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Sesotho and IsiZulu Reading Project

Study guide 2:

Language and Literacy

Primary Teacher Education project
Department of Higher Education and Training

UNIVERSITY OF JOHANNESBURG

Sesotho and IsiZulu Reading Project

Study guide 2: Language and literacy

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Introduction to Language and literacy

Essential linguistic concepts for teaching reading

What does the literacy teacher need to know about language?

This study guide provides a basic introduction to the linguistic (language study) terminology and concepts that underlie the teaching of reading and writing. It provides the essential linguistic concepts for teaching reading and gives special attention to the characteristics of the African languages and their relevance to developing literacy.

It can also serve as a reference work to many of the technical terms in literacy teaching.

What this study guide contains

There are eighteen units:

1. Essential linguistic concepts relating to literacy
2. The four basic language and literacy skills
3. The structure of words and sentences
4. The sounds of spoken language – phones and phonemes
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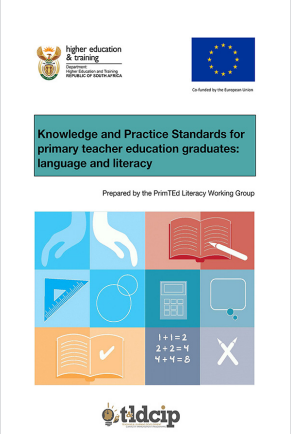


What literacy teacher standards are covered?

This study guide covers six of the standards (or portions of them). These knowledge standards relate to the knowledge of language and literacy and that graduate teachers need to have to teach learners to read and write.

1. Demonstrate basic knowledge of the key components of language.

1.1 Explanations can be given of six basic components found across languages: phonology, morphology, grammar, syntax, semantics, and pragmatics.

1.2 Essential simple language terms can be used.

1.3 A basic comparative knowledge of similarities and differences in the components across the South African languages is described.

2. Demonstrate knowledge of basic grammatical concepts that are necessary for language and literacy teaching.

2.1 Knowledge of, and the ability to explain the following grammatical features, is demonstrated:

word classes (e.g., nouns, verbs, adjectives, articles, conjunctions, pronouns)

grammatical functions in sentences (e.g., subject, verb, object)

grammatical constructions (e.g., subject-verb agreement/concordial agreement, conjunctions)

syntax (e.g., word order and the relationship between words and sentences).

2.2 Knowledge of when it is appropriate to teach elements of grammar.

2.3 Basic differences in the grammatical structures of English and Afrikaans (as analytic or isolating languages) and African languages (as agglutinating languages) are identified and explained.'

5. Demonstrate knowledge of the importance of oral language in literacy development and of the influence of written language on oral language.

5.1 The reciprocal relationship between spoken language and written language can be explained.

5.2 The distinction between the language of everyday Basic Interpersonal Communication Skills (BICS) and that of Cognitive Academic Language Proficiency (CALP) is described.

5.3 Ways of developing listening and speaking in the Foundation and Intermediate Phases are described.

5.4 The relationship between orality development and literacy development in the Foundation and Intermediate Phases is explained.

5.5 The importance of vocabulary development in home language and first additional language can be discussed.

5.6 The importance of reading aloud and its role in the encouragement of reading for pleasure can be articulated.

5.7 An understanding of varied oral genres and types of from different cultures is demonstrated, e.g. praise poems, riddles, nursery rhymes.

8. Demonstrate knowledge of theoretical and research-based components of reading and writing teaching through the phases and grades (including its cognitive, linguistic and socio-cultural foundations and the processes and concepts involved).

8.1 What learners need to be able to read and write, and why, within and across the relevant grades and subjects, can be described.

8.2 A broad understanding of the concepts, curriculum, and pedagogy of literacy teaching can be articulated.

8.3 A coherent evidence-based understanding of the teaching of reading and writing that guides their approach and practice can be articulated.

8.4 The broad continuum of reading and writing development can be described.

8.5 A variety of strategies to teach, assess and support learners' development across the continuum can be identified.

10. Demonstrates phonological awareness including phonemic awareness

10.1 A basic awareness of the sounds of languages is displayed.

10.2 Definitions, explanations and demonstrations of phonological awareness (syllabification, onset and rime (onset and rime are important in English but not in agglutinating languages), and phonemic awareness) are given.

10.3 The use of activities such as phoneme isolation, identification, categorization, addition, deletion, substitution, and segmentation is demonstrated.

10.4 An understanding of the developmental continuum of phonological awareness and an ability to use this knowledge in reading instruction appropriate to each grade and learner is demonstrated.

11. Demonstrates basic knowledge of phonics, e.g. knowing letter shapes, knowing that written words are built up from letters and letter groups with sound values

11.1 Phonics is defined.

11.2 The use of phonics and decoding strategies appropriate to the particular language and grade are identified.

11.3 Awareness of the similarities and differences in phonics strategies in analytic/isolating and agglutinating languages is shown.

11.4 The importance of syllables and word morphology in the African languages is recognised.

11.5 Explanations of the principles underpinning particular phonics approaches are given.

11.6 Knowledge of resources available to support particular approaches/programmes is demonstrated.

12. Demonstrate vocabulary and word study knowledge, e.g. know how to help learners extend vocabulary for communication and academic purposes

12.1 The role of vocabulary in learning across and beyond the curriculum in expanding the learner's conceptual world is articulated.

12.2 A variety of research-based ways to introduce and build new language and vocabulary in both home and additional languages (e.g., word study, word parts and word associations, etc.) throughout the curriculum and across different subjects and grade levels is described, including:

- Word features and their structures, for example, syllables, prefixes, infixes, suffixes, roots, inflections, etc., are explained.
- A list of high frequency and sight words (words which should be instantly recognisable) for the grade level is presented.
- A appropriate vocabulary list with the words in the particular language that should be spoken and written by the end of a particular grade (and which take into account necessary subject specific vocabularies) can be presented.

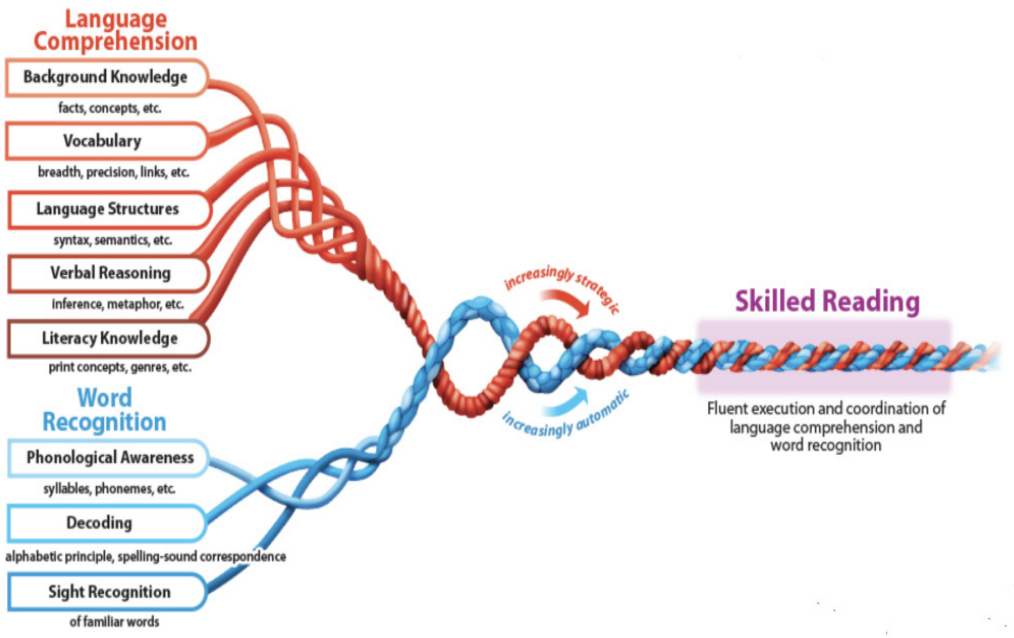
12.3 The distinction between expressive and receptive vocabulary is explained.

1. Essential linguistic concepts relating to literacy

Learning to read is regarded as the most difficult task the human brain can achieve. Moreover, unlike listening and speaking, reading and writing are not skills that children acquire naturally and automatically, they have to be taught to read and write. And teaching these difficult skills is best done overtly and systematically.

Scarborough (2001) compares achieving the level of a skilled reader with weaving two main strands (each with a number of sub-strands) into a tightly knit reading rope.

The two main strands involve **language comprehension** and **word recognition**.



language comprehension: the ability to derive meaning from oral and written language. As indicated by the diagram, a reader must be capable of both understanding language and word recognition in order to gain meaning from written text.

word recognition: the process by which new readers learn to identify words and word parts. It begins with an understanding that letters represent the sounds in words and progresses to the ability to recognize written words correctly and virtually effortlessly.

As you can see from this diagram, reading is very complex and to understand how reading takes place requires some knowledge of technical terms – already in this diagram one can see several of these terms such as syntax, semantics, inference, metaphor, genres, phonological awareness, syllables, phonemes, and alphabetic principle – and of the mental processes that are in operation when we use our language for listening, speaking, reading and writing.

In order to teach reading a teacher must have a good knowledge of the fundamental concepts that underlie the teaching of reading. If a teacher does not understand the linguistic concepts that underlie reading or does not understand how these concepts relate to reading, she or he will not be able to teach reading effectively.

The major concepts associated with language study and their relevance for preparing for teaching reading and writing will be covered in this study guide.

Understanding language study

When we study language there are various levels of language study, each one with its own focus and its own terminology and concepts. The literacy teacher has to have a very basic familiarity with what these levels are about and know the key terminology.

There are six levels: phonology, morphology, grammar, syntax, semantics and pragmatics. When we study languages we need to be able to analyse the languages according to these levels.

phonology:	the organization of sounds in a language and how and when certain sounds can be combined
morphology:	the structure of words and parts of words, how they are formed, and their relationship to other words in the same language
grammar:	the complete set of rules about the structure of a language and therefore of what are acceptable words, phrases, clauses, and sentences
syntax:	the rules about the arrangement and order of words and phrases to create well-formed sentences in a language
semantics:	the study of meaning at the levels of words, phrases, sentences and narratives in language
pragmatics:	the ways in which context contributes to meaning in language

Unit 1: Self test questions

Fill in the missing words:

1. The _____ of this sentence, "He the boat saw.", is wrong.
2. Words ending in a vowel are characteristic of the _____ of the African languages.
3. That swearing is not acceptable in certain social settings is one aspect of the _____ of language use.
4. The _____ of many English words is explained by their Greek or Latin origins.
5. The _____ of that word are very difficult – it can mean so many things.
6. It breaks the rules of _____ to say "I run yesterday."
7. According to Scarborough the two main strands of skilled reading are _____ _____ and _____ _____.

2. The four basic language and literacy skills

Language is a communication system. We can use the communicative power of language in four main ways – Listening, Speaking, Reading and Writing. These are the four basic language and literacy skills.

Of these skills, Listening and Speaking are oral language ones, and Reading and Writing are written language ones.

We can categorise listening and reading as receptive skills – we receive or perceive information – and speaking and writing as productive skills – we produce speech and writing.

[We do need to note that listening and reading are not entirely receptive – we contribute to making meaning from hearing or reading by also using our own background knowledge and our knowledge of the language and vocabulary, etc. In other words, reception is an active process.]

Receptive	Productive	
Listening	Speaking	Oral
Reading	Writing	Written

The key process involved in the receptive part of communication is **decoding** and the key process involved in the productive part of communication is **encoding**.

Decoding

What process is happening when we listen and read? We are decoding what we hear and decoding what we read.

We have used the term 'decoding' here in a very broad sense, in books on literacy the term decoding is usually restricted to the making meaning of written language, to reading words and sentences, the converting of writing into spoken language.

To be able to decode the sounds we hear in speech we have to understand what the sounds and combinations of sounds that we hear represent in our language. With reading we have to decode the written text by transforming the letters of the written form into spoken language in our brains. Right now, while reading this text, you are decoding the written text we wrote some time ago.

Receptive	Productive	
Listening	Speaking	Oral
Reading	Writing	Written

Decoding

code: a system of words, letters, or signs used to represent a message

decode: to discover the meaning of information given in a code. We decode speech by decoding the speech sounds into intelligible language. In reading we apply our knowledge of letter-sound relationships, including knowledge of letter patterns, to correctly sound-out and pronounce written words.

encode: to convert information from one system of communication into another. In writing we convert language into a written alphabetic code in which the letters represent sounds in the language.

Encoding

What process is happening when we speak and write? We are encoding what we speak and encoding what we want to write.

Encoding is the putting of information into a code that the hearer or reader will have to decode. When you speak you encode language into spoken sounds. When you write you encode language into written letters in a text. We encode language because we wish to communicate with other human beings. Speech is different from writing in that it is ephemeral, once spoken it is gone (though of course we can now make sound recordings of speech). The reason for writing is to preserve ideas expressed in language so that we or other people can read them at any time after the writing process.

Receptive	Productive	
Listening	Speaking	Oral
Reading	Writing	Written

Encoding

The importance of oral language development

Because literacy is so concerned with Reading and Writing there is a danger that teachers may not pay sufficient attention to oral language skills. Whilst it is true that oral language skills develop naturally by mere exposure to the language (as compared to written language skills that have to be taught), it is important that children to continue to develop their oral language skills in school.

Though schooling places great value on reading and writing development, literacy is built on the foundation of oral language. It is essential to develop children's oral language skills systematically in the preschool phase and in Grade R before they are formally taught to read and write in Grade 1. (For example children need to be able to rapidly recognize and name common objects in the sequenced they are lined up in.) Inadequate oral language development leads to reading problems. However, the oral language development should not stop there, it must be further expanded during the Foundation Phase and beyond. Once children can read fluently reading will also start to influence their spoken language.

Unit 2: Self test questions

1. Distinguish between encoding and decoding.
2. List the four basic language and literacy skills.
3. Why is listening an active process?

3. The structure of words and sentences

We all "know" that language is made up of words and sentences. However, we are so sure of this because we are so used to reading and writing texts that are made up of words collected into meaningful sentences. Words in a text are separated by spaces and at the end of a sentence there is a full stop. In reality things are somewhat more complicated.

Study of the phonology and morphology of a language enables us to understand the sounds and structure of words. We can understand the parts they are made up from, how those parts are put together in a word, and how each word relates to other words in sentences of that language.

To gain a deeper level of understanding how language works we do have to learn a number of technical terms which are used in describing language. Three key terms, key because the describe some of the smallest units that make up a spoken and written language, are phoneme, morpheme and grapheme:

phoneme:	the smallest unit of a speech sound that makes a difference in communication
morpheme:	the smallest meaningful grammatical unit of a language that cannot be further divided. It is a word or part of word that has meaning. In the word "incoming", the *in*, *come* and *ing* are all morphemes. In the word "pins", *pin* and the suffix *s* are morphemes. The word "pin" is a stand-alone morpheme and the *s* cannot stand alone.
grapheme:	a written symbol that represents a sound (phoneme) This can be a single letter such as *a* or *k* or a sequence of letters such as in *ai*, *sh*, *ow, igh tch*, *ough,* etc. in English or the sequence of letters as in *th*, *ng*, *tsh*, etc. in isiZulu.

What is a word?

In linguistics, a word of a spoken language is the smallest sequence of phonemes that can be spoken with meaning.

The *a* in English is a phoneme and it is also a word. In isiZulu *mama* is a sequence of four phonemes *m a m a* that make the word "mama".

In many languages, words also correspond to sequences of graphemes in their standard writing systems that are separated by a space from other words by spaces. In many languages, the notion of what constitutes a "word" may be mostly learned as part of learning the particular writing system.

Words are seemingly easy to identify in written text because the convention in alphabetic languages is to separate them by leaving spaces between them. However, if we hear someone speaking a very unfamiliar language we will at

first find it difficult to distinguish the separate words. Further, if we hear or read different languages we will find that what are "words" in each language may be very different.

These sequences of graphemes in written sentences can be considered to be words because they are separated by spaces, but they are very different in the size of the "words" and how those "words" are constructed.

Look at these three examples:

"He had three houses that were built at the bottom of a hill." [English]

"Wayenezindlu ezintathu ezazakhiwe ngaphansi kwegquma." [IsiZulu]

"O ne a e-na le matlo a mararo a hahiloeng botlaaseng ba leralla." [Sesotho]

Compare, for example the words in two sentences of equivalent meaning in Sesotho and isiZulu and a direct English translation:

"O na le lilemo tse kae?" [Sesotho]

"Uneminyaka emingakhi?" [IsiZulu]

"You have years how many?" ("How old are you?") [English]

The Sesotho sentence comprises six words while the isiZulu equivalent sentence comprises two words. The differences are the result of the different way that the sounds of the language (its phonology) are divided up when written down. There are, for example, word division differences in the **orthographies** of Sesotho and isiZulu.

We need to know a number of other technical terms used of words or parts of words:

affix (prefixes, infixes and suffixes):	a morpheme that is attached to the beginning (prefix), inside (infix) or at the end of a word (suffix) to produce a related word or an **inflectional** form of a word. Examples: the prefix *in-* in the word "informal", the prefix *aba-* in the word "abantu"; the infix *ee* in the word "feet" (the plural of "foot"); the suffix *-s* in the word "cows", the suffix *-ing* in the word "running"
word root:	a morpheme that expresses the basic meaning of a word and cannot be further divided into smaller morphemes
word stem:	a word root or word or compound word to which an prefix or suffix can be attached.
word base	a word root or stem to which any kind of affix can be added, even if it already has an affix. Example: the word "wait" is the word stem to which the inflectional suffixes *-s*, *-ed* and *-ing* can be attached to make the words "waits", "waited", and "waiting" and to which the prefix *a-* can be added to make "await".

orthography: The conventional spelling system of a written language. It includes norms of spelling, hyphenation, capitalization, word breaks, emphasis, and punctuation.

affix: is a morpheme that is added to the base or stem or root of a word and modifies its meaning. A prefix appears at the front of a word, an infix inside the word and a suffix at the end of a word.

prefix: prefixes are word parts that attach to the beginning of a word or word base (a word stripped down to its simplest form) to produce a related word or an inflectional form of a word, for example the *in-* in "informal".

infix: infixes are inserted into a word or word base. They are rare in English but common in African languages.

suffix: a suffix is a letter or group of letters added to the ending of a word to change its meaning or grammatical function, for example, *-ing* in "ending".

inflection: a change in the form of a word (typically the ending) to express a grammatical function or attribute such as tense, mood, person, number, case, and gender.

inflection:	the change in the form of a word to express a grammatical function or attribute such as tense, mood, person, number, case, and gender. In English inflections are usually suffixes such as: *-s*, *-ing*, *-d*, *-er*, *-est*.
pitch:	the rise and fall of our voice when we speak. So we can say words in a high or low pitched way. Pitch is directly related to word and syllable stress. We use pitch to give subtle meaning to sentences, to convey emphasis, contrast, and other such features in what is called intonation. The words "pitch" and "intonation" are often used interchangeably. Some languages, including most African languages, use pitch to distinguish or differentiate words. These languages are called tonal languages.
intonation:	the pattern or melody in speech that helps indicate the attitudes and emotions of the speaker (e.g., surprise, anger, wariness). Intonation is primarily a matter of variation in the pitch level of the voice, but in languages such as English, stress and rhythm are also involved. Intonation needs to be distinguished from tone in tonal languages where the same word has a different meaning depending on the pitch with which it is spoken.
stress:	the degree of emphasis given a sound or syllable in speech or to certain words in a phrase or sentence. Stress patterns can help distinguish the meanings of two words or phrases that otherwise appear to be the same. In English, stressed syllables are louder than non-stressed syllables, are longer, and have a higher pitch. To communicate clearly when speaking in English, the speaker has to stress the correct syllables in each word. In African languages the stress usually falls on the next to last syllable.

Clauses and sentences

A clause is a short group of words (that have a particular meaning) that is part of, rather than the whole of, a sentence and does not contain a subject-verb pair, e.g. "along the road", "after the meeting", "a beautiful view," "in the morning".

There are two main types of clauses: independent clauses, which can function independently as sentences, and dependent clauses, which depend on an independent clause to form a sentence.

Example of an independent clause:

"Even though he got a job, **he was still poor**."

"He was still poor" is a clause that can also stand alone as a sentence.

Example of a dependent clause:

"**After the race**, I will be very tired."

"After the race" is a clause that cannot stand alone as a sentence, it has no verb.

Sentences

A sentence is a group of words, usually containing a verb, that expresses a complete thought in the form of a statement, question, instruction, or exclamation. A sentence typically contains a subject (what the sentence is about) and a predicate (something about the subject). It must contain at least one main clause. In written form it typically starts with a capital letter and ends with a full stop or other end punctuation mark. In spoken form it has characteristic patterns of stress, pitch, and pauses.

Depending on its type, a sentence consists of a main clause and sometimes one or more subordinate clauses.

While a sentence may comprise one word only (e.g. "Stop!"), it may also consist of a large number of words.

Unit 3: Self test questions

1. Name the three affixes.
2. What is the orthography of a language?
3. What is a word root?
4. What is the term for:

- change in the form of a word to express a grammatical function or attribute – _____
- emphasis given a spoken sound or syllable – _____
- the pattern or melody in speech – _____
- the rise or fall of the voice when one speaks – _____

5. Tick the correct cell for these symbols - are they a phoneme, morpheme or grapheme or two or all of these?

	phoneme	morpheme	grapheme
ing [English]			
a [English]			
ough [English]			
dog [English]			
s [Sesotho]			
tsh [IsiZulu]			
aba [IsiZulu]			

4. The sounds of spoken language - phones and phonemes

In this section we look at the sounds in spoken language and how we represent those sounds when we are writing about language. Phonetics is the study of human language sounds and phonology is the study of the sounds and patterns of sounds in a particular language or group of languages. Language study has created its own special terminology and ways of representing language sounds.

Phones

A phone is a single distinct speech sound. Phones are represented by a symbol in square brackets, e.g. [p], [ɛ] and [t']. They do not represent letters in writing.

Phones are represented by the set of symbols in the International Phonetic Alphabet (IPA). This set of symbols represents every single known sound in human speech in all languages. These phonetic symbols in the IPA are used to represent the slightest differences between speech sounds.

The sound represented by the letters *sh* in the word "i**sh**oba" is written as [ʃ] in phonetic script. The word "inyoka" will be represented in phonetic script as [iɲɔk'a]. The individual symbols used within the square brackets each constitute a phone. Here is the IPA rendering of the words "English": ['ɪŋglɪʃ] and "teacher": ['ti:tʃə].

Information on the IPA can be found at:

https://en.wikipedia.org/wiki/International_Phonetic_Alphabet

https://www.wikihow.com/Write-Phonetically

Phonemes

A phoneme is the smallest speech sound that enables us to distinguish meanings within a particular language. That is, if a phoneme in a word changes then the meaning of the word changes. It is any of the perceptually distinct units of sound in a language that distinguish one word from another, for example the sounds *p* and *d*, and *t* and *d* in the English words "pad" and "dad" and "bat" and "bad".

When phonemes are combined they make up words. A phoneme may be represented by one, two, three or four letters of the alphabet.

Languages usually contain between 20 to 60 phonemes. There are approximately 44 phonemes in English (the number varies depending on the accent). African languages have more phonemes than English.

A phoneme is represented by a symbol or symbols within slashes, e.g. /t/ or /b/ or /tsh/. It does not represent the letter name (for example in English the phoneme /b/ is represented by the letter *b* and the name of that letter is "bee").

As phonemes are the units of sound that are represented in writing by the letters of an alphabet, an awareness of phonemes is key to understanding the logic of reading.

If users of a particular language perceive a sound as being distinctive from other sounds in the language and that sound in a word distinguishes that word from other words in the language, it is a phoneme.

You can determine whether a sound is a phoneme by the minimal pair unit test with two words that differ only in one phonological element. This test compares two words (or word stems) with the same number of sounds with only one of the sounds being different from the sound in the same position in the other word.

For example take the two English words "pin" and "bin". The /p/ and the /b/ sounds are different phonemes and their use leads to a difference in meaning between the two words.

In another example look at the sounds /b/ and /bh/ in isiZulu. If we compare the minimal pair, "-beka" and "-bheka" we notice that the two forms differ only in terms of the /b/ and the /bh/. This difference in sound results in a difference in meaning, because "-beka" means 'put down' while "-bheka" means 'look'. So /b/ and /bh/ are thus two separate phonemes. Consider the word stems "-hlala" ('sit/reside') and "-sala" ('remain behind'). Because these two words are identical in form except for the sounds /hl/ and /s/ and they have different meanings, the /hl/ and /s/ sounds constitute two separate phonemes.

One and two phone phonemes

Usually each phone constitutes a single phoneme. For example, the isiZulu word "mina" can have two different meanings depending on the pronunciation of the first sound, *m*, in the word. If this word is pronounced as [**m**ina] it means "I" (it is the pronoun of the first person singular). If it is pronounced as [**mɦ**ina] it means "Here, take it" (a dedicated imperative verb). The two phones [m] and [mɦ] therefore constitute two separate phonemes, namely /m/ and /mɦ/.

However, sometimes two different phones can yet be seen as one phoneme.

However, consider the sounds in the isiZulu words "ukhezo" ('spoon') and "imfezi" ('spitting cobra snake'). The *e* sound in the word "ukhezo" is pronounced as [ɛ] while the *e* sound in "imfezi" is pronounced as [e] and is referred to as the raised vowel *e*. The slight change in pronunciation between these two *e* sounds is that the *e* in "imfezi" is a 'raised vowel' brought about by the high vowel [i] following the *e*. But these two *e* sounds differ only very slightly and moreover the use of one rather than the other in a particular word will not lead to a change in word meaning or make that word incomprehensible. These two sounds are thus two different phones ([e] and [ɛ]) but they constitute a single phoneme, namely /ɛ/.

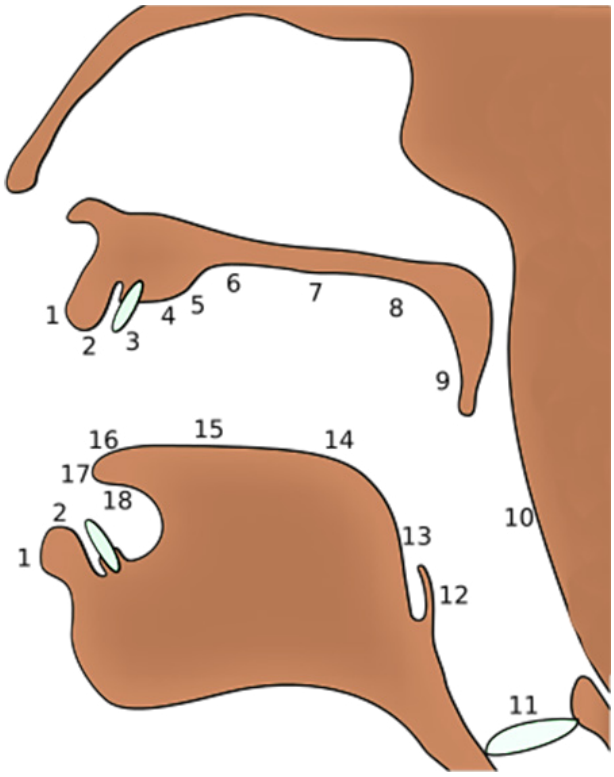
Articulatory phonetics

In understanding the sounds in language, one branch of language study, **articulatory** phonetics, looks at how the speech sounds are made and describes each speech sound according to what parts of the speech organs are involved and how they are placed and moved and how air flows over these parts when a sound is made. This can help us in describing various phones and phonemes and how these sounds are made.

Speech sounds are produced when air is pushed from the lungs through the vocal tract into the mouth (and nose) and over the tongue and through the lips. The ways in which the tongue and lips are placed and move changes the kind of sound made. The parts of the body that influence the sound made are the larynx (voice box in the throat which includes the glottis (a fold of skin in the middle of the larynx) that can vibrate causing sound waves), the tongue, the teeth and the lips, and the nose cavity.

In the descriptions of particular **vowels** and **consonants** they are often referred to in relation to the places where they are formed in the vocal tract.

Places of articulation (Rohieb, 2007)



1 Exo-labial (outer part of lip)
2 Endo-labial (inner part of lip)
3 Dental (teeth)
4 Alveolar (front part of alveolar ridge)
5 Post-alveolar (rear part of alveolar ridge and slightly behind it)
6 Pre-palatal (front part of hard palate that arches upward)
7 Palatal (hard palate)
8 Velar (soft palate)
9 Uvular (uvula)
10 Pharyngeal (pharyngeal wall)
11 Glottal (vocal folds)
12 Epiglottal (epiglottis)
13 Radical (tongue root)
14 Postero-dorsal (back of tongue body)
15 Antero-dorsal (front of tongue body)
16 Laminal (tongue blade)
17 Apical (apex or tongue tip)
18 Sub-laminal (underside of tongue)

articulation: the way in which a person pronounces words or producing speech sounds.

There is another meaning of articulation, not related to phonetics, as the way in which ideas and feelings are expressed.

vowel: a speech sound produced when the breath flows out through the open mouth without being blocked by the teeth, tongue, or lips. There are long and short vowels.

The letters that represent the five basic vowels of isiZulu and the seven basic vowels of Sesotho are a, e, i, o, and u.

consonant: A consonant is a speech sound in which the air is at least partly blocked by the position of the tongue, teeth or lips. Consonants interrupt the flow of air by blocking it (p, b, t, d, k, g), diverting it through the nose (n, m), or by obstructing it (f, v, s, z). Consonants may come singly (by themselves) or in clusters (two or more together), but must be connected to a vowel to form a syllable. The majority of letters in the alphabet represent consonants. Most consonant letters have only one sound and rarely sound like their letter name.

The consonants represented by the letters y and w are sometimes called semi-vowels because they have characteristics similar to vowels.

Whilst it may not be necessary to learn all these technical terms from articulatory phonetics, it is useful to know when a text refers a vowel or consonant what these place terms are referring to, such as:

Glottis: glottal

Back of the throat: pharyngeal

Tongue: dorsal

Front of the tongue: coronal

Lower lip: labial

Both lips: bilabial

One lip and teeth: labiodental

Nose: nasal

And it can be helpful to know terms such as:

egressive: speech sound made with an outward flow of air from the lungs (as in mouth speech sounds)

ingressive: of a speech sound made by pulling air into the mouth (as when making click sounds)

aspirated: with an audible breath at the end of a plosive sound

plosive: the quick, explosive release of a sound

fricative: sound made by forcing the breath through a constricted or partially obstructed passage in the vocal tract

Sometimes charts of the shape of the mouth and lips when making sounds can be useful in second language learning where some of the sounds being learned are not in the home language.

Unit 4: Self test questions

1. Distinguish between a phone and a phoneme.
2. What is this, a phone or a phoneme?
   /d/ – _____
   [d] – _____
   [ŋ] – _____
   /b/ – _____
3. Roughly how many phonemes are there in most languages?
   Between: 20 and 30 / 20 and 60 / 44 and 92
4. Give an example of the changing of a single phoneme changing the meaning of the word.
5. Can two separate phones be considered the same phoneme? _____
6. What is articulatory phonetics about?

5. Phonological awareness – syllable awareness

Phonological awareness is a broad term that refers to the identification and manipulation of **aural** units of speech. Phonological awareness is an individual's awareness of the phonological structure, or sound structure, of words. It involves the detection and manipulation of sounds at various levels of sound structure. It is a **metalinguistic** skill, requiring conscious awareness and **reflection** on the structure of language.

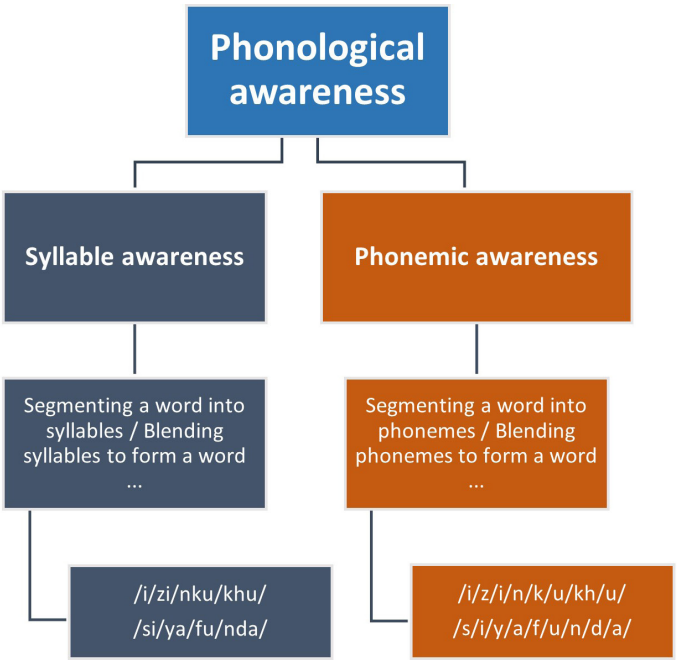
Phonological awareness has to do with a beginner reader acquiring the knowledge that spoken language comprises different sounds and the skills to be able to manipulate these sound units. In the early stages, it does not involve written language.

Children either pick up themselves, or must be taught to tune in to, the sounds of language. They need to notice that some words **rhyme** or that sounds **repeat** themselves in **alliteration**.

Then they must learn to identify and learn to manipulate them in a developmental progression of large to small pieces of language. This includes learning that a sentence is composed of words, that words can be divided into **syllables**, and syllables can be split into separate sounds (phonemes).

By definition phonological awareness is the awareness of and ability to manipulate the sounds of language. Though some of the knowledge and skills necessary to learn to read in a particular language are transferable to another language, someone learning to read in a particular language has to have knowledge and skills relating to the phonological structure and vocabulary of that particular language.

Phonological awareness includes **syllable awareness** and **phonemic awareness**.



aural: related to the sense of hearing

reflection: serious and careful thought about something

meta: from the Greek "meta-", meaning 'after' or 'beyond') is a prefix meaning more comprehensive or transcending.

metalinguistics: the branch of linguistics that studies language and its relationship to other behaviour. Metalinguistic skills involve understanding of the rules of language. When learner readers develop their metalinguistic capabilities they become consciously aware of language and the components of language, especially heightened phonological awareness, which is a key precursor to literacy.

rhyme: in poetry when there are corresponding sounds at the ends of pairs of lines

alliteration: the repetition of the same consonant sound at the beginning of several different words used in a sentence or paragraph

syllable: a single speech sound (a single segment of uninterrupted sound that is typically produced with a single pulse of air from the lungs), usually having one vowel sound (with or without surrounding consonants), either a whole word or one of the parts into which a word is separated when it is spoken or written.

Syllable awareness

A syllables are units of unbroken sound usually having one vowel sound with or without surrounding consonants. They combine to form words and every word is made from syllables.

After a syllable there is a natural break within the word where the speaker will insert a short pause when pronouncing the word slowly.

The two most common of several types of syllables are:

- **Closed syllables** (symbol VC) have a single vowel with a short sound and end with a consonant. If the word has three or more letters it has a consonant before the vowel and one or more after the vowel (CVC). If a word has two closed syllables next to each other, there will be two consonants between the vowels (e.g. "su**m**-**m**er," "co**m**-**m**on"). Typical of English.
- **Open syllables** end with a single vowel with a long sound. (symbol $C\overline{V}$). They have no more than one consonant between the open syllable and the next vowel ("**ba**-ba"). Open syllables are typical of African language syllables.

In some languages most words can be easily broken up into syllables, especially in the African languages.

Syllables in the African languages

The African languages syllables generally end in a vowel (that is, they have an open syllable structure) as seen in these examples:

Sesotho: /ba/ /a/ tsa/ma/ya/, /ba/ /a/ /qo/qa/, /le/di/mo/, /ma/bu/tsha/bu/ tsha/

IsiZulu: /u/wi/le/, /si/ya/se/be/nza/, /i/zu/lu/, /a/ma/nto/ngo/ma/ne/.

There is always a syllable break after a vowel in isiZulu and Sesotho.

A syllable may comprise a vowel (V) only, thus for example the vowel /u/ in /u/ba/ba/ or the vowel /i/ in /i/tshe/ or the vowel /o/ in /o/Vu/si/.

A syllable may have the consonant vowel structure (CV) which means that it can be any consonant phoneme followed by a vowel. Examples of single consonant phonemes followed by a vowel are:

/bo/ in /bo/na/, /qa/ in /qa/la/ , /su/ in /i/si/su/, /ti/ in /i/ka/ti/.

Phonemes represented by two letters (i.e. digraphs) are also phonemically CV for example the /th/ in the syllable /thi/ in the word /thi/na/ or the phoneme /l/ in the syllable /dla/ in the word /si/dla/. These consonant phonemes /dl/ and /th/ are each represented by two letters and comprise digraphs representing a single consonant sound (C).

The consonant sound [tʃ] in the word "itshe" ('stone') has three letters, namely *t*, *s*, and *h*. These three letters constitute one sound. and is therefore called a trigraph. It represents a single phoneme /tsh/ in the syllable /tshe/ (type Ce.)

A syllable may also comprise the CCV structure. Examples of syllables comprising two consonant phonemes followed by a vowel are:

the phonemes /n/s/i/ in the syllable /nsi/ in the word /i/nsi/mbi/

the phonemes /n/t/o/ in the syllable /nto/ in the word /i/nto/mbi/

the phonemes /m/b/i/ in the syllable /mbi/ in the word /i/nto/mbi/

the phonemes /n/dl/e/ in the syllable /ndle/ in the word /i/ndle/la/.

A syllable may have a CCCV structure involving a sequence of consonants, also referred to as consonant blends. An example of such structures are the phonemes /n/t/w/a/ in the syllable /ntwa/ in the word /i/ntwa/yi/ntwa/yi/.

A syllable may comprise the bilabial consonant /m/ only. The /m/ is the only isiZulu consonant that may be syllabic (thus constituting a syllable on its own) in certain contexts, as in /u/m/ntwa/na/ and /ngi/ya/m/tha/nda/. It is only the shortened prefix um- instead of umu- of isiZulu noun classes 1 and 3 and the object morpheme of classes 1 and 1a -m- instead of -mu- that results in the /m/ being syllabic. Compare the syllable structure of the nouns from classes 1 and 3: class 1, /u/mu/ntu/ but /u/m/fa/na/; class 3, /u/mu/zi/ but /u/m/si/la/.

The pattern or rhythm of speech, and especially poetic speech and writing (what we call its **metre**), comes from the stress or emphasis placed upon certain syllables.

In the African languages this metre is mainly through the long length of the penultimate (i.e. second to last) syllable of the word and especially on the long length on the penultimate syllable of the last word in the sentence. These characteristics contribute to a strong metre in these languages. (We can indicate length by the use of a colon, thus **:** after the particular vowel.) The word "siyafu:nda ('we learn') has length on the vowel of the penultimate syllable. If this word is extended, the lengthening is moved to the vowel of the penultimate syllable, thus "siyafundi:sa" ('we let learn/we teach'). The length has now shifted from the [u] to the [i]. In the word "siyafundisa:na" ('we let each other learn/we teach each other') the length has shifted to the second to last [a].

Syllables in English

In English, because there is a weak correspondence between sounds and letters, often written syllables do not correspond to spoken syllables and many syllables are very complicated.

In English a syllable can normally be divided into two parts: the **onset**, which consists of the initial consonant or some consonants blended together and the **rime** which consists of the vowel and any final consonants.

For example, in the one-syllable English word "cat", the onset is *c* and the rime is *at* (made up of the nucleus *a* (the vowel sound) and the coda *t*).

The English language has six syllable types: Open, Closed, R-controlled, Vowel Team, Silent-e, and C-le.

metre: the pattern or rhythm of poetic speech and writing derived from the stress or emphasis placed upon certain syllables

onset: The part of the syllable before the first vowel (e.g. **c**at in English)

rime: In English a syllable can normally be divided into two parts: the onset, which consists of the initial consonant or consonant blend, and the rime which consists of the vowel and any consonant sounds that come after it.

Rime is not the same as "rhyme" but it is pronounced the same way. A **rhyme** occurs in poetry when there are corresponding sounds at the ends of pairs of lines. Words that have the same rime will always rhyme but not all rhymes are rimes.

Types of English syllables

Closed (VC, CVC)	have a single vowel with a short sound and end with a consonant. If the word has three or more letters it has a consonant before the vowel and one or more after the vowel (CVC). If a word has two closed syllables next to each other, there will be two consonants between the vowels (e.g. "su**m**-**m**er," "co**m**-**m**on", "bu**t**-**t**er").
Open ($\overline{V}$)	end with a single vowel with a long sound. They have no more than one consonant between the open syllable and the next vowel ("**ba**-by").
Vowel-r (R-controlled)	the vowel (or a dipthong or tripthong) has an *r* or *re* (*r* with a silent *e*) after it. The voewl is usyually pronounced in a different way from musual because it is 'controlled' by the *r*.
Vowel team	a group of two to four letters, usually vowels, which make a single short or long vowel sound. If a vowel team has only two vowels usually only the first vowel is pronounced. e.g. "rai-n". If the vowel team syllable has a consonant in it the vowel is usually pronounced differently from normal vowels, e.g. -augh, -ough, -igh.
Silent-e (VCe)	consists of a vowel, followed by a consonant, followed by an *e* that is silent and which tells us that the previous vowel has a long sound, e.g. "**wa**k**e**", "hare"
C-le (C-le)	consists of a consonant followed by *-le* and the consonant has a long sound.

dipthong: a sound formed by the combination of two vowels in a single syllable, in which the sound begins as one vowel and moves towards another (as in "**coi**n" and "l**oud**")

tripthong: a union of three vowels (letters or sounds) pronounced in one syllable (as in "fl**our**", "ch**oir**", "cur**ious**" and "b**eau**tiful")

Unit 5: Self test questions

1. Being able to talk about the sounds in language is a _____ skill.
2. How many phonemes are in the word "bafana"?
3. How many syllables in the word "banana"?
4. The first stage of phonological awareness is about the identification of the sound values of letters in writing. True/False
5. What do CV, CVC and CCV stand for?
6. What is a trigraph?
7. What is a consonant blend?
8. Distinguish between onset and rime in an English syllable.

6. Phonological awareness – phonemic awareness

Phonological awareness is made up of a group of components and the most sophisticated of these is phonemic awareness. This is the skill of being able to identify the individual sounds in words – the phonemes.

Phonemic awareness enables a listener to hear and identify the separate sounds in a stream of speech (e.g. in English to identify the same *a* sound in 'bad', 'sad', 'glad' and 'mad', and to distinguish between the different vowel sounds in 'bed', 'bad', 'bud', and 'bid'). These separate sounds are called phonemes.

Phonemic awareness relates only to speech sounds, not to alphabet letters or sound-spellings.

Because phonemes are the units of sound that are represented by the letters of an alphabet, an awareness of phonemes is key to understanding the logic of the alphabetic principle and thus the ability to learn of phonics and spelling. When children have a strong foundation in phonemic awareness, it becomes easy for them to understand that certain letters stand for specific sounds (phonemes). That is because they have experience blending sounds into words and taking words apart. And that enables them to start to decoding written text into letter sounds, holding them in memory, and blending them into words.

Phonemic awareness includes the ability to separate a word into the individual sounds that make it up (segmenting words) and to blend some single sounds into words (blending sounds into a word). It also involves the ability to add, subtract, or substitute new sounds in words.

Phonemic awareness needs to be taught explicitly.

These are some of the activities that phonemic awareness makes possible. They should be done individually with the children.

Phoneme matching:	identifying words that begin or end with the same sound, e.g. fast, fish, fall, frog, friend
Phoneme isolation:	identifying where a sound appears in a word, e.g. /a/ in "baba", "mama", or to identify what sound appears in a given position in a word, e.g. the first , e.g. "baba", "mama", "gogo", or last sound, e.g. "baba", "mama", or identifying first, last and middle phonemes in a word (e.g. "map" or identifying the phoneme in a list of words (e.g. /m/ in "map", "mom", "ram") in or identifying the sounds that a list of words have in common (say a list of words with the same beginning or ending phonemes).
Phoneme blending:	blending individual sounds into a word, e.g. /i/ /k/ /a/ /t/ /i/ into "ikati"

Phoneme segmentation:	the process of breaking apart the individual sounds that make up a word or syllable, e.g. "ikati" into /i/ /k/ /a/ /t/ /i/. Being able to do this is an essential skill for successful decoding. It is also needed in writing where one breaks down a language word into its component sounds and then selects the letters that represent those sounds to write the word.
Phoneme categorization:	being able to distinguish a different phoneme in a set of phonemes, e.g., where a learner is asked to identify a word that has a different or odd sound compared to the rest of the words, e.g. "mat", "sat", "set", "sit"
Phoneme manipulation:	the ability to modify, change, or move the individual sounds in a word, e.g. change the first phoneme of the word "mat" to make a new word -> "pat", etc.
Phoneme addition:	adding a new phoneme to the beginning or end of a word to make a new, different word, e.g. add /s/ to "at" to make "sat"
Phoneme deletion:	removing a phoneme (or a number of phonemes) from a word to make a new, different word, e.g. say "mat" without the /m/ sound = "at"
Phoneme substitution:	substituting one phoneme for another in a word, e.g. "pig" to "fig"

Rhymes and alliteration

assonance: the repetition of a vowel sound in a phrase or sentence

consanence: the repetition of consonant sounds in a phrase or sentence, usually in the middle or end of words

rhyme: the repetition of similar sounds at the ends of lines of poetry

Phoneme correspondences (whether as **assonance** or **consanence**) in words give a rhythm to language and may lead to **rhyme** (e.g. n**ight** l**ight**; impa**hla** isihla**hla**; impa**ka** isa**ka**). Rhyme, in particular end rhyme, is used successfully in some languages (such as English) to sensitise learners to sound patterns in words and as a strategy to remember words in context. Rhyme is used to develop phonological awareness.

English poetry has a variety of rhyme schemes in poetry ranging from the simple AABB pattern like this below to very complicated ones:

The day was very s**unny**. (A)

And the children were all f**unny**. (A)

They then sat beneath the tr**ees** (B)

Until stung by some angry b**ees**. (B)

However, rhyme is not applied successfully in the African languages. In these languages repeating sounds, words or phrases are used rather than rhyme.

Alliteration is the repetition of the same consonant sound at the beginning of several different words used in a sentence or paragraph, e.g.

Round the **r**ocks the **r**agged **r**ascal **r**an

I**si**ziba e**si**nzonzo **si**nzonzobele ('The deep pool is silently powerful')

l**si**dlangudlangu e**si**njenge**ndl**ebe ye**ndl**ovu (He is rough as the ear of the elephant')

In English to create a harmonious pattern of alliteration, the repetition of a letter sound must fall at the start of a stressed syllable.

Sound sequences that are single phonemes

In the case of some words that include the sound sequence n+g, n+k and n+y the phoneme /n/ forms a single phoneme with the following consonant.

If the nasal sound /n/ appears before the consonants /g/, /k/ or /y/ it forms one phoneme with that following consonant. The nasal /n/ becomes phonetically [ŋ] when followed by a /k/ or /g/ as in the words "inkomo" (/i/ŋk/o/m/o/) and "ingubo" (/i/ŋg/u/b/o/). The /n/ also becomes phonetically [ŋ] when followed by a *y* in a word such as "inyama", thus /i/ŋy/a/m/a/.

The /n/ also becomes a [ŋ] phonetically before the click sounds but does not form one phoneme with the click. Consider the examples "iyancela" (/i/y/a/ŋ/c/e/l/a/), "nxa" (/ŋ/x/a/) and "inqola" (/i/ŋ/q/o/l/a/).

Note that the n remains a separate phoneme in words such as "into" (/i/n/t/o/), "indlala" (/i/n/dl/a/l/a/), and "intshe" (/i/n/tsh/e/).]

The semi-vowel *w* often appears after certain consonants in Sesotho and isiZulu. The /w/ does not combine with the preceding consonant to form a single phoneme, it remains a separate phoneme in such cases. The semi-vowel /w/ thus retains its status as a separate phoneme when it is preceded by other consonants, even though it has a phonetic influence on the preceding consonant resulting in the rounding of the lips when saying these these consonants. Despite the phonetic influence the semi-vowel /w/ exerts on the preceding consonant it remains a separate phoneme. The word "utshwala" therefore comprises the phonemes /u/tsh/w/a/l/a/.

Prosodic awareness

Prosody refers to the patterns of stress and intonation in a language (or more specifically, in poetry). It describes the "music" of the language, the rhythmic and tonal aspects of speech. Prosody is dealt with in more detail in Unit 12 on page 55.

Although songs, nursery rhymes and games are frequently used to develop phonological awareness these activities often stress the meaning of the words rather than the sounds including such prosodic features as rhyme, alliteration, repetition and **onomatopoeia**.

Specific activities are needed to help children attend to the sounds of words such as waving hands when rhymes are heard or stomping feet for alliterations, clapping for syllables, etc.

It must be remembered that phonological awareness is about sounds and children do not have to be knowledgeable about the letters of the alphabet to be able to develop phonological awareness.

onomatopoeia: words the sound of which imitates the sound of the object referred to. English examples are "meow", "moo", "buzz", "bang", "neigh", "tweet", "swish". A good isiZulu one is "isithuthuthu" ('tractor').

Phonological awareness		
Syllable awareness	Segmenting a word into syllables / Blending syllables to form a word ...	/i/zi/nku/khu/ /si/ya/fu/nda
Phonemic awareness	Segmenting a word into phonemes / Blending phonemes to form a word ...	/i/z/i/n/k/u/kh/u/ /s/i/y/a/f/u/n/d/a/
Prosodic awareness	Use of tone Use of vowel length Use of intonation	Wena uyadla/Yena uyadla Bahamba manje/ Ba:hamba ngalelo langa Niyabona./Niyabona?

Unit 6: Self test questions

1. What does phonemic awareness enable a listener to do?

2. Do these actions demonstrate phonemic awareness?

	Yes	No
A child shown a letter of the alphabet can say its name.		
A different sounding word can identified in a spoken list of words, e.g. king, sing, ring, bang.		
A child on hearing the word 'mat' can identify that it ends with a /t/ sound.		
On hearing the word 'hospital' a child can say that it contains three syllables.		
A child says which letter of the alphabet matches with which sound.		
A child can say if two words, e.g. 'cat' and 'mat', rhyme.		

3. Distinguish between the phonemic awareness activities of blending and segmentation.

4. Give the name for each of these activities.

Activity	Phoneme - ____
Break the word "inja" down into /i/ /n/ /j/ /a/	
Find the sound /a/ in the words "man", "pan", "ham".	
Find six words that began with the same sound "t"	
Identify a word in a list of words that has a different or odd sound.	
Change a word by moving or changing an individual sound in a word, e.g. change "hat" to "mat"	
Remove a phoneme or phonemes from a word to make a new word.	

5. Distinguish between rhyme and alliteration.

7. The Alphabet and orthography

Written texts in South African languages all make use of the Roman alphabet. This alphabet, also called the Latin alphabet, is the most widely used alphabetic writing system in the world, the standard script of the English language and the languages of most of Europe, the Americas and much of Africa Its earliest form can be traced back to scripts used in Syria and Palestine over 3000 years ago. The word alphabet is a compound of the names of the first two letters of the Greek alphabet, "alpha" and "beta". The term "letters" or "letters of the alphabet" refers to one of the 26 characters that make up the Roman alphabet that we employ when writing.

The principle on which the alphabet is based is that letters of the alphabet and some combinations of letters are the symbols used to represent the speech sounds of a language based on systematic and predictable relationships between written letters, symbols, and spoken words. This alphabetic principle is the foundation of any alphabetic writing system.

Although there are only 26 letters in the standard alphabet used for instance to write English, Afrikaans, Setswana and isiXhosa, these letters have to somehow represent all the distinctive speech sounds (i.e. phonemes) of these (and other) languages in writing.

English has 44 distinctive speech sounds (phonemes) and most African languages have even more. The typical strategy used to solve the problem of representing the speech sounds that are more than the 26 alphabet letters available is to use a combination of letters to represent a particular speech sound, or to use **diacritics** (though many languages do not use diacritics). Consider for instance the use of letters to represent the sound /ʧ/ that occurs in many languages. In English it is written as *ch* as in "much" or *tch* as in "watch". In isiZulu it is represented by the letters *tsh* as in "siyatshala". The aspirated *k* sound of Sesotho and isiZulu is represented by the letters *kh* as found in the word "sekhona" ('calabash') in Sesotho and "ikhala" ('nose') in isiZulu.

Ideally, alphabetic writing systems should have an almost perfectly phonemic writing system (**orthography**) with a single letter (or **digraph** or, occasionally, **trigraph**) for each individual phoneme and a one-to-one correspondence between sounds and the letter (or letters) (called a **grapheme**) that represent that phoneme.

This is where there are significant difference between English and the many other European and other South African languages. Only some of the letters represent the same sounds in all the languages (*d, f, h, k, l, m, n, s,* and *z* for instance). (The situation is further complicated by the way the alphabetic writing system is used to represent words in their orthographies.)

The African languages have **transparent** or **shallow orthographies** because of the nearly one-to-one correspondence between sounds and letters (phonemes to graphemes). All words are easily decodable and also have a clearly defined syllable structure. The primary processing unit is the syllable. All syllables are open (Consonant Vowel (CV) or Consonant Consonant Vowel (CCV)).

diacritic: a sign, mark, point or accent that is a small symbol (a glyph), which when written above, below, through or on a letter, indicates a different phonetic value from the same letter when unmarked or differently marked

orthography: the conventional writing and spelling system of a language. It determines the way the speech sounds of the language are represented by graphemes and the word division applied in the language. It includes norms of spelling, hyphenation, capitalization, word breaks, emphasis, and punctuation.

digraph: a combination of two letters, representing two consonants or a vowel and consonant, pronounced as a single phoneme, e.g. in English *st*, *sh*, *ch*, *wh*, *gh*, etc.

trigraph: a single sound that is represented by three letters, for example, in the English word "match", the three letters *tch* at the end make only one sound. Other examples of trigraphs are: *igh* as in "sigh"

grapheme: a written symbol that represents a sound (phoneme). This can be a single letter or a sequence of letters, such as *ai*, *sh*, *ow*, *igh*, *tch*, *ough*, etc. in English. or *th* in Sesotho or isiZulu.

syllable: a speech sound having one vowel sound, with or without surrounding consonants, forming a part or the whole of a word

By contrast English has an **opaque** or **deep orthography** because there is not a consistent correspondence between letters and sounds. Some words are not easily decodable. There are 44 phonemes in English but the alphabet has only 26 letters to represent all these sounds. English syllables are primarily closed (CVC) and it is often unclear to which syllable the consonant belongs. It is more difficult to master an opaque writing system (Borleffs *et al.*, 2017). So English is a harder language to decode and children take longer to become proficient in decoding and word recognition.

African languages orthography

The term orthography refers to the 'writing rules' of the language. This involves aspects such as word division and the representation of speech sounds in writing. Even though all the African languages in South Africa are **cognate** languages, their orthographies differ, in particular in terms of word division. For example, the writing system used by Sesotho is called a **disjunctive** orthography while that used by isiZulu is called a **conjunctive** orthography. The difference between these two systems lies in the word division applied in them.

cognate: of the same or similar nature. Cognate languages related by descent from the same ancestral language.

conjunctive orthography: writing system where each written (orthographic) word corresponds to one spoken (linguistic) word (as in Nguni language texts). E.g. in isiZulu "They used to read it" is written conjunctively as a single orthographic word "Babeyifunda."

disjunctive orthography: writing system where each written spoken (linguistic) word is broken up into component (orthographic) parts (as in Sotho language texts where some of the verbal elements in a sentence (e.g. noun class markers and suffixes) are written separately. E.g. in Sesotho "Ke a leboha" (Thank you) is actually one word – 'ke' and 'a' possess no independent meaning.

Vowel changes and conjunctive orthography

One of the decisive factors that led to the use of a conjunctive orthography for the Nguni languages is the vowel changes that take place when two vowels are juxtaposed (appear next to each other) in a word. Vowel juxtaposing in isiZulu can lead to vowel elision (one vowel is simply omitted), semi-vowel insertion (/w/ or /j/ is inserted between the two vowels), replacement of a vowel with a semi-vowel (/w/ or /j/) or vowel coalescence (the two vowels coalesce to form a new vowel /a/ + /i/ become /e/ or /a/ + /u/ become /ɔ/). Consider the examples in the table below:

Vowel elision (the process of omitting one vowel in cases where two vowels are juxtaposed in a word)	"Isela lebe (< li-eb-e) imali." ('The thief stole money.')
Semi-vowel insertion (the process whereby a semi-vowel y or w is inserted between two vowels that are juxtaposed in an orthographic word. The semi-vowel y is inserted before the front vowels [i] and [e] while the semi-vowel w is inserted before the back vowels [o] and [u].)	"Le nja ayikhonkothi (< a+i-khonkoth-i) ebusuku." ('This dog does not bark at night.')
Replacement of a vowel with a semi-vowel (the process takes place where two vowels are juxtaposed in a word and the first vowel is a higher vowel than the second vowel. The semi-vowel y is used to replace the front vowels [i] and [e] while the semi-vowel w is used to replace the back vowels [o] and [u].	"Imfene yehla (< i+ehl-a) esihlahleni." ('The monkey is climbing down the tree.')

Vowel coalescence (the process whereby two juxtaposed vowels coalesce to form a new vowel. The vowels a + i coalesce to form the vowel e while the vowels a + u coalesce to form the vowel o.)	"UThembi unemali (< u-na+imali)." ('Thembi is with money/Thembi has money.")

The inadmissibility of the phonological structure of Vowel Vowel /VV/ in isiZulu poses a problem for word division. If we were to write "nogogo" as two words (which would be linguistically correct) should we write it as "no gogo" or "n ogogo"? Both these options would be incorrect because the particle word is na and the noun is "ugogo". The only feasible option would be to write it as "na-ugogo", however, this too would be unsatisfactory because the written language would then deviate from the spoken language. Word division difficulties such as these compelled the developers of the orthography to opt for the conjunctive way of writing, resulting in such language forms being written as one word, thus as "nogogo".

The application of this conjunctive writing system resulted in long words which in turn makes early reading challenging in isiZulu (and the other Nguni languages).

Consider the example below that illustrates the differences between word division practices in the orthographies of Sesotho and isiZulu. The Sesotho sentence comprises six 'words' while the isiZulu sentence comprises two 'words.'.

Sesotho: "O na le dimelo tse kae?"

IsiZulu: "Uneminyaka emingakhi?"

English: "You are with how many years? / How old are you?"

The linguistic correctness of word division as reflected in the orthography is also a factor that has an impact on the difficulty level of mastering the particular orthography. Sesotho and isiZulu pose some challenges in this regard due to the fact that orthographic words do not always correlate with linguistic words in these languages.

Morphological complexity in agglutinating languages

The fact that the African languages are **agglutinative languages** with a very productive morphology also contributes to words being morphologically complex and very long. This is especially true for the Nguni languages and isiZulu in particular because of the use of the conjunctive orthography. The meaning of words can be modified or extended by affixation (addition of morphemes) in these languages.

If you compare the orthographies of Sesotho and isiZulu you will find that in Sesotho (and the Sotho languages in general) words are generally shorter compared to words in isiZulu (and the Nguni languages in general). This is because of the disjunctive orthography used in the Sotho languages as opposed to the conjunctive orthography used in isiZulu. Even language forms that are clearly morphemes (thus not words but parts of words) are written disjunctively

agglutinative languages: languages in which several morphemes are added to a noun or verb to denote case, number, gender, person, tense, etc. Usually, an agglutinative language starts with a word root, and creates new words by 'gluing' small, meaningful parts – called prefixes (if you glue them to the front of the root), infixes (inside) or suffixes (if you glue them to the back). Words may contain different morphemes to determine their meanings, but all of these morphemes (including stems and affixes) remain, in every aspect, unchanged after their joining.

Agglutinative languages may be written either conjunctively or disjunctively..

(thus as 'words') in Sesotho. This does not mean that the Sotho orthography is wrong and the Nguni orthography is right or vice versa. In both Sesotho and isiZulu there are some anomalies. The discrepancies between what is written orthographically as a word and what is actually linguistically a word has led to a distinction between 'orthographic' and 'linguistic' words.

We therefore need to be aware that in Sesotho there are language forms that are written as words that are not linguistically words (in particular the morphemes of the verb) while on the other hand there are forms in isiZulu that are written as one word that are actually linguistically two or more separate words.

The Sesotho sentence, "Sello o sa e hlatswa (koloi)." ('Sello he is still washing it (the car)') consists of five orthographic words, however the parts o, sa, e and hlatswa are not linguistically words, they are morphemes. These four parts together form one linguistic word, namely the verb "o-sa-e-hlatswa."

The isiZulu sentence, "UThembi uhamba nomama." ('Thembi is walking with mother') comprises three orthographic words, however, the orthographic word "nomama" actually consists of the two words "na" and "umama". It is primarily due to the vowel coalescence that takes place between the a of na and the u of umama that the coalesced form nomama is written as one word even though "na" and "umama" are linguistically two separate words.

While it would be ideal to correct the orthographies of these languages in as far as the word division is incorrect, the use of these orthographic conventions over many years has made it practically impossible to change the orthographic conventions at this stage. We simply have to accept the inconsistencies that exist in both orthographic systems. Bear in mind that inconsistencies in orthographies are not uncommon across languages. The African languages are thus not unique in this regard.

English orthography

An orthography where a single speech sound is represented using different graphemes, or different speech sound are represented by the same grapheme is called an opaque orthography. English and French are examples of languages with an opaque orthographies. It is more difficult to master an opaque writing system.

Research has shown that, leaving aside other characteristics of languages, it is easier to master reading in a language that has a transparent orthography as opposed to a language with an opaque orthography such as English. (See for instance Aro and Wimmer, 2003 and Seymour, Aro and Erskine, 2003 for a discussion on the differences between mastering a transparent or an opaque orthography.)

Towards decoding

After children have become aware of the alphabetic principle and realised that there is a relationship between spoken language and the words and letters in written language they move into the decoding stage of learning to read. (In more technically language they have developed the phonemic awareness that there are separate sounds in words and a broader phonological awareness that words are made up of sets of individual sounds, and that the individual sounds that they are now aware of are represented by the letters of the alphabet – the alphabetic principle.)

The children now have to learn to know and match letters or letter combinations with word sounds. They learn that writing – print – represents these sounds, or phonemes. Thereafter they have to develop the clear understanding that the letters on the page – the *m*, the *a*, and the *b* and so on – represent these units of sound. They will be able to use this information to decode (read) and encode (write) words.

When children reach this level of print and phonological awareness and have understood the alphabetic principle they are ready to learn to read.

Learning to read is not, however, an easy process. For the mature reader and writer the focus is on the word as the starting point – reading these words and writing these words.

However, for the sake of teaching reading, the word is subdivided into smaller components in three ways, namely: (i) syllables, (ii) phonemes and (iii) morphemes, as illustrated in the examples below:

Sesotho		
Syllables:	/ke/sa/re/ki/sa/	/le/sha/no/
Phonemes:	/k/e/s/a/r/e/k/i/s/a/	/l/e/sh/a/n/o/
Morphemes:	ke-sa-rek-is-a	le-shano

IziZulu		
Syllables:	/ngi/sa/the/ngi/sa/	/u/lu/pho/ndo/
Phonemes:	/ng/i/s/a/th/e/ng/i/s/a/	/u/l/u/ph/o/n/d/o/
Morphemes:	ngi-sa-theng-is-a	u-lu-phondo

English						
Syllables:	/I /	/am/	/still/	/sell/ing/	/the/	/horn/
Phonemes:	/I/	/a/m/	/s/t/i/ll/	/s/e/ll/i/ng/	/th/e/	/h/or/n/
Morphemes:	I	am	still	sell-ing	the	horn

Unit 7: Self test questions

1. Define the term orthography.
2. What is the alphabetic principle?
3. Do all languages use the alphabet letters to represent the same speech sounds in the same way?
4. Guess how may letters of the alphabet represent the same speech sound in all the South African languages.

   4 / 9 / 14 / 21
5. Distinguish between a shallow or transparent orthography and an opaque or deep one.
6. Distinguish between a conjunctive and a disjunctive orthography
7. What is vowel elision?
8. What is vowel coalescence?

8. Decoding – letter-name knowledge

Once some degree of phonological and phonemic awareness has been achieved, children need to understand that there is a relationship between spoken language and the words and letters in written language.

After children have realised that there is a relationship between spoken language and the words and letters in written language they move into the decoding stage of learning to read. (In more technically language they have developed the phonemic awareness that there are separate sounds in words and a broader phonological awareness that words are made up of sets of individual sounds, and that the individual sounds that they are now aware of are represented by the letters of the alphabet – the alphabetic principle.)

The ability to decode words quickly and accurately is equally essential for becoming a fluent reader.

fluency: reading fluency is the ability to read accurately, quickly and with appropriate expression or prosody.

In order to read, learners have to decode text and in order to decode they first have to acquire knowledge of the alphabetic principle. According to the alphabetic principle, letters and combinations of letters are symbols that are used to represent the speech sounds of a language. There is a systematic and predictable relationships between written letters, symbols, and spoken words.

The alphabetic principle is the foundation of any alphabetic writing system (one of the more common types of writing systems in use today). Learning that there are predictable relationships between sounds and letters allows children to apply these relationships to both familiar and unfamiliar words, and to begin to read with fluency.

Children usually acquire alphabetic knowledge in a sequence that begins with letter names, then letter shapes, and finally letter sounds.

Alphabetic knowledge entails two things:

- letter-name knowledge
- letter-sound knowledge.

Letter-name knowledge

Letter-name knowledge refers to knowing the names of the letters of the alphabet. For example, this means that a learner learning to read in English has to know that the letter *a* is called "ay" and that the letter *l* is called "el" and the letter *g* is called "gee" and the letter *w* is called "double-yoo".

In English, letter-name knowledge is less complex than letter-sound knowledge simply because there are only 26 letters in the alphabet and each letter has a name.

Letter-name knowledge is a strong preschool predictor of school reading achievement. As a phonologically-based strategy, letter-name cue reading and

spelling fosters the further development of alphabetic skills based on letter-sound correspondences.

There are good pedagogical reasons to help children to acquire letter-names before the formal process of learning to read starts. It is furthermore beneficial to draw their attention to the phonological linkage between letter names and letter sounds. In most countries that use the Roman alphabet, letter-names are taught at preschool level (in our context in Grade R). In other words the children are taught the names of the letters of the alphabet based on their shape (in both capital and small letter format) before they start to learn to read in Grade 1.

Learning the letter-name involves linking the name of the letter to the shape of the letter.

Knowing the names of the letters of the alphabet partly depends on the ability to isolate phonemes in spoken words. There is an advantage in knowing the names of letters when it comes to learning letter-sound correspondences especially if the names of the letters correspond closely with the sound the letter represents. Studies demonstrate that letter-names provide more than just names, they supply convenient labels that uniquely identify the individual letters and that is important for the child's understanding of the language of literacy. These considerations point to the value of knowing the name of the letters apart from knowing which sound they represent.

Ideally, letter names should include the corresponding letter-sound or at least the most common sound the letter represents (in cases where a letter represents more than one sound). Helping children recognize the connections between letter-names and letter-sounds may give them an advantage serving as a bridge between their knowledge of sounds and manipulating the written word.

The higher the correlation between the letter-name and the letter-sound in a particular language the more advantageous it is for the young learners to know the letter-names before they start learning the letter-sound relationships when they formally start learning to read.

Knowing the letter-names and their sequence is important later on in life as well (e.g. for the purposes of teaching spelling, discussing literacy, teaching language and being able to sort things in alphabetic order).

Letter-names in the African languages

As African languages are characterised by a transparent orthography the letter-names correlate nearly perfectly with the letter-sounds. There are really very few instances where a letter may represent more than one sound or different letters represent a single sound in isiZulu or Sesotho. There are only 26 letters that the children have to associate with their names and these names happen to be well-known sounds in their language.

Although the letter-names of Sesotho and isiZulu are not quite conventionalised, there are names for the letters and teachers do use them. Generally this letter name is the sound of the letter. So, for example, a teacher will simply say "Hhawu ubhale u-g kunokuthi ubhale u-h." (' Oh, you have

written a g instead of an h.') rather than use the English names ("gee" and "aitch") – she will use the letter-sounds as letter-names. The click sounds should also be named according to the sounds they represent instead of the English names "cee", "que" and "ex" which refer to completely different English sounds.

Learning the Sesotho or isiZulu letter-names is particularly beneficial for learners who learn to read in these languages because of this high correlation. It is important to use the African language letter-names and not the English names for the letters of the alphabet when teaching them in these languages. The name of the letter *b* is not 'bee' but rather 'b' and *f* is 'f' rather than 'ef'. This principle is particularly true in the case of the click sounds. There is no justification to teach the learners the English names of these letters in an African language class. It is true that when they learn English they will have to learn the English names for letters such as *g*, *c*, *x*, *q* and *y* which differ substantially from the African language names, but that is no reason to teach them the English names of these letters.

The African language letter-names should be taught in Grade R and/or at the preschool level to be really beneficial for learning to read.

Some people argue that it is a waste of time to teach the children the names of the letters in African languages because they will have to learn the names of the letters in English anyway. However, the benefits of knowing the letter-names in the African home language being taught in the Foundation phase outweighs the objections to teaching the children the letter-names.

It is true that when the children start learning English, they will have to learn the English names for the letters of the alphabet in the same way they will have to learn the English names for just about all known and new objects and concepts anyway. Learning the English letter-names will then entail associating the already known 26 alphabetical symbols with their English labels. This will in fact entail learning far less than 26 new lexical items because many of the English letter-names (closely) resemble the African language sounds and letter-names.

Note that Afrikaans speaking children have always been taught the Afrikaans letter-names when they started to read. The English letter-names were only learned later when these children started learning English. This practice has not impacted negatively on these children.

Letter-names in English

Even in English, where the correlation between letter-names and letter sounds is rather low, research indicates that children benefit from knowing the letter-names when they start learning to read. The high number of instances where letter-names correlate with letter-sounds in English outweighs the draw-back which result from letter-names that differ from the letter-sounds of those letters (as is the case with h, w and z for instance).

Most researchers report positive outcomes in cases where young children were taught the letter names before they were taught letter-sound knowledge (which is essential for learning to read). Those in favour of teaching the names of the letters note that many letter-sounds agree or partially agree with the letter

sound (e.g. "bee", "dee" and "el"). On the other hand, those that are not in favour of this approach, cite the instances where the letter-names actually mislead the young learners if they associate the letter name with the letter sound (for instance the letters "double-yoo" (*w*) and "zed" (*z*)).

Relationship between letter-name knowledge and phonemic awareness

reciprocal: a mutual action or relationship

Letter-name knowledge also has an impact on emerging phonemic awareness skills. The impact is **reciprocal** – the more phonologically aware the child is, the stronger the letter-name knowledge will be. Letter-name knowledge is the most important preschool contributor to first-grade phonemic awareness. Given that phonemic awareness and letter-name knowledge interact and facilitate each other's growth, letter-name knowledge may also be indirectly involved in the relationship between children's phonemic awareness and learning to read.

Recent empirical research has found that those learners who start Grade 1 with a knowledge of the letter-names, perform better when learning to read than those that do not have this knowledge at the outset. One has to be careful not to jump to conclusions since knowing the letter-names also implies knowing the letter form and/or being able to identify the sound represented by the particular letter in a word. (In other words a learner who knows the letter-names may have a better phonological awareness than the learner who does not know the letter-names.) The reality is that the learner who knows the letter-names has an advantage over the learner who does not have this knowledge at the start of Grade 1. This implies that the letter names should be taught in Grade R (or at preschool level). Learning to read is such a big task for the child that only teaching the letter-names later while teaching the child to read may not be ideal.

Unit 8: Self test questions

1. What is a letter name?

2. The names of the letters should be taught [before/after] children start learning about letter-sound relationships and starting to learn to read.

3. What are some other uses of letter-name knowledge?

9. Decoding – letter-sound knowledge

After children have become familiar with the names of the letters they can move to gaining letter-sound knowledge, the key to decoding written alphabetic text. Decoding is impossible without initial letter-sound knowledge.

Although children may previously have learned to recognise the letters of the alphabet and know their names, the alphabetic principle fundamentally refers to the linking of the letter to the corresponding sound in speech. The children have to learn that writing represents these sounds, or phonemes. Then they have to develop the understanding that the letters on the page - the *b*, the *a*, and the *t* - represent these units of sound.

This is normally done sequentially, with the sounds of the letters most commonly used in the texts children will read first. One begins with letter-sound correspondences that can be combined to make words that the learners can read and understand.

These sound-letter links should be taught explicitly and systematically. Most letter-sound correspondences can be taught in the space of a few months at the start of Grade 1. This means that the children can read many of the unfamiliar words they meet in text for themselves, without the assistance of the teacher.

Letter-sound knowledge

Letter-sound knowledge has to do with the relationship between **letters** and sounds.

Letter-sound knowledge is the combination of phonology (sounds in speech; phonemes) and orthography (spelling patterns; **graphemes**). Letter-sound knowledge is a critical foundational skill of early literacy acquisition and serves as the basis for word reading.

Through letter-sound knowledge children develop an awareness of individual sounds within written words and as beginner readers use that letter-sound knowledge to sound out words when they start reading.

Letter-sound knowledge is also related to phonological awareness, especially at the phonemic level, which has been found to be important in learning to read across alphabetic languages. When children learn letter-sound relationships, they develop an awareness of individual sounds within words.

One of the factors that makes reading challenging is the fact that most languages have far more speech sounds (phonemes) than the 26 letters of the alphabet that represent them.

Even though there are instances of one letter representing one sound there is no absolute one-to-one relation between the speech sounds and the graphemes that represent them in writing.

letter: a symbol usually written or printed representing a speech sound and constituting a unit of an alphabet

grapheme: a written symbol that represents a sound (phoneme). This can be a single letter, or could be a sequence of letters, such as *ai*, *sh*, *ow*, *igh*, *tch*, *ough*, etc. in English.

The application of the writing system (with this inherent shortcoming) leads to the following:

(1) one letter may represent one sound,

(2) one letter may represent different sounds,

(3) a combination of letters may represent a single sound or

(4) different letters may represent the same sound.

Each of these are briefly described and illustrated below.

One letter representing one sound	These are letters that always represent only one speech sound. For example in isiZulu the letter *a* always represents the low central vowel /a/ as in the word "amandla". The letter *f* represents the sound /f/ as in "-funda". So too the letter *l* always represents the sound /l/ as in the word "ilala". Similarly the letter *x* in the orthography represents the lateral click /ǁ/ as in the word "ixoxo".and the letter *q* represents the sound /ǃ/' as in the stem "-qeda".
One letter representing different speech sound	Instances of different sounds being represented by a single letter occur commonly in English (which is why its spelling is so tricky!) but are rather subtle in the case of Sesotho and isiZulu. The grapheme *e* of isiZulu represents the two mid vowel /e/ sounds in the words "isela" [ɛ] and "leli" [e]. Even though these two vowels differ slightly in their pronunciation they are written using the same grapheme. The vowel [e] in the word "leli" is called a raised high-mid vowel. It is pronounced higher because of the influence of the high vowel [i] in the syllable following the /e/. The pronunciation of the sound represented by the grapheme *k* of isiZulu may also differ slightly. Consider the pronunciation of the /k/ sounds in the words "ikathi" and "ukulala". The /k/ in "ikathi" is pronounced as an ejective sound thus [k'], while in the word "ukulala" it is pronounced as [ʔ] sounding more like a [ġ]. These sounds nevertheless form a single phoneme /k/. Another example is the /b/ sound in the stems "-bika" ('report') and "-baba" ('bitter'). The *b* sound in "-bika" ('report') is an **egressive** sound while the *b* sound in "-baba" ('bitter') is **ingressive**. These two sounds do not constitute different phonemes though. However, the two *m* sounds in the words "imithi" ('medicines') and "mina" ('here, take it') comprise two different phonemes. The /m/ in for instance "imithi" is represented by the phoneme /m/. The *m* sound in the word "mina" ('here, take it') is pronounced with breathy voice and is a separate phoneme, namely /mɦ/.

egressive: of speech sounds in which the air stream is created by pushing air out through the mouth or nose. The three types of egressive sounds are from the lungs, the glottis, and from the tongue. The opposite of an egressive sound is an **ingressive** sound, in which the airstream flows inward through the mouth or nose.

A combination of letters representing one speech sound	The speech sound [ɬ] of isiZulu is represented by two letters, namely *h* and *l* as in the word "isihlahla". These two letters together thus represent a single speech sound. The same is true for the speech sound [ʤ] of isiZulu in the word "badlala" which is represented by the two letters *d* and *l*. Consider also the use of the letter *h* after a consonant to indicate **aspiration** as in these: *bh, kh, ph, th, ch, qh,* and *xh*. Another example is the letters *tsh* representing the sound [tʔ] in the word "itshe". In English there are many cases of different letters or letter combinations representing the same sound, as in the case of the f sound that may be represented by the letter *f* (in "fish"), the letters *ph* (in "physics") or the letters *gh* (in "tough").
Different letters or combinations of different letters representing the same speech sound	As an example of this is the way the /f/ sound is represented in the English words "fish" , "physics" and "tough". In these instances the same sound is represented in three different ways in the orthography, namely by *f, ph* and *gh*. Sesotho and isiZulu do not have instances of different letters representing the same speech sound.

The importance of alphabetic knowledge

The ability to decode words quickly and accurately is equally essential for becoming a reader. Successful reading and comprehension depend on the ability to decode text quickly and accurately and it is therefore essential to the development of fluency in reading (Muter and Diethelm, 2001; Ardington *et al.* 2020).

Teachers need to be able to develop decoding skills in both home and additional languages, develop skill in each of the decoding components, know how to use assessment guidelines and rubrics and know what norms and benchmarks to apply in both home and additional languages.

Children's growing knowledge of letter-sounds correspondence enables them to blend letters together into words, and as they begin to rapidly recognise word patterns they begin to read fluently – that is at a good pace and accurately.

These skills enable children to decode words they have not seen before. After extensive practice the process of reading becomes automatic – and now more attention can be devoted to meaning (comprehension) in the various texts they are able to read.

If children are taught reading in their home language systematically and explicitly (and at the same time motivated through pleasurable activities,

hearing good books and gaining meaning from what they read) nearly all children (whatever their socio-economic background) should be able to read at an acceptable level of fluency at the end of Grade 1 in the African languages (where the correspondence between sounds and letters is regular), but often after a somewhat longer period in English (because of certain irregularities) (in more technical terms, African languages have transparent orthographies, English an opaque one).

Preschool children's alphabetic knowledge is a critical foundational skill of early literacy acquisition for alphabetic languages and is recognized as perhaps the most robust predictor of future decoding ability and reading in the early grades (Torppa *et al*., 2006). Learning letter-sound relationships develops children's awareness of individual sounds within words and is a crucial skill for children to sound out words when learning to read.

Conversely, an inability to grasp the letter-sound principle, negatively affects the development of decoding (Nieto, 2017). Unfortunately, as Ouellette *et al*. (2013) point out, because of its strong link with early reading instruction, alphabetic knowledge seems to have a narrow developmental window. Introducing alphabetic knowledge too early with preschool children may lead to most of the children failing to achieve competence, introducing it too late may not produce any identifiable beneficial effect.

However, in situation where schooling has been ineffective and literacy levels are low, assessing alphabetic knowledge with older learners may help to distinguish readers from non-readers who have not yet grasped the relationship between print and sound.

Decoding across the grades

Teachers need to gain a developmental perspective on these decoding components and adapt their teaching emphasis across the grades.

The alphabet, letter-names and the most common sound-spelling for each letter should be taught in Grade R or early in Grade 1. In Grade 1, the majority of the decoding skills should be formally taught. Because of its conjunctive writing system and complex consonant sounds, it is very difficult to read Nguni words fluently if learners do not know their letter-sounds and how to blend them, so a strong phonics foundation must be laid in Grade 1.

The focus of instruction in Grades 2 and 3 is to consolidate learners' phonics skills. That includes attention to fluency with basic sound-spellings taught in Grade 1, and the decoding of longer and more complex words.

Above Grade 3, the focus of instruction should be on multisyllabic words. In English children need to have formal instruction on the six syllable types, (see page 20) prefixes, suffixes, and Greek and Latin roots.

It must be remembered that decoding skills are not all that is required for teaching reading, they are just one component of teaching reading. Decoding is a means to an end – that of developing good reading comprehension.

Assessing decoding skills

Decoding skills need to be regularly assessed and progress monitored.

Generally, one-to-one assessment by the teacher with each child is the most effective way of monitoring the development of decoding skills and reading.

Decoding is initially assessed at the letter or grapheme level and later at the word level. When assessing learners at the word level it is beneficial to include pseudo words such as words *siyaphova, *balomba amathimbi, *isikhophi. By doing so, you truly test the learners ability to decode the word phonologically. This assessment can be introduced as a game where they have to say silly words ('amagama abhedayo').

There are a huge range of tests, exercises and benchmarks for decoding in English but few available in the African languages.

Explicit, measurable goals by grade level for oral reading fluency (ORF) and related sub-skills are needed with the criteria established by research. Rereading, partner reading, and reading with a model are validated techniques.

***** : When you see an asterisk or asterisks in a word or sentence or next to a character in a word in any linguistic text it means that the word or sentence is not found in the natural spoken language. It has been constructed by the writer to illustrate some point.

Decoding in African languages, Afrikaans and English

Because African languages are strongly syllabic, the Roman alphabet is not ideal for representing the syllables as it uses two letters (or more) for each one sound syllable. These languages have a general Consonant-Vowel syllable pattern, e.g. ngu- and ba-.

Hence learners need to understand the letter-sound relations within syllables, and how to blend sounds to form syllables, and how to blend syllables to form words.

The Nguni languages have both an agglutinative structure and a conjoined writing structure which makes the words long and complex. These complex words are composed of word stems and affixes, and readers must register the meaning of the stem and note its modification by each affix. For example, in the isiZulu word "asimthandazele"('let us pray for him/her') readers must recognise the five morphemes (a/si/m/thandaz/ele) – a stem preceded by three affixes and succeeded by another. A change of one letter in one affix changes the meaning, (e.g., "animthandazele" ('you (plural) should pray for him/her').

The implications of this for teachers of reading are that learners must rapidly perceive shifts in arrangements of morphemes, and the concomitant shifts in meaning of the word. Exercises designed to develop readers' ability to instantly recognise high frequency non-agglutinated short words and high frequency word forms with only two or three morphemes would be equally useful.

Tone modifies meaning in spoken African languages but there are no tone markers in the written script. For example, in isiZulu, -nga- can have a negating effect in a low tone, but indicates potential in a high tone. "Lomntwana angajovwa", if nga- is low toned, means "This child **must not** be vaccinated." but, if nga- is high toned, means "This child **may** be vaccinated." Therefore,

readers must either hold alternate meanings in mind where there is ambiguity until they confirm meaning from contextual cues, or reread phrases to decide on their meaning. The implication for educators here is that they must teach readers to find contextual cues within the text which would help them decide on the appropriate tone and the consequent meaning of the word.

Because of its conjunctive writing system and complex consonant sounds, it is very difficult to read Nguni words fluently if learners do not know their letter-sounds and how to blend them, so a strong phonics foundation must be laid in Grade 1. The available data indicates that Nguni orthography is relatively time consuming to read in comparison with other alphabetic languages.

Finally, especially in comparison with English, African languages tend to have a lower number of permissible letter combinations, partly because of the Consonant-Vowel (CV) syllable structure, and partly because there are no contiguous vowels or double consonants. Short letter strings such as *zi, ku, ka,* or *nga*, recur frequently, either as distinct morphemes or parts of larger morphemes, with different meanings in different contexts. In a comparison with English letter strings these letter strings appear much more frequently in African language texts. One effect of this is that words are not as visually distinct from one another in African languages as they are in English.

Decoding in Afrikaans is fairly straightforward as there is a consistent correspondence between letters and sounds.

English is a harder language to decode and children take longer to become proficient in decoding and word recognition. However, many of the "irregularities" in the English sound-letter representation obey certain rules that owe their origin to the different language sources (British, Anglo-Saxon, Latin, Greek, Norse, etc.) in the evolution of the English language. About half of all English words have a regular sound-symbol correspondences, about a third have only one irregularity (usually of a vowel). Only about 4% are truly irregular. Some of the most common English words are hard to decode phonetically – such as "the" and should be learned as sight words.

In the teaching of phonics encouraging reading accuracy is vital as it is a prerequisite for increasing reading speed. Only when accuracy has reached levels of approximately 95% will the reading speed increase.

Unit 9: Self test questions

1. Most languages have far more _____ than the 26 letters of the alphabet that represent them.
2. How should letter-sound knowledge and decoding be taught?
3. List the four options for what sound or sounds letters may represent.
4. When teaching decoding how does one address the lack of tone markers in the orthography of most of the African languages used in South Africa?

10. Phonics

Phonics is the system of sound-letter relationships used in reading and writing. Phonics requires learners to know and match letters or letter combinations with word sounds, learn the rules of spelling, and use this information to decode (read) and encode (write) words.

So teaching "phonics" refers to the method of teaching the relationship between spoken and written language in the process of reading instruction used to teach learners to decode written text.

Remember that reading is actually the process of converting the letters on paper into speech sounds and then joining these sounds together to form words and meaning. The learner will initially sound out the word slowly and consciously but with much practice accurate word recognition occurs rapidly and in the case of competent readers eventually automatically (without conscious attention).

Phonics therefore concerns an understanding of the writing system – the orthography of the language, and the process of mapping speech sounds onto the graphemes that represent them in the written form.

The importance of phonics in learning to read is clear, as is stated by Castles *et al.* (2018, p. 6):

> It is uncontroversial among reading scientists that coming to appreciate the relationship between letters and sounds is necessary and nonnegotiable when learning to read in alphabetic writing systems and that this is most successfully achieved through phonics instruction.

Phonics is the bringing together of the knowledge of letter shapes, knowing that written words are built up from letters and letter groups (syllables and consonant clusters) and word parts (prefixes, infixes, suffixes, roots and base words) and from knowledge of letter sounds, knowing that they represent sound values in the language and can be blended together to make words.

To recognise words, children need to learn not only the connections between phonemes and graphemes (the letters or letter combinations that represent phonemes), but also the spelling patterns for syllables from which longer words are constructed. As they progress they come to decode digraphs, trigraphs, vowel teams, blends, word families, inflections, roots and affixes. Eventually learners recognise recurring letter patterns in their language based on orthographic, phonological, morphological, syntactic and semantic information relating to smaller and larger segments of words (Castles *et al.*, 2018; Ehri, 2005; Share, 2008). When beginner readers encounter words frequently, these words become familiar and known, and they recognise word chunks (for example in the isiZulu words "sifunda", "asifundi", "bafundile", and "zisafunda" they will eventually realise that the common root is *-fund-* ('learn' or 'read') and develop word-specific knowledge that speeds up and automatise the reading process which in turn frees up more short term memory for reading comprehension rather than focusing on word decoding.

Methods of teaching phonics

The literacy teacher needs to be familiar with a range of methods and techniques for teaching phonics.

There are many phonics programmes following slightly different phonics teaching approaches and many schools use them.

The Department of Basic Education Grade 1 and Grade 2 learner workbooks provide a simple phonics informed approach and the Department also has a ***National Framework for the Teaching of reading in African Languages in the Foundation Phase*** (Department of Basic Education, 2020).

There are also a host of resource materials in English for teaching decoding. including the official United Kingdom's ***Letters and Sounds: Principles and Practice of High Quality Phonics*** (Department for Education and Skills, 2007).

The value of such programmes is that they provide the necessary details for dealing with particular sound-letter combinations and word components in a suitable sequence at particular school grade levels and make use of simultaneous visual, auditory and kinesthetic activities.

Teachers need to become familiar with the similarities and differences in phonics teaching strategies appropriate to the particular language and be aware of the similarities and differences in phonics strategies in analytic/isolating and agglutinating languages.

This includes recognising the importance of syllables and word morphology in the African languages.

Approaches to teaching phonics

The are two main approaches to teaching phonics, the synthetic and analytic.

Synthetic phonics programmes teach grapheme-phoneme correspondences individually and in a specified sequence, and children are taught early to blend (synthesize, hence the term synthetic) individual phonemes together to make words.

In contrast, analytic phonics programmes begin with whole words, and grapheme-phoneme correspondences are taught by breaking those words down into their component parts.

Scientific research has shown that the synthetic phonics approach has some clear advantages over the analytic phonics approach.

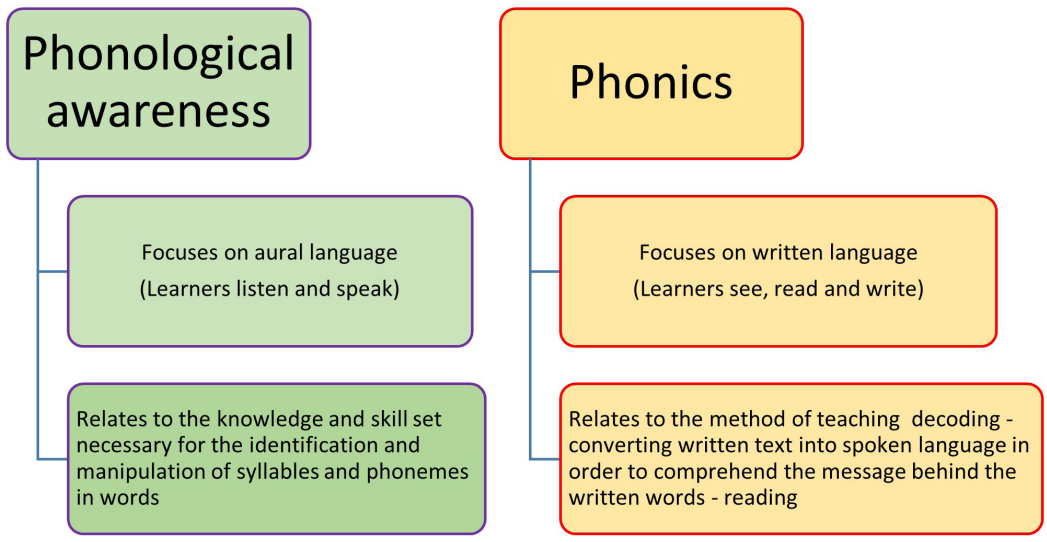
Phonics and its outcome, successful decoding of words in a text, has, of course to be followed by word and sentence reading skills so that the "sounding out" of the decoding stage can move on to the beginning of meaningful reading – the text "making sense".

The six basic phonological operations in phonics

These phonological operations, which have previously done when developing phonemic awareness with spoken language (see pages 21-22) now have to be done with the written text.

Matching:	identifying words that begin or end with the same sound, e.g. fast, fish, fall, frog, friend
Blending:	blending (putting together or combining) individual sounds into a word, e.g. /i/ /k/ /a/ /t/ /i/ into "ikati"
Segmentation:	the process of breaking up or distinguishing the individual sounds that make up a word or syllable, e.g. "ikati" into /i/ /k/ /a/ /t/ /i/. Being able to do this is an essential skill for successful decoding. It is also needed in writing where one breaks down a language word into its component sounds and then selects the letters that represent those sounds to write the word.
Addition: (epenthesis)	adding a new phoneme to the beginning or end of a word to make a new, different word, e.g. add /s/ to "at" to make "sat"
Deletion:	removing a phoneme (or a number of phonemes) from a word to make a new, different word, e.g. say "mat" without the /m/ sound = "at"
Substitution:	substituting one phoneme for another in a word, e.g. "pig" to "fig"

The differences between phonological awareness and phonics are summarised below:



While phonological awareness and phonics are not the only important components of reading they are foundational. Without the ability to decode words, the reader will not be able to derive meaning from a text. Decoding demands of the reader an understanding of the sound system (phonology), the writing system (orthography), and of the smallest meaningful parts (morphemes) of the language concerned. It is therefore important that these components form an integral part of early reading (and writing) instruction.

Eventually learners need to recognise recurring letter patterns in their language based on orthographic, phonological, morphological, syntactic and semantic information relating to smaller and larger segments of words (Castles *et al.*, 2018; Ehri, 2005; Share, 2008). When beginner readers encounter words frequently, these words become familiar and known, and they recognise word chunks and develop word-specific knowledge that speeds up and automatise the reading process which in turn frees up more short term memory for reading comprehension rather than focusing on word decoding.

Generally it is not a good idea to teach children to use context to read the words on the page: children who read well do not need to use context as an aid to word recognition. (An exception is using contextual clues within the text where lack of tone markers in African language orthographies may require it.)

Unit 10: Self test questions

1. What is teaching phonics?
2. Fill in the missing words. Phonics is the bringing together of the knowledge of letter _____, knowing that written words are built up from l_____ and letter groups (_____ and _____ clusters) and word parts (_____, _____, _____, _____ and _____ words) and from knowledge of letter _____knowing that they represent sound values in the language and can be _____ together to make words.
3. As children start reading faster what is freed up and what can it be used for?
4. Very briefly describe the synthetic phonics approach?
5. What are six basic phonological operations in phonics?
6. Does a learner need to understand the meaning of a word to be able to segment or blend the word's phonemes?
7. Mark True or False for these statements about English phonics:

	True	False
Phonemes are represented by letters (graphemes).		
A phoneme can only be represented by a single letter.		
The same phoneme can be spelled in more than one way.		
The same spelling may represent more than one phoneme.		

11. Morphological awareness

Morphological awareness is the knowledge and skills associated with breaking words down into smaller units of meaning such as stems, roots, and morphemes.

Morphology is an important contributor to word reading, language comprehension, reading comprehension and vocabulary building. It is critical to the development of word reading fluency (Berninger *et al.*, 2002).

Morphemes are the smallest units of words that carry meaning. Unlike a word, which has a stand alone meaning, a morpheme often does not stand alone and the meaning of a morpheme is context dependent, that is, it is only in the context of a particular word that the contribution of the morpheme to the meaning of the whole word becomes clear.

Take the letter s. It has no meaning in itself but, used as a plural, it has. It is thus a morpheme when added to a word such as "cat" to turn it into the plural "cats".

Take the word "unbreakable". It is meaningful and is a word with three morphemes. "Unbreakable" is composed of the morphemes: un- (a morpheme signifying "not"), -break- (the root, a morpheme), and -able (a morpheme signifying "can be done").

Some languages have very a **productive morphology**, that is, many morphemes in the language are actively used in not only existing words, but also in word-formation. Basically this means that the morpheme is so regularly attached to words that the speaker does not have to memorise words but rather the rules about attaching morphemes to words or word bases, as for example in the suffix *s* as a plural in English.

productive morphology: a large number of grammatical morphemes can be attached to words in order to modify meaning.

The morphology of the African languages

The most appropriate starting point for morphological analysis in the African languages is the word and not the root (Posthumus, 1994).

Starting the morphological analysis from the whole word, the morphological processes that may be applied to the word are affixing (which is an general term for prefixing, infixing and suffixing), morphological substitution, deletion and reduplication).

The meaning of words can be modified or extended by applying these morphological processes to the word.

The fact that the African languages are agglutinating languages with a very productive morphology also contributes to words often being morphologically complex and long.

This is especially true for the Nguni languages because of the use of the conjunctive orthography.

The three basic types of morphemes are:

Roots (lexical morphemes)	A root is that part of a word that cannot be analysed any further into smaller meaningful parts and which carries the basic meaning of the word. These morphemes are nouns, adjectives and verbs that are independently meaningful, e.g. "dog", "inja", "good", "pretty", "man".
Stems	The term stem is best described as the root plus an affix or affixes. [The term 'stem' is often defined as a root plus suffixes. That definition is based on the assumption that the morphological structure of the language generally comprises a root and suffixes. In the African languages prefixes are as productive as suffixes and therefore this definition is inadequate.] The term stem is used to refer to that part of a word in a morphological analysis that has been shed of some morphemes but which still contains a root plus one or more morphemes.
Grammatical	These are small sets of letters that perform a function when used with words or added to words, They include prepositions, conjunctions, pronouns and the noun class prefixes class in African languages. They include all the affixes.

Affixes in the Bantu languages

The most prominent grammatical characteristic of Bantu languages is the extensive use of affixes Each noun belongs to a class, and each language may have several numbered classes, somewhat like grammatical gender in European languages. The class is indicated by a prefix that is part of the noun, as well as agreement markers on verb and qualificative roots connected with the noun. Plural is indicated by a change of class, with a resulting change of prefix

In the noun "izikhova" the first i- is the preprefix and the -zi- is the true prefix. Both these morphemes are grammatical morphemes. These morphemes mark grammatical categories such as the noun class and singular versus plural. The remaining part of this word -khova is the root. It is called a root because that is the part that carries the lexical meaning of the word and it cannot be broken down further into morphemes.

This also implies that morphemes can only be analysed within the context of a word. It is for instance impossible to answer the question, "What morpheme is the morpheme ba?" The reason why it is impossible to answer this question is because there are a number of morphemes ba.

- ba may be the subject morpheme of a verb as in the example, "Abantwana bayadla" ('The children they are eating'). This morpheme ba- appears as the first morpheme in the verb and it is called the subject morpheme because it marks the subject in the verb, telling us who are playing.
- ba may be the object morpheme as in the example, "Siyababona abantwana" ('We are seeing them the children'). In this sentence the subject morpheme

is si- and the subject is thus "thina" ('we'). The morpheme -ba- marks "abantwana" as the object of this sentence, thus as the people/thing being seen.

- ba may also be the true prefix of a noun as in the example abazali 'parents'.

All these morphemes signify particular grammatical functions and are therefore called grammatical morphemes. Note also that it is clear from the examples above that morphemes have a fixed position in the word structure.

With reference to the first two examples above, we can conclude that the subject morpheme is the first morpheme in the verb while the object morpheme appears directly before the verb root.

Note that no morpheme can appear between the object morpheme and the verb root.

Consider another set of isiZulu examples involving the morpheme si.

- "Sihlala eGoli" ('We live in Johannesburg') si- is the subject morpheme for 1st person plural.
- "Uyasibiza umama" ('Mother is calling us') si- is the object morpheme for 1st person plural.
- "Isicathulo siphukile" ('The shoe has/is broken') si- is the subject morpheme of a class 7 noun (isicathulo).
- "Angisiboni isigqoko sakho" ('I don't see your hat') si- is the object morpheme of a class 7 noun ("isigqoko").
- "Isigqoko" ('hat') si- is the true prefix of a class 7 noun (isigqoko).
- "Sibheka umusi" ('We are looking at the smoke') si- is the root of a noun in class 3 denoting 'smoke'.

It is thus clear that the morpheme and its meaning depends on the word category in which it appears (noun, verb, adverb, etc.) and its position in the word.

The impact of agglutination on morphology

The African languages are agglutinating languages, meaning that they have a very productive morphology – a large number of grammatical morphemes can be attached to the word in order to modify its meaning. Compare the difference in the number of morphemes in this isiZulu word which is also a sentence and the equivalent English sentence:

"Basazofundisana."

"They will teach each other."

IsiZulu employs a single word (a verb) "basazofundisana" (ba-sa-zo-fund-is-an-a) comprising seven morphemes to express the meaning expressed by the six English words "they will still teach each other"'.

Agglutination is the process of adding affixes to the word to mark grammatical categories and syntactic functions. Consider for instance the noun class prefixes that mark the categories of singular or plural or non-countable and in general

the noun system of the language. The noun "umuntu" contains the noun class prefix umu- that marks the singular and at the same time marks the noun as belonging to the class 1 - the human class. On the other hand, the noun "abantu" contains the noun class prefix aba- that marks the plural and at the same time marks the noun as belonging to Class 2 – also human class but plural.

The verb also contains certain morphemes that, for instance mark the subject, object, mood, tense and polarity (positive and negative statements). Let us consider the sentence below.

"Siyazibala izinkomo."

('We are counting them, the cattle.')

In the sentence above, the verb "siyazibala", contains the subject morpheme si-. This morpheme marks the subject as being the first person plural. The verb also contains the object morpheme -zi-. This morpheme marks the object in the verb as being "izinkomo". The final morpheme -a in the verb is the verb categorial morpheme and marks the verb as being the positive form of the present tense.

Most words in the African languages are polymorphemic, which means they contain two or more morphemes. It is thus evident that they have a far more productive morphology than a non-agglutinative language such as English.

Example of a morphological analysis of an isiZulu word: "basazofundisa"

There is a hierarchical arrangement of morphemes in the word. We distinguish between essential and non-essential morphemes. In analysing a word, we normally deal with the non-essential morphemes first by analysing them one by one until we are left with the word containing only the essential morphemes. The essential morphemes are then analysed simultaneously. In this analysis the stem refers to the root plus one or more affixes.

(word) basazofundisana

↓

(stem) bazofundisana → -sa- (progressive morpheme)

↓

(stem) bafundisana → -zo- (near future tense morpheme)

↓

(stem) bafundisa → -an- (reciprocal morpheme)

↓

(stem) bafunda → -is- (causative morpheme)

↓

(stem) bafunda

ba- -fund- -a

(subj morph class 2) (root) (categorial morpheme)

Syllables and morphemes in African languages

The grammatical morphemes in the African languages often consist of a single syllable and there is a strong correlation between syllables and morphemes in terms of the morphemes that appear in front of the root in the word.

See for instance the morpheme and syllable correlation in the Sesotho and isiZulu verb forms "ha ba sa sebetse" and "abasasebenzi" ('they are no longer working') respectively and the **locative** derived nouns "sefateng" ('at/in/to … the three') and "emifuleni" ('at/in/to…the rivers') below.

locative: a word or morpheme indicating location or direction. They correspond roughly to the English prepositions "in", "on", "at", and "by".

The analyses are presented in a table form for easy comparison between the syllabic and morphological analysis of each of these words.

Syllabic and morphological analysis of the Sesotho verb "ha ba sa sebetse"

	"ha ba sa sebetse" ('they are no longer working')					
Syllables	/ha/	/ba/	/sa/	/se/	/be/	/tse/
Morphemes	ha- (negative morpheme, indicative)	-ba- (subject morpheme, class 2/2a)	-sa- (progressive morpheme)	-sebets- (verb root)		-e (negative verb final morpheme)

Note the correlation between the syllables and morphemes in the pre-root position of the verb "ha ba sa sebetse" ('they are no longer working') in the table above.

In the case of the morphemes /ha/, /ba/ and /sa/ the morpheme and syllabic boundaries correlate exactly.

Syllabic and morphological analysis of the isiZulu verb "abasasebenzi"

	"abasasebenzi" ('they are no longer working')					
Syllables	/a/	/ba/	/sa/	/se/	/be/	/nzi/
Morphemes	a- (negative morpheme, indicative)	-ba- (subject morpheme, class 2/2a)	-sa- (progressive morpheme)	-sebenz- (verb root)		-i (negative verb final morpheme)

It is clear from the analysis of the verb with the root -sebenz- that the boundaries of the morphemes and the syllables in pre-root position, namely /a/, /ba/ and /sa/ (highlighted in the table above) correlate exactly.

Morphology and the word categories

Each word category has its own unique morphological structure. We focus on the morphology of verb and the noun only because these word categories are morphologically very productive and they are the words with the highest frequency of usage.

Nouns

noun class: in the Bantu languages nouns are grouped according to their prefix. The nouns in each class refer to certain categories of things or concepts. There are 23 nominal classes though a particular language may not have all of them, for example isiZulu has 14, Sesotho and IsiXhosa have 15 and Tshivenda has 20.

A noun in Sesotho and isiZulu is characterised by the basic morphological structure as indicated below. The Sesotho noun comprises a **noun class** prefix and a root.

Basic morphological structure of the noun in Sesotho

	Word	Noun class prefix	Root
Sesotho:	motho	mo-	-tho
	basadi	ba-	-sadi
	sefate	se-	-fate
	dithiane	di(n)-	-thiane

The noun class prefix morphemes mo-, ba-, se- and di(n)- are grammatical morphemes while the forms -tho, -sadi, -fate and -thiane are roots.

Unlike the Sesotho noun, the noun class prefixes of isiZulu comprise a preprefix and a true prefix.

Basic morphological structure of the noun in isiZulu

	Word	Preprefix	True noun class prefix	Root
IsiZulu:	umuntu	u-	-mu-	-ntu
	abafazi	a-	-ba-	-fazi
	isihlahla	i-	-si-	-hlahla
	amaqhina	a-	-ma-	-qhina

The noun class prefix morphemes u- mu-, a- -ba-, i- -si- and a- -ma- are grammatical morphemes while the forms -ntu, -fazi and -hlahla and -qhina are roots.

Unlike the Sesotho noun, the noun class prefixes of isiZulu comprise a preprefix and a true prefix.

Both Sesotho and isiZulu have subclasses in certain noun classes. Sesotho has a subclass 1a and 2a while isiZulu has a subclass 1a, 2a and 3a.

Sesotho nouns in class 1a have no class prefix, for instance the noun “ntate”. Nouns in class 1a use the agreement morphemes of class 1. Consider for instance “Ntate o a ja .” (‘Father, he, is eating.’) and “Ke a mo rata.” (‘I him love (father) / I love him (father)’). Nouns such as “ntate” are therefore categorised as belonging to class 1a. IsiZulu nouns in class 1a, such as “umama” consist of a pre-prefix only, namely u- and use the agreement morphemes of class 1. Consider for instance “Umama uyadla.” (‘Mother, she, is eating.’) and “Ngiyamthanda.” (‘I her love (mother) / I love her (mother)’.)

Although Sesotho nouns in class 2a such as "boSello" have a noun class prefix bo-, these nouns use the agreement morphemes of class 2 and are thus categorised as belonging to class 2a. Similarly, isiZulu nouns such as "oVusi" have a preprefix o- but they employ the agreement morphemes of noun class 2 and are thus categorised as belonging to class 2a.

Apart from subclasses 1a and 2a, isiZulu has a subclass 3a as well. Like class 1a nouns, the class 3a nouns of isiZulu have a preprefix u-, only. Nouns in this group are nouns that do not denote human beings like classes 1 and 1a. Consider for instance the morphological analysis of the class 3 nouns "utamatisi" ('tomato') and "ufezela" ('scorpion').

Word	Preprefix	Root
utamatisi	u-	-tamatizi
ufezela	u-	-fezela

These nouns employ the agreement morphemes of class 3 and hence, they are classified as class 3a nouns.

Note the use of the class 3 object morpheme and the pronoun "wona" for the object noun "utamatisi" in the sentence below rather than that of class 1.

"Siyawudla wona utamatisi." ('We eat it, a tomato.')

If the noun "utamatisi" belonged to class 1a the object morpheme would have been -mu- and the absolute pronoun "yena", thus "Siya*mudla *yena utamatisi." However, since this noun employs the object morpheme -wu- and the absolute pronoun "wona" of class 3, it is a subclass of class 3, thus 3a.

The agreement morphemes are basically derived from the true prefix of the noun and because the subclasses contain a preprefix only and no true class prefix, they derive their agreement morphemes from the main classes.

IsiZulu nouns in noun classes 16 and 17 have no preprefix, only a true prefix. Consider the examples below.

Word	True prefix	Root
phandle	pha-	-ndle
kude	ku-	-de

The form and meaning of the basic noun can be modified by adding, omitting, replacing or reduplicating the morphemes in the noun. Consider for instance the morphological and semantic modification of the basic noun in the forms "sefateng" (< se-fat(e) + (e)ng) ('at/in/to/from… the tree') and "bukana" (< buk(a) + (a)na) ('small book') and "tlouhadi" (< tlau + hadi) ('lioness'.)

Similar to Sesotho, the form and meaning of the basic isiZulu noun can also be modified by adding, omitting, replacing or reduplicating morphemes in the noun. Consider for instance the morphological and semantic modification of the basic noun in the forms "isitshana" (< i-si-tsh(a) + (a)na) ('a container') and "emfuleni" (< u e- m-ful(a) + (i)ni) ('on the river') and "imbuzikazi" (< i-m-buzi + kazi) ('female goat').

* : When you see an asterisk or asterisks in a word or sentence or next to a character in a word in any linguistic text it means that the word or sentence is not found in the natural spoken language. It has been constructed by the writer to illustrate some point.

Verbs

The basic form of the verb in the positive comprises three morphemes. These morphemes are, a subject morpheme, a verb root and a verb final categorial morpheme.

Consider the Sesotho verb "re reka" (< re-rek-a) in the sentence "Re reka dibuka" ('We are buying books'). The subject morpheme re- is the grammatical morpheme that denotes the 1st person plural as subject while the verb root is -rek- (with the meaning of 'buy') and the verb final morpheme -a marks the verb as a positive form of the indicative, present tense.

From this analysis it is clear that a single morpheme may denote more than one grammatical category. The final verb morpheme or verb categorial morpheme, the -a referred to above, for instance marks the indicative mood, the present tense and the positive polarity.

In the negative, the basic form of the verb will comprise a negative morpheme ha- followed by the subject morpheme then the verb root and then the negative verb categorial morpheme. Consider the verb "ha re reke" (< ha-re-rek-e) in the sentence, "Ha re reke dibuka." ('We are not buying the books').

Consider the isiZulu verb "sithenga" (< si-theng-a) in the sentence, "Sithenga amaswidi" ('We are buying sweets'). The subject morpheme si- is the grammatical morpheme that denotes the 1st person plural as subject while the verb root is -theng- (with the meaning of 'buy') and the verb categorial morpheme -a marks the verb as a positive form of the indicative, present tense.

From this analysis it is clear that a single morpheme may denote more than one grammatical category in isiZulu as well. The final verb morpheme (or verb categorial morpheme) -a referred to above for instance marks the indicative mood, the present tense and the positive polarity.

In the negative, the basic form of the verb will comprise a negative morpheme a- followed by a subject morpheme then the verb root and then the negative verb categorial morpheme -i. Consider the verb, "asithengi" (< a-si-theng-i) in the sentence "Asithengi amaswidi." ('We are not buying sweets.').

The morphology of English

The African languages use consistent letters and letter combinations to represent sounds. Once the learners know the sound/letter correspondences, they can read and write any word in that language. In English this is not always the case.

English spelling irregularities occur because there are lots of different spelling for the same sound. For example, the /k/ sound can be spelled with several different letters and letter combinations, such as k (*king*), c (*cat*), ck (*back*), qu (*queen*), and ch (*chorus*).

Why is this? As English developed as a language it was influenced by several languages: Anglo-Saxon, Norman French, Latin, and Greek. Each of these languages had its own conventions for spelling speech sounds, syllables, and meaningful units of speech (morphemes). So the spelling of a modern English word is often related to and explained by, its language of origin (Moat, 2005).

How does a word's form determine its spelling?

The form of an English word may determine its spelling. This is because many English words are spelled according to both their sounds (**phonemes**, such as /b/) and their meaningful parts (**morphemes**, such as the root *med* (from the Latin word "to heal") in words such as medical, medicine, medicate, remedy, and remedial). This is why linguists describe English spelling as a morpho-phonological alphabetic system.

Here is another example – these ten words all share a Latin morpheme "cred", a root meaning "to believe" – *credible, credibility, credit, creditable, creditor, credulity, credulous, incredible, incredulity, incredulous*. The last three words also share the morpheme, "in", meaning "not".

Though the spelling of these morphemes is constant, the pronunciation of them is not, e.g. in *heal* and *health* the morpheme is pronounced differently.

Unit 11: Self test questions

1. What is a root of a word and a stem of a word?
2. What are grammatical morphemes?
3. What is morphological awareness about?
4. Break up the English word “unsuitable” into its morphemes and say what each morpheme signifies.
5. Why are the words in the African languages often morphologically complex and long?

12. Prosody

Prosody is the general term for the patterns of stress and intonation in a language (or more specifically, in poetry) that describes the rhythmic and tonal aspects of speech: the "music" of oral language.

Prosodic features (also called **suprasegmental qualities**) are variations in speech such as pitch (**intonation**), stress patterns (syllable prominence), duration (length of time), word juncture and rhythm that contribute to expressive reading of a text. In the orthography of some languages the modification these features make to consonants and vowels are indicated with diacritics, but prosodic features are not limited to single sounds but often extend over syllables, words, or phrases.

Because of the absence of diacritic signs in the orthography of South African languages (apart from Tshivenda) there is no signalling to the reader about the suprasegmental qualities that operate on the word and sentence level in these languages – they are unmarked. This poses a challenge to the beginner reader. The reader has to decide on the appropriate intonation pattern in order to decode the relevant meaning of the text in such instances (though the cues for this may be in the neighbouring text) and this obviously complicates the reading process.

Teachers must be aware of these challenges and assist the beginner reader to understand the suprasegmental qualities of speech and how to identify and use them correctly in speech.

The main prosodic features following:

Pitch	Pitch is the rise and fall of our voice when we speak. So we can say words in a high or low pitched way. Pitch is used in language to distinguish the meaning and grammatical place of words. Pitch is directly related to word and syllable stress. We use pitch to give subtle meaning to sentences, to convey emphasis, contrast, and other such features in what is called **intonation**. The words "pitch" and "intonation" are often used interchangeably. Some languages, including most African languages, use pitch to distinguish or differentiate words. These languages are tonal languages.
Stress	Stress is the degree of emphasis given a sound or syllable in speech or to certain words in a phrase or sentence. Stress patterns can help distinguish the meanings of two words or phrases that otherwise appear to be the same. In English, stressed syllables are louder than non-stressed syllables. Also, they are longer and have a higher pitch. To communicate clearly when speaking in English, it is important to stress the correct syllables in each word.

suprasegmental: meaning properties that are above or over more than individual phonetic segments (vowels and consonants) such as syllables and larger units of speech

intonation: the pattern or melody in speech that helps indicate the attitudes and emotions of the speaker (e.g., surprise, anger, wariness). Intonation is primarily a matter of variation in the pitch level of the voice, but in languages such as English, stress and rhythm are also involved.

Intonation needs to be distinguished from tone in tonal languages where the same word has a different meaning depending on the pitch with which it is spoken.

Word tone	Vowel length or the use of high or low tone is often the only quality that marks the difference in meaning between two words or sentences. The simple question, "Usebenza lapha?" is ambiguous in isiZulu. It may mean, "Do you work here?" or "Does he/she work here?" depending on the tone on the subject morpheme u-. The ambiguity in the written form is due to the fact that we do not mark tone on the vowels in isiZulu. If the subject morpheme u- is pronounced with low tone, marked thus "Ùsebenza lapha?", the meaning is "Do you work here?" If the subject morpheme u- is pronounced with high tone, thus "Úsebenza lapha?", the meaning is "Does he/she work here?"
Sentence tone	In spoken language tone may be the only characteristic to distinguish between a statement and a question sentence in the African languages. (In the writing (orthography) a question mark is obviously used to mark a question sentence.) Consider the rising tone at the end of the question sentence in the examples below. In spoken language the question is distinguished from the statement only by the rising tone at the end of the sentence. "Nizobhala isivivinyo." ('You will write a test.') "Nizobhala isivivinyo?" ('Will you write a test?')
Duration	In some languages vowel length can change the meaning of the word or sentence, for example in the African languages. The difference in length in the pronunciation of the two *a* vowels in the sentences below lead to a difference in the meaning of the verb. Present tense: "Abantwana b**a**khwela intaba manje." ('The children are climbing the mountain now.') Remote past tense: "Abantwana b**a**khwela intaba ngesonto eledlule." ('The children climbed the mountain last week.') The indicated vowel a in the first sentence is short while the vowel a in the second sentence is pronounced with length. This difference in length marks the first verb as a present tense form and the second verb as a remote past tense form.

	Note also that the in the African languages the penultimate (second to last) vowel in a word is normally pronounced with length, thus "sisathe.nga" ('we are buying') with length on the vowel *e*. The penultimate vowel in a sentence is normally also pronounced with length, thus, "Sisathe.nga isi.nkwa ma:nje." ('We are still buying bread now'). [The long penultimate vowel of each word is marked with . after the vowel and the penultimate vowel of the last word in the sentence is marked with a : symbol.]
Word juncture	A set of features in speech that enable a hearer to detect the boundaries of a word or phrase. For example, the detection of the boundaries of the two words in each of these very similar sounding phrases: "I scream." "Ice cream".
Rhyme	Rhyme occurs in poetry when there are corresponding sounds at the ends of pairs of lines. It is used in many languages as a poetic technique to sensitise the learners to the sound patterns of the language. Due to the phonological and morphological structure of the African languages, rhyme is far less effectively used as a language ordering device compared to languages such as English. In the African languages repetition, linking and reduplication (e.g., Bafana Bafana) are used as ordering or poetic devices instead. English poetry has a variety of rhyme schemes in poetry ranging from the simple AABB pattern like this: The day was very s**unny**. (A) And the children were all f**unny**. (A) They then sat beneath the tr**ees** (B) Until stung by some angry b**ees**. (B) to very complicated ones.
Alliteration	**Alliteration** is the repetition of the same consonant sound at the beginning of several different words used in a sentence or paragraph, e.g. "**R**ound the **r**ocks the **r**agged **r**ascal **r**an." Alliteration is often found in so-called tongue-twisters, which are hard to say fast., e.g., "**S**he **s**ells **s**ea **s**hell**s** by the **s**ea **s**hore." To create a harmonious pattern of alliteration, the repetition of a letter sound must fall at the start of a stressed syllable.

Repetition	Repetition is a literary device that involves intentionally using a word or phrase for effect, two or more times in a speech or written work. For repetition to be noticeable, the words or phrases should be repeated within close proximity of each other, e.g. "And that government of the people, by the people, for the people, shall not perish from the earth" (Gettysburg Address). The key is to look for repetition of sounds, not letters. Typical English repetitive phrases are: "ashes to ashes, dust to dust", "time after time", "hand in hand", "over and over", and "rain, rain go away".
Reduplication	Reduplication is the process of repeating parts of words or morphemes (for example "uyahlekahleka" (from "uyahleka") or "amazambazambane" (from "amazambane"). Reduplication has a somewhat restricted usefulness because it alters the meaning of the word slightly.
Linking	Linking has to do with the repetition of words or phrases in different positions in successive sentences or lines.

Unit 12: Self test questions

1. Prosodic features are also termed _____ qualities.

2. Distinguish between intonation and word tone in tonal languages.

3. Match the descriptions below to some of these terms:
   Pitch, Stress, Word Tone, Sentence tone, Duration, Word juncture, Rhyme, Alliteration, Repetition, Reduplication, Linking.

Fast and furious flowed the fighting fleet.	
His voice rose and fell as he spoke.	
"The cock is crowing, The stream is flowing, The small birds twitter, The lake doth glitter"	
"**You sha**ll **not pa**ss!" he shouted	
Bafana Bafana	
Ashes to ashes	
"Ice scream" *versus* "I scream"	

13. Automacity and fluency

With regular practice children gain more knowledge of letter-sound correspondences and word components, more rapidly blend letters together into words and rapidly recognise word patterns. They are able to decode words they have not seen before. After a time the process of reading becomes automatic – they have automatic word recognition – and now they can really devote mental attention to the meaning of the texts they are reading. At this stage they begin to be fluent readers (i.e., they can read orally at a good pace, accurately and with proper expression). Fluency is a critical factor for reading comprehension.

Automaticity

Automatic and accurate word recognition is important because it enables learners to distinguish different words from each other and to focus on the meaning of what is being read. Teachers need to understand that when children start to learn to read, word recognition is a slow, halting, conscious and often effort demanding process. Word recognition is, however, an essential process because children need to be able to identify most of the words in a text if they are going to comprehend it. Through practice it becomes increasingly accurate and speeds up. It becomes automatic – that is the reader can now recognise words instantly without having to sound them out or think about them.

When readers encounter words frequently these words become familiar and known to them and they recognise word chunks and develop word-specific knowledge that speeds up and automatises the reading process. This in turn frees up the short term memory for comprehension rather than focusing on word decoding. The more children read, the more automatised their reading.

It is important for the teacher to understand why automaticity is crucial for comprehending texts. Human beings have limited short-term memory capacity (a sort of rule of thumb is that we can only keep about seven items in our short term memory at once). If one reads very slowly, sounding out each letter and word (as is the case for the person starting to learn decoding skills) by the time you get to the end of the sentence, what you read at the beginning of the sentence has dropped out of your short-term memory – and therefore you cannot really make sense of the text nor relate it to your existing long-term memory store of background information. You will not have enough working memory to actually comprehend what you are reading.

Dehaene (2009, p. 204) refers to this process as parallel decoding. He maintains that the reader develops a skill whereby the neuronal transmissions happen simultaneously between the different regions of the brain where meaning and where pronunciation takes place. This process becomes so fast that people think that it is a matter of immediate recognition of the word. Regardless of exactly how automatized reading development occurs, what is important is to understand that it depends on regular and frequent reading and it is essential for freeing up working memory so that the focus can be more on reading comprehension than on decoding.

Reading fluency

Reading fluency is the ability to read accurately, quickly and with appropriate expression or prosody. A beginner reader must strive to read out loud effortlessly and accurately at a Grade appropriate rate using intonation modulations that resemble spoken language.

In order to understand what they read, learners have to be able to read fluently, accurately and at an appropriate pace. Attaining a level appropriate reading fluency in both oral and silent reading is important.

In the early grades the focus should be on oral reading fluency (ORF) rather than silent reading fluency because it is much easier to monitor and assess oral reading fluency.

Since reading fluency is critical for reading comprehension it is imperative to attend to this aspect of reading. The more a learner struggles to read, the more the short term memory is occupied with the task of decoding rather than being available for reading comprehension. This is why it is important that learners should be able to read with grade appropriate fluency at all levels.

Although the principles for teaching reading fluency may be, to some extent, similar for oral reading and silent reading, these two forms of reading are different and it cannot be assumed that fluent oral reading necessarily leads to fluent silent reading.

If children are taught reading in their home language systematically and explicitly (and at the same time motivated through pleasurable activities, hearing good books and gaining meaning from what they read) nearly all children (whatever their socio-economic background) should be able to read at an acceptable level of fluency at the end of Grade 1 in the African languages (where the correspondence between sounds and letters is regular), but often after a somewhat longer period in English.

Unit 13: Self test questions

1. Define automaticity and fluency.
2. What does ORF stand for?

14. Vocabulary building

As children read, they come across new words that they may not have been exposed to in their oral language. Vocabulary building is extremely important for developing reading comprehension. Without a Grade appropriate vocabulary a child will not be able to read the texts for that Grade with comprehension.

In order for reading comprehension to occur, children must have word knowledge, or vocabulary, in addition to reasoning skills.

The development of a growing vocabulary happens through oral language practice, by explicit instruction, and by reading itself.

Vocabulary learning is not only important for learning the words in a second and third language. Vocabulary learning is equally important for the mother-tongue. Vocabulary must be taught continuously and systematically. The learner must have the necessary breadth and depth of vocabulary.

Vocabulary learning enhances all aspects of oral language and reading and writing proficiency. A broad vocabulary strengthens precise communication, particularly in writing. It also improves general knowledge. Learners who know more words are likely to be better at what they do and be more self-confident.

The relationship between oral and written vocabularies

Teachers need to be able to explain the reciprocal relationship between spoken language and written language and why and how both oral and written vocabularies have to be developed in primary schooling. They have to understand the complex relationship between oral language proficiency, vocabulary knowledge, background knowledge, and reading comprehension.

The number of words used in nearly all oral speech (child or adult) is quite low – probably about 400 to 600 words. Most children's books have a richer vocabulary than most adult speech or the speech on the television programmes that children watch.

Note that we usually understand many more words than we actually use (this is our passive vocabulary). Our active vocabulary is the words we actually use in speech (or writing). A similar distinction is made between our receptive vocabulary (all the words I recognize and understand the meaning of when I hear or read them) and our productive vocabulary (all the words I can say or write in a grammatically acceptable way).

It is important that teachers also understand that children enter school knowing varying numbers of words. Estimates are given of linguistically advantaged children entering into Grade 1 knowing two to four times the number of words than linguistically disadvantaged children know. The variance comes from

growing up in different family and community environments. Children who come from poor communities typically have smaller vocabularies than children who come from wealthier homes. (Children whose parents give books to their pre-school children and read story books to them will have larger vocabularies.)

If learners hope to access post-secondary study they have to enormously enlarge their vocabularies – probably to at least 20 000 words. There are also words that are necessary to make critical distinctions in the physical and social worlds in which we live. Without word knowledge tools, one will be severely disadvantaged in attaining one's goals in an advanced modern society.

Building a larger vocabulary is done partly by explicit instruction in school. But the number of new words learned in such a way is relatively small – about 400 a year. Most vocabulary development can only come from reading. Learners have to know how to read fluently to continue to grow their vocabulary at the rate that is necessary. When they find new words in texts, they have to have the means to find out their meaning.

The importance of reading in vocabulary development

The only opportunities to acquire new words occur when an individual is exposed to these new words in written texts or oral language that is outside his or her current vocabulary. A consistent finding related to vocabulary learning is that children need multiple exposures to a new word in meaningful contexts to learn it well. This will happen much more often while reading than while talking or listening to the radio or watching television. (This reinforces again the vital importance of early fluency in reading). Indeed, most vocabulary development takes place outside of explicit instruction.

The amount of time devoted to reading out of school is probably the most important indicator of who will prosper in later life: cognitively, socially and economically.

Explicit instruction on vocabulary

Teachers need to be able to teach vocabulary. Direct vocabulary instruction may be particularly important for learners with weak oral language skills who lack the proper foundation for easily acquiring new words.

Vocabulary is often taught through giving list of words for children to learn each day, discussing their meanings, and checking the spelling thereof. Children should be explicitly taught specific words selected from texts that they are reading. The teacher can pre-teach new words that will appear in the text or, during readings, ask questions to help determine the meaning of a word as it is used in the context of the story. Instruction that engages learners in active analysis of word meanings is more effective in promoting learning than instruction that only has learners relate words to their own personal background knowledge and experiences.

Vocabulary can be taught as part of comprehension. Vocabulary is necessary for comprehension – unless one understands 95 percent of the words in a text

one is unlikely to make sense of it. Reading comprehension depends heavily on knowledge of the individual word meanings in a text, and these meanings are learned by repeated exposure to a word's use in context and by explicit, direct instruction in word meanings.

Teaching word learning strategies

It is impossible to provide specific instruction for all the words that children do not know. Learners need to be able to determine the meaning of words that are new to them but are not taught directly. They need to develop effective word-learning strategies for the following four types of new word learning:

- Learning the meaning for a new word representing a known concept
- Clarifying and enriching the meaning of a known word
- Learning a new meaning for a known word
- Learning the meaning of a new word representing an unknown concept.

So, in addition to specific word instruction, children should be taught word-learning strategies that they can use on their own (which they need because most vocabulary development will come from their own individual reading).

Children need to be able to know and apply grade appropriate phonics and word analysis skills in decoding words and finding out their meaning using a dictionary (single language and bilingual) and to deepen knowledge of word meanings. Teachers must know how to teach children to look up words in a dictionary (and know alphabetic order). For primary school use with English dictionaries it is best to use dictionaries that have a limited defining vocabulary.) The most useful dictionaries include example sentences of word meanings in context, particularly when the same word has several meanings. Teachers should also be familiar with print and online visual dictionaries. Glossaries and thesauri can be used to broaden and deepen learners' knowledge of words in the Senior Phase.

Learners need to be taught how to use their knowledge about meaningful word parts (morphology) to work out the meanings of words in a text. Morphology should be taught in the context of rich vocabulary instruction. The important word parts should be explained systematically with opportunities for reteaching and practice. Learners need to be able to determine a word's meaning based on its roots. However, explicit instruction on morphology should be situated in meaningful contexts.

Sight words and high frequency words

Sight words is a term applied in early reading instruction in English to the set of **high frequency words** that have irregular spelling patterns and that must be memorized by sight. The only way to 'read' these words is to identify them as sight words having memorising their correct pronunciation. Knowledge of these sight words should be reinforced by spelling them correctly. Good examples are "the", "was", "as", "it", "said" , "eye", "knock" and "island" which cannot be sounded out using basic phonics knowledge and often cannot

be represented using pictures. With the African languages it is not really necessary to memorise sight words as all the words have regular spelling and are easily decodable. Note that the sensible selection of a small number of high frequency, difficult to decode, sight words has its place in early reading in English.

High frequency words are simply those words in common use in the language. High frequency word lists related to school grades are usually based on the words used in contemporary reading texts used in schools at each grade level.

Teachers need to know how and where to access lists of grade appropriate high frequency words, high frequency cross-subject content words and academic words that they can teach and use in class. Many of these words need to be explicitly taught, especially to struggling readers and English learners.

These words can then simply be identified and pronounced without decoding them. This will speed up the reading tempo and lead to better reading comprehension. Learners are generally advised to learn short high frequency words first. This will speed up automatised reading and result in better reading comprehension.

It is best to keep the concepts of sight words and high frequency words apart. In the case of the African languages there are really no sight words (and that is due to the transparent orthographies of these languages).

It may be beneficial for the beginner readers to learn a number of high frequency words. These are words such as the isiZulu forms “uma”, “nxa”, “na”, “mina”, “wena”, “thina”, “nina”, “la”, “le”, etc.

There are high frequency word lists available for most South African languages (e.g. at https://vulabula.molteno.co.za/).

BICS and CALP vocabularies

The teaching of a set of “school” or “academic” words is also important. School going children have to demonstrate what is called “Cognitive Academic Language Proficiency” (CALP) as distinct from the language of the everyday “Basic Interpersonal Communication” (BICS).

These academic words mainly appear in written texts and are increasingly necessary for the literacy practices engaged in school study as children advance through the grades. They include general school/academic words that appear frequently in most subjects, subject specific terms, and literary vocabulary that appears in literature but not much in everyday life.

Assessing vocabulary knowledge

Vocabulary assessment should be done regularly and should be assessed orally and in writing. There are many interesting assessment techniques that a teacher can use to assess vocabulary.

The teacher should know what learners need to be able to read and write within and across the relevant grades and subjects. The teacher also needs to know how to assess the learners’ progress in doing so.

Special issues related to specific language vocabularies

The teacher needs to recognise that different languages have different word forms. In African agglutinating languages one has to know the word stem and how it is joined to, and its meaning altered by, a complex system of prefixes, infixes and suffixes. English and Afrikaans, by contrast are analytic languages with words standing on their own.

Special issues related to English vocabulary

Apart from the general need to build up English vocabulary, the teacher needs to pay special attention to the learning and spelling of English words with similar sounds but different spelling patterns. Being able to spell words when writing is more difficult in English because of its complex spelling rules. In the African languages and Afrikaans it is much easier to code words in writing.

Although English is commonly described as having irregular spelling, many of the "irregularities" obey certain rules that owe their origin to the different language sources (British, Anglo-Saxon, Latin, Greek, Norse, etc.) in the evolution of the English language. About 60% of all English words have Latin or Greek origins.

Knowledge of irregular spelling patterns helps learners to read new words. For example:

- When a vowel is followed by r, the two sounds are tied together. The /är/ sound in "dark" is usually spelled ar. Two common spellings for the /ôr/ sound in "store" are or and ore.
- The vowel + r sound in "nurse" can be spelled ur, or, ir, or er. The learner may need to check a dictionary if they are not sure how to spell a word with this sound.
- The consonant sound /j/ can be spelled j, but it can also be spelled g if it is followed by e or i.
- The consonant sound /s/ can be spelled c when it is followed by either e or i.
- To understand these English spelling complexities teachers need to have some understanding of the morphology of the English language and that meaningful word parts include base words and word roots, and affixes (prefixes and suffixes but no infixes). Base words and root words can help learners grasp the meanings of many new words. Base words are words that are not derived from other words. They are the words from which many other words are formed. For example, many words can be formed from the base word "migrate": "migration", "migrant", "immigration", "immigrant", "migrating", and "migratory."

Affixes are word units that are 'fixed to" either the beginnings of words (prefixes) or inside words (infixes) or the ending of words (suffixes). English does not have infixes. The word "disrespectful" has two affixes, a prefix (dis-) and a suffix (-ful). Explicitly teaching the definitions and parts of speech for affixes

dramatically enhances a English learner's vocabulary. For example, teaching that dis- can mean "not" or "opposite of" or "apart from" makes it easier to remember the meanings of "disrespect", "dishonourable", etc.

If learners know the four most common English prefixes (un-, re-, in-, dis-), they will have important clues about the meaning of about two thirds of all English words that have prefixes. Prefixes are relatively easy to learn because they have clear meanings (for example, un- means "not", re- means "again", in- means "in, into" or "not", and dis- means "apart from, the opposite of"); they are usually spelled the same way from word to word.

English suffixes are divided into two categories:

- Inflectional suffixes minimally change the meaning of the base word. Examples of inflectional suffixes are -ing, -ed, and -s or -es. The meaning difference between "walk" and "walked" is minimal. "Walk" and "walked" are similar enough that learners can easily understand the difference.
- Derivational suffixes change the meaning of the base or root word. Examples of derivational suffixes are -tion, -ous, -ite, and -or. The meaning difference between "govern" and "governor" is significant. The part of speech changes from a verb ("to govern") to a noun ("one who governs").

Learning suffixes can be difficult. This is because some suffixes have more abstract meanings than prefixes.

Many word roots come from other languages such as Latin or Greek that are the origin of many English words. They are frequently found in content-area school subjects, especially in the sciences and social studies. Teachers should teach the more common root words that learners are likely to see often and teach other word roots as they occur in the textbooks.

Unit 14: Self test questions

1. How is vocabulary built?
2. The greatest amount of vocabulary development comes from where?
3. What is the distinction between a receptive and a productive vocabulary?
4. List four types of new word learning.
5. Distinguish between high frequency words and sight words.
6. Explain what BICS and CALP stand for?
7. What is the explanation for why many English words have seemingly irregular spelling?

15. Syntax

Syntax is about the rules, principles and processes concerning the arrangement and order of words and phrases to create well-formed sentences in a language.

Syntax is often confused with the more general term, grammar. Grammar is the complete set of rules a language uses to convey meaning. It is the set of rules about the structure of a language and therefore of what are acceptable words, phrases, clauses, and sentences. Syntax deals only with the structure of sentences.

We need syntactic awareness to be able to reflect on the syntactic characteristics of language and to deliberately control its application. Generally, speakers of a home language are able to judge whether a sentence in that language has the correct syntax, even if they have never heard or seen it before. They are also able to produce an infinite number of totally new grammatically correct sentences.

Languages differ in terms of their word order and what is an acceptable word order in one language is not necessarily acceptable in another language. The default word order in all the official South African languages is the same: subject, verb and object (SVO). This does not mean that this word order is absolutely fixed, it simply means that the default word order is SVO.

To understand syntax it is necessary to know the word categories in the particular language. In English the focus can initially be on nouns, pronouns and verbs because these are the word categories with a very high frequency of usage.

The ability of children to judge the acceptability of sentences is a metalinguistic skill and usually only develops about age six once the child has access to syntactic knowledge, and is related to early reading acquisition (Cairns *et al.*, 2006).

Developing syntactic awareness in the mother tongue can by done through a range of activities such as:

- by the teacher modelling correct syntax,
- sentence completion exercises,
- putting word cards in the right order to make a syntactically correct sentence,
- correcting sentences with faulty syntax
- explaining the noun-verb-object pattern
- verb tense exercises,
- using songs and rhymes.

With second language teaching there is need for explicit instruction in syntax.

Example of a morphological shift related to word order in the African languages

Consider the this basic isiZulu sentence, "Abantwana baphuza amanzi." ('The children are drinking water.'). The words are in the default (SVO) order. The initial focus is on the subject.

If the word order in this sentence is changed to, "Baphuza amanzi abantwana." ('They drink water, the children.'), the word "baphuza", the verb, is in focus and if the sentence starts with the object, thus "Amanzi bayawaphuza abantwana.", then the object is in focus.

In that last sentence the object has moved from its position which is immediately after the verb to the pre-verb position. If the object is moved from its default position the use of the object morpheme in the verb becomes compulsory. This is the reason for the compulsory use of the object morpheme -wa- in the verb "bayawaphuza" above.

Unit 15: Self test questions

1. Define syntax.
2. What is the default (usual, most common) word order in all South African languages?

16. Semantics

Semantics is the study of meaning in language. Semantics looks at how, when we read or write, we combine separate word meanings into a sensible, meaningful whole. Semantics therefore looks at meaning at the levels of words (lexical semantics), phrases, sentences, or larger units of discourse.

One of the crucial questions of linguistic semantics is that of the relationship between the form (of spoken or written language) and its meaning.

Children as they develop as readers and writers have to pay more and more attention to the form and meaning of what they read and write. Not only do they have to enrich their vocabulary but they have to look at how words interact together to create meaning.

They should be taught the meanings of words that are contained in their study materials and in books that they read and words that they hear in conversations. They need to analyse the meanings of words and the relationship between words (for the meaning of words is only fully gained in their context).

They should be made aware of word families, words that are partly different but semantically related such as "ubuntu", "umuntu", "abantu" and "isintu" or "ukufunda", "umfundi", "isifundo", "umfundisi".

Children should be taught synonyms (words with the same or similar meanings) and antonyms (words with opposite meanings).

They should recognize a hypernym (a word with a broad or generic meaning constituting a superordinate category into which words with more specific meanings fall (hyponyms). These are words such as "cattle", "dogs", "sheep", "cats", etc. which fall under the hypernym "animals" or words such as "teacher", "mechanic", "lawyer", "manager", "translator", etc. which have "occupations" as the hypernym or the words, the hyponyms, "red", "blue", "green" and "yellow" with the hypernym of "colour".

Learners also have to recognize figures of speech such as metaphors (a term or phrase is applied to something to which it is not literally applicable in order to suggest a resemblance between two ideas or things – a metaphor states that one thing is another thing, e.g. "le ndoda iyimpisi" ('this man is a hyena'), simile (comparison of two things using the link "like") and euphemisms (a vague term as a substitute for a harsh or vulgar term, e.g. "Ngisaya endlini yangasese". ('I am going to the house at the back.')).

As children become fluent readers they need to become adept at making inferences from what they read, inferences that are essential in reading and comprehending more complex texts and where the learner is expected to carry out a thoughtful analysis of the meaning of the text.

The good reader has to be able to:

Understand the **literal** meaning (identify information explicitly stated in a text)

Visualize (create mental images supported by the five senses)

Make **connections and applications** (retrieve and activate prior knowledge in order to connect to own life, other texts, and the world)

Predict and question (make predictions and pose questions before, during, and after reading)

Analyse (break the text into its parts in order to understand the whole)

Criticise (think about the information and evaluate the information, actions, style, etc. presented for their truth or falsity or good and bad points)

Determine **importance** (the theoretical or practical importance of what is read)

Infer (use a set of logical steps to use information explicitly stated in the text to draw logical conclusions either through deduction (deriving logical conclusions from premises known or assumed to be true), induction (inference from particular premises to a universal conclusion) and abduction (from a single observation or set of observations formulating the simplest and most likely explanation for the observations))

Synthesize (put together information from the text, the context and background knowledge into a new whole)

Evaluate (analyse and make judgements about what is read).

Unit 16: Self test questions

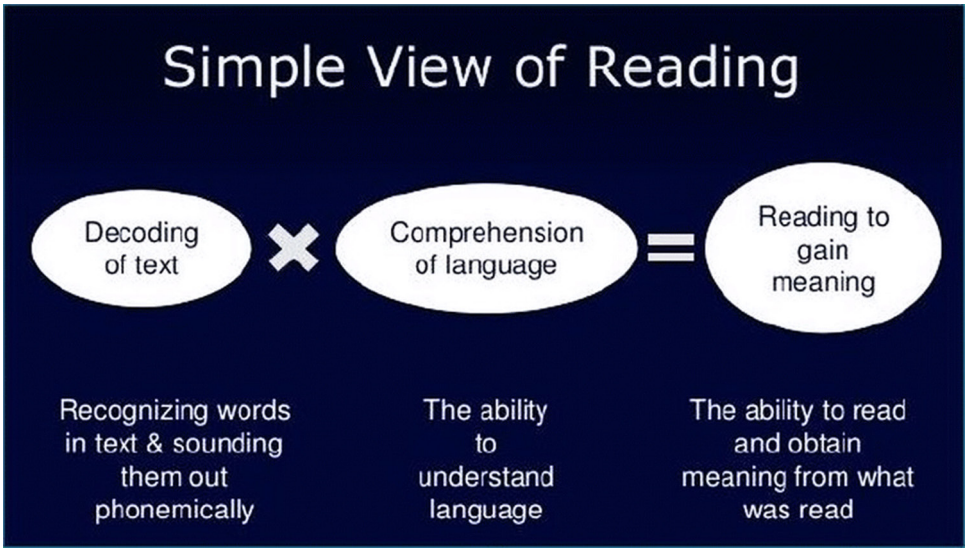
1. What is semantics.
2. Match the correct term to the description:

Words with opposite meanings	
A word indicating a general category into which words with more specific meanings fall	
Words which fall into a more general category	
A term or phrase is applied to something to which it is not literally applicable in order to suggest a resemblance between two ideas or things	
A word used as a substitute for a harsh or vulgar one	
Two words used to compare things linked by the word "like"	
Analyse and make judgements about what is read	
Break text into its parts in order to understand it	
Go through a set of steps to use information explicitly stated in the text to draw logical conclusions about its meaning	
Think about the information and evaluate the information, actions, style, etc. presented for their truth or falsity or good and bad points	
The plain meaning of information explicitly stated in the text	

17. Simple view of reading

The Simple View of Reading (first proposed by Gough and Tunmer in 1986) is still one of the most supported scientific theories of reading.

According to the Simple View of Reading, while reading is a very complex process, it can be represented as two interdependent processes. A reader's ability to understand written words depends on how well they sound out (decode) the words and comprehend the meaning of those words. Specifically, their reading comprehension can be predicted by multiplying their skill in decoding the written words by their ability to understand the meaning of those words. It is expressed in this equation:



Decoding (D) x (Oral) Language Comprehension (LC)= Reading Comprehension (RC)

Reading comprehension (RC) depends on how well the reader can sound out (decode (D)) the words and understand the meaning of those words (language comprehension (LC)). The reader's level of reading comprehension (RC) can be estimated by multiplying their skill in decoding the written words (D) by their ability to understand the meaning of those words (LC).

The parts of the equation **D x LC = RC**, are:

(D) **Decoding**: the ability of the reader to accurately sound-out or decode the written words using the principles of phonics (e.g. /k - æ - t/ = "cat").

(LC) **Language Comprehension**: the ability of the reader to understand the meaning of the words (as if words they know had been spoken out loud).

(RC) **Reading Comprehension:** the ability of the reader to understand the meaning of the written words.

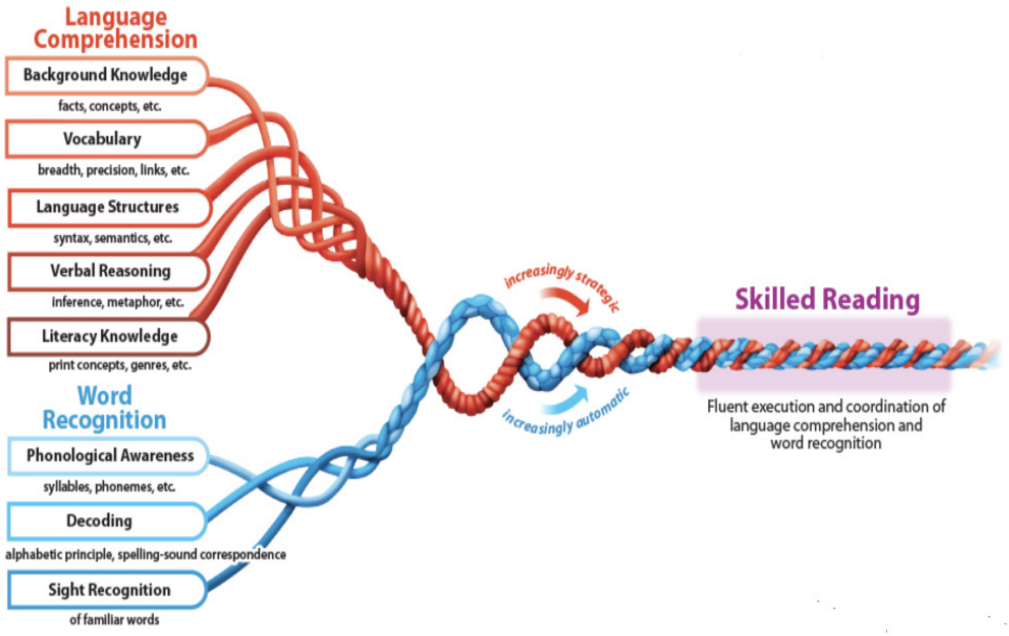
The relationship between D and LC will change over time as the new reader gains mastery. In the early stages Decoding has more impact, later Language Comprehension becomes a stronger predictor of Reading Comprehension (Torppa *et al.*, 2016).

The point of the formula having a multiplication sign rather than an addition sign is that reading comprehension is not achieved by adding a decoding score to a language comprehension score. If only one element is strong the weak result in the other area will significantly reduce the reading comprehension score (e.g. 25% (D) x 100% (LC) = 25% (RC)). And, if that same reader improves in that weak area, it will result in an equivalent improvement in the reading comprehension score (e.g. 50% (D) x 100% (LC) = 50% (RC).

So if children can decode the words accurately, but do not understand the meaning of the words, they will not have reading comprehension. For example if a reader can decode the word "pandemic" but does not know what it means, he or she will not achieve reading comprehension. Similarly if readers cannot decode the words accurately, yet understand the meaning of those words in spoken language, they will not have reading comprehension. For example a reader who knows what "pandemic" means but cannot decode the written words, she or he will not achieve reading comprehension.

Scarborough's 2001 reading rope visualization of the simple view (see below) shows the interactivity of decoding and language comprehension (and their sub-components) in producing fluent reading comprehension.

Researchers tell us that, while the equation may be simple, learning to read is not so simple. Beginning readers can already understand spoken language. The task, then, is to gain the same understanding from print. This requires decoding skills and language comprehension. For many learners, learning to efficiently decode is only achievable with proper instruction, feedback and practice in phonics and their language comprehension is a "multidimensional cognitive activity" that requires adequate content knowledge.



Unit 17: Self test question

1. What does the formula D x LC = RC mean?

18. Towards reading development

Writing represents spoken language which highlights the importance of understanding the orthography of a particular language. In order to learn to read and write the learner must have a command of the orthography.

At Reception Year and Grade 1 level learners are mostly exposed to narrative oral texts. The focus is initially on listening comprehension while vocabulary development is also important. The learners acquire language comprehension and develop a sense of narratives. They start to develop phonemic awareness in the form of letter/sound knowledge and recognise words and their semantic fields. Fluency is not a priority at this stage.

In the Foundation Phase learners are still mostly exposed to narrative texts. More complex language comprehension takes place at this stage and word recognition is an important aspect of the literacy development. Accuracy and fluency become important corner stones as the learners are exposed to decodable or grade relevant texts. Incremental exposure to reading and writing is important.

Mastering grammar is the foundation in the proficiency of a language. Grammar is often mistakenly perceived to be knowledge that the learners will acquire automatically and on their own or that it is a collection of arbitrary rules about language structures. Grammar teaching is also sometimes regarded as an abstract and boring process. If taught in context and innovatively it will not only be interesting but also beneficial to the learners for developing their reading and writing.

Through formal teaching of grammar and exposure to written texts the learners' knowledge of the underlying system of the language grows and their language comprehension is improved through employing phonemic awareness, phonics, word attacking strategies, and comprehension strategies. The learners' knowledge and skills in phonology, morphology, syntax, semantics, and pragmatics and discourse become essential tools to develop their literacy and cognitive abilities.

In the Intermediate Phase and beyond the focus shifts from learning to read to reading to learn. The disciplines themselves, such as language study, mathematics and science become most important. Learners now need to learn from the text instead of reading the text and they are exposed to a wider range of genres. There is even more emphasis on language comprehension while the vocabulary the learner has to learn, is more specialised and subject specific. Accurate word recognition and fluency in reading is imperative and the learner now has to complete specific tasks.

Unit 18: Self test questions

1. Consider how you will use this study guide as a resource when you are studying more directly the 'how' of teaching reading and writing.

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Self test answers

Unit 1: Essential linguistic concepts relating to literacy

Fill in the missing words:

1. **The** syntax **of this sentence, "He the boat saw.", is wrong.**
2. **Words ending in a vowel are characteristic of the** phonology **of the African languages.**
3. **That swearing is not acceptable in certain social settings is on aspect of the** pragmatics **of language use.**
4. **The** morphology **of many English words is explained by their Greek or Latin origins.**
5. **The** semantics **of that word are very difficult – it can mean so many things.**
6. **It breaks the rules of** grammar **to say "I run yesterday."**
7. **According to Scarborough the two main strands of skilled reading are** language comprehension **and** word recognition.

Unit 2: The four basic language and literacy skills

1. **Distinguish between encoding and decoding.**

   Encoding is the putting of information into a communication code that that the recipient can decode and thereby regain the original information. Thus, for example the sounds of spoken language can be encoding into written letters of the alphabet and decoded by the readers so that they can understand what the message was.

2. **List the four basic language and literacy skills.**

   Listening, Speaking, Reading, Writing

3. **Why is listening an active process?**

   To understand what we are listening to we are also making use of our background knowledge of what the speaker is talking about and our knowledge of the language and vocabulary.

Unit 3: The structure of words and sentences

1. **Name the three affixes.** Prefix, infix and suffix.
2. **What is the orthography of a language?** The conventional spelling system of the written language that includes the norms for spelling, hyphenation, capitalization, word breaks, emphasis, and punctuation.
3. **What is a word root?** A morpheme that expresses the basic meaning of a word and cannot be further divided into smaller morphemes.
4. **What is the term for:**
   - **change in the form of a word to express a grammatical function or attribute –** inflection
   - **emphasis given a spoken sound or syllable –** stress
   - **the pattern or melody in speech –** intonation
   - **the rise or fall of the voice when one speaks –** pitch
   - **5. Tick the correct cell for these symbols - are they a phoneme, morpheme or grapheme or two or all of these?**

	phoneme	morpheme	grapheme
ing [English]		✓	
a [English]	✓	✓	✓
ough [English]	✓		✓
dog [English]		✓	
s [Sesotho]	✓		✓
tsh [IsiZulu]	✓		✓
aba [IsiZulu]		✓	

Unit 4: The sounds of spoken language - phones and phonemes

1. Distinguish between a phone and a phoneme.

A phone is a single distinct speech sound. A phoneme is the smallest speech sound that enables us to distinguish meanings within a particular language.

2. What is this, a phone or a phoneme?

/d/ – phoneme

[d] – phone

[ŋ] – phone

/b/ – phoneme

3. Roughly how many phonemes are there in most languages?

Between 20 and 60

4. Give an example of the changing of a single phoneme changing the meaning of the word.

Many example are possible. The text gave two examples: "**b**in" and "**p**in" in English, "**b**eka" and "**bh**eka" and also "**s**ala" and "**hl**ala" in isiZulu.

5. Can two separate phones be considered the same phoneme?

Yes.

6. What is articulatory phonetics about?

The study of how all the speech sounds are made by the various parts of the speech organs. This is helpful in describing various phones and phonemes and how these sounds are made.

Unit 5: Phonological awareness - syllable awareness

1. **Being able to talk about the sounds in language is a** metalinguistic **skill.**

2. **How many phonemes are in the word "bafana"?** Six (6)

3. **How many syllables in the word "banana"?** Three (3)

4. **The first stage of phonological awareness is about the identification of the sound values of letters in writing. True/False**

   False – Phonological awareness is about the identification of the sound units in spoken language.

5. **What do CV, CVC and CCV stand for?**

   Consonant Vowel, Consonant Vowel Consonant, and Consonant Consonant Vowel.

6. **What is a trigraph?**

   Three written letters representing a single sound.

7. **What is a consonant blend?**

   A group of two or three consonants not separated by any vowels, the sounds of which are sounded in sequence but so quickly that the sounds combine and blend together in a smooth manner.

8. **Distinguish between onset and rime in an English syllable.**

   The onset is the initial consonant or consonant blend and the rime is the vowel and any consonant sounds that come after it.

Unit 6: Phonological awareness - phonemic awareness

1. What does phonemic awareness enable a listener to do?

Identify the separate sounds in a stream of speech.

2. Do these actions demonstrate phonemic awareness?

	Yes	No
A child shown a letter of the alphabet can say its name.		No
A different sounding word can identified in a spoken list of words, e.g. king, sing, ring, bang.	Yes	
A child on hearing the word 'mat' can identify that it ends with a /t/ sound.	Yes	
On hearing the word 'hospital' a child can say that it contains three syllables.		No
A child says which letter of the alphabet matches with which sound.		No
A child can say if two words, e.g. 'cat' and 'mat', rhyme.	Yes	

3. Distinguish between the phonemic awareness activities of blending and segmentation.

Blending is to blend single sounds (phonemes) into a word. Segmentation is to do the opposite, breaking down a word or syllable into its individual sounds.

4. Give the name for each of these activities.

Activity	Phoneme - ____
Break the word "inja" down into /i/ /n/ /j/ /a/	segmentation
Find the sound /a/ in the words "man", "pan", "ham".	isolation
Find six words that began with the same sound "t"	matching
Identify a word in a list of words that has a different or odd sound.	categorization
Change a word by moving or changing an individual sound in a word, e.g. change "hat" to "mat"	manipulation
Remove a phoneme or phonemes from a word to make a new word.	deletion

5. Distinguish between rhyme and alliteration.

A rhyme is where, for example in poetry, there are corresponding sounds at the ends of lines. Alliteration is the regular repetition of the same consonant sound at the beginning of several different words in the same sentence.

Unit 7: The alphabet and orthography

1. **Define the term orthography.**

   Orthography is the conventional writing and spelling system of a language that includes norms for hypenation, capitalization, emphasis, word breaks and punctuation.

2. **What is the alphabetic principle?**

   The letters of the alphabet and some combinations of letters are the symbols used to represent the speech sounds of a language based on systematic and predictable relationships between written letters, symbols, and spoken words.

3. **Do all languages use the alphabet letters to represent the same speech sounds in the same way?**

   No, there are often differences.

4. **Guess how may letters of the alphabet represent the same speech sound in all the South African languages.**

   9

5. **Distinguish between a shallow or transparent orthography and an opaque or deep one.**

   In a shallow orthography there is a nearly one-to-one correspondence between sounds and letters and there is a clearly defined syllable structure. In an opaque orthography there is no consistent correspondence between sounds and letters.

6. **Distinguish between a conjunctive and a disjunctive orthography**

   In a conjunctive orthography (such as isiZulu) each spoken word is written down as a single written word. In a disjunctive orthography (such as Sesotho) each word is broken up into its separate components.

7. **What is vowel elision?**

   Where two vowels come together in a word they are replaced by one of them.

8. **What is vowel coalescence?**

   Where two vowels come together in a word they coalesce to for a single new vowel.

Unit 8: Decoding – letter-name knowledge

1. **What is a letter name?**

   This is the commonly understood name for a letter of the alphabet, especially in English where each letter has its own name, e.g. the letter a is called "ay", the letter g is called "gee" and h is "aitch". In the African languages the name for a letter is usually its sound, so the letter a would be called by the sound /a/.

2. **The names of the letters should be taught [before/after] children start learning about letter-sound relationships and starting to learn to read.**

   Before

3. **What are some other uses of letter-name knowledge?**

   Teaching spelling, teaching language, discussing literacy, using alphabetic order

Unit 9: Decoding – letter-sound knowledge

1. **Most languages have far more** letter-sounds/phonemes **than the 26 letters of the alphabet that represent them.**

2. **How should letter-sound knowledge and decoding be taught?**

   Explicitly, sequentially and systematically.

3. **List the four options for what sound or sounds letters may represent.**

   (1) one letter may represent one sound,
   (2) one letter may represent different sounds,
   (3) a combination of letters may represent a single sound or
   (4) different letters may represent the same sound.

4. **When teaching decoding how does one address the lack of tone markers in the orthography of most of the African languages used in South Africa?**

   Teach the children to :

   (1) Hold alternate meanings in mind as they read
   (2) Confirm meaning from contextual clues in the text
   (3) Reread phrases.

Unit 10: Phonics

1. **What is teaching phonics?**

   Teaching the system of sound-letter relationships used in reading and writing.

2. **Fill in the missing words. Phonics is the bringing together of the knowledge of letter** shapes**, knowing that written words are built up from** letters **and letter groups (**syllables **and** **consonant** **clusters) and word parts (**prefixes, infixes, suffixes, roots **and** base **words) and from knowledge of letter** sounds**, knowing that they represent sound values in the language and can be** blended **together to make words.**

3. **As children start reading faster what is freed up and what can it be used for?**

   Short-term memory used for comprehension of what is being read.

4. **Very briefly describe the synthetic phonics approach?**

   First, grapheme-phoneme correspondences are taught one by one and in a specified sequence and then children are taught to blend the individual phonemes together to make a word.

5. **What are six basic phonological operations in phonics?**

   Matching, Blending, Segmentation, Addition.,Deletion, Substitution.

6. **Does a learner need to understand the meaning of a word to be able to segment or blend the word's phonemes?**

   No.

7. **Mark True or False for these statements about English phonics:**

	True	False
Phonemes are represented by letters (graphemes).	True	
A phoneme can only be represented by a single letter.		False
The same phoneme can be spelled in more than one way.	True	
The same spelling may represent more than one phoneme.	True	

Unit 11: Morphological awareness

1. **What is a root of a word and a stem of a word?**

   The root is the part of a word that cannot be broken down into any smaller meaningful parts and which carries the basic meaning of the word; the stem is a root plus an affix or affixes.

2. **What are grammatical morphemes?**

   All the affixes, prepositions, conjunctions, pronouns, and the noun class prefixes in the African languages.

3. **What is morphological awareness about?**

   The breaking down of words into smaller units of meaning such as stems, roots and morphemes

4. **Break up the English word "unsuitable" into its morphemes and say what each morpheme signifies.**

   Unsuitable - un (a prefix meaning "not"), suit (a root), and -able (a suffix meaning "can be done").

5. **Why are the words in the African languages often morphologically complex and long?**

   Because the languages are agglutinating, many grammatical morphemes in the African languages often consist of a single syllable, and in the verb there are a subject morpheme, the verb root and a verb final categorical morpheme.

Unit 12: Prosody

1. **Prosodic features are also termed** suprasegmental **qualities.**

2. **Distinguish between intonation and word tone in tonal languages.**

   Intonation is the pattern or melody in speech that indicates the attitudes and emotions of the speaker. In spoken language this is usually done by variation in the pitch level of the voice. In some languages, such as English, stress and rhythm are also involved.

   Tone in tonal languages, indicated by changes in the pitch with which a word is spoken changes the meaning of the word.

3. **Match the descriptions below to some of these terms:**

   Pitch, Stress, Word Tone, Sentence tone, Duration, Word juncture, Rhyme, Alliteration, Repetition, Reduplication, Linking.

Fast and furious flowed the fighting fleet.	Alliteration
His voice rose and fell as he spoke.	Pitch
"The cock is crowing, The stream is flowing, The small birds twitter, The lake doth glitter"	Rhyme
"You shall not pass!" he shouted	Stress
Bafana Bafana	Reduplication
Ashes to ashes	Repetition
"Ice scream" *versus* **"I scream"**	Word juncture

Unit 13: Automacity and fluency

1. **Define automaticity and fluency.**

   Automaticity is the ability to recognise words instantly without having to sound them out or think about them.

   Fluency is the ability to read accurately, quickly and with appropriate expression or prosody.

2. **What does ORF stand for?**

   Oral Reading Fluency

Unit 14: Vocabulary building

1. **How is vocabulary built?**

   Vocabulary is built through oral practice, explicit teaching and reading itself.

2. **The greatest amount of vocabulary development comes from where?**

   Reading outside of explicit instruction.

3. **What is the distinction between a receptive and a productive vocabulary?**

   A receptive vocabulary is all the words a person recognizes and understands the meaning of when hearing or reading them. A productive vocabulary is all the words a person can say or write in a grammatically acceptable way.

4. **List four types of new word learning.**

   - Learning the meaning for a new word representing a known concept
   - Clarifying and enriching the meaning of a known word
   - Learning a new meaning for a known word
   - Learning the meaning of a new word representing an unknown concept.

5. **Distinguish between high frequency words and sight words.**

   High frequency words are those words in common use in the language. High frequency word lists related to school grades are usually based on the words used in contemporary reading texts used in schools at each grade level.

   Sight words is a term applied in early reading instruction in English to the small set of high frequency words that have irregular spelling patterns and that must be memorized by sight because they are hard to decode phonetically.

6. **Explain what BICS and CALP stand for?**

   "Basic Interpersonal Communication" (BICS) is everyday language whereas "Cognitive Academic Language Proficiency" (CALP) refers to the academic language of school with its special subject terms.

7. **What is the explanation for why many English words have seemingly irregular spelling?**

   Because the spellings obey certain rules related to the language of origin of these words, such as Anglo-Saxon, Norman French, Latin and Greek.

Unit 15: Syntax

1. **Define syntax.**

   Syntax is the rules, principles and processes concerning the arrangement and order of words and phrases to create well-formed sentences in a language.

2. **What is the default (usual, most common) word order in all South African languages?**

   Subject Verb Object (SVO)

Unit 16: Semantics

1. **What is semantics.**

   The study of meaning in language at the level of words, phrases, sentences and the text or discourse as a whole.

2. **Match the correct term to the description:**

Words with opposite meanings	antonyms
A word indicating a general category into which words with more specific meanings fall	hypernym
Words which fall into a more general category	hyponyms
A term or phrase is applied to something to which it is not literally applicable in order to suggest a resemblance between two ideas or things	metaphor
A word used as a substitute for a harsh or vulgar one	euphemism
Two words used to compare things linked by the word "like"	simile
Analyse and make judgements about what is read	evaluate
Break text into its parts in order to understand it	analyse
Go through a set of steps to use information explicitly stated in the text to draw logical conclusions about its meaning	infer
Think about the information and evaluate the information, actions, style, etc. presented for their truth or falsity or good and bad points	criticise
The plain meaning of information explicitly stated in the text	literal (meaning)

Unit 17: Simple view of reading

1. **What does the formula D x LC = RC mean?**

   (D) Decoding: the ability of the reader to accurately sound-out or decode the written words using the principles of phonics (e.g. /k - æ - t/ = "cat").

   (LC) Language Comprehension: the ability of the reader to understand the meaning of the words (as if they had been spoken out loud).

   (RC) Reading Comprehension: the ability of the reader to understand the meaning of the written words.

Unit 18: Towards reading development

1. **Consider how you will use this study guide as a resource when you are studying more directly the 'how' of teaching reading and writing.**

   Own answer.

Sesotho and IsiZulu Reading Project

Study guide 2: Language and literacy

This is a short and very basic introduction to the linguistic (language study) terminology and concepts that underlie the teaching of reading and writing.

It provides the essential linguistic concepts for teaching reading.

Though suitable for all teachers of South African languages, many of the examples given in the study guide are particularly useful for those who will teach in Sesotho or IsiZulu.

The study guide includes short self-tests for each unit in the study guide.

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