

The value of our electricity

Senior Phase (Grade 8)

Educator Guide

English Home Language



How to save energy

Electricity is produced from fuel such as coal, water, diesel and uranium which are limited resources. An alternative to building new power stations to supply the increase in demand for electricity is to use what we have more efficiently (i.e. without wasting), one of the ways is to change the way we use electricity. Eskom's Integrated Demand Management (IDM) Energy Education programme motivates people to change the way they use electricity. Eskom has taken the approach of integrating energy education within the school curriculum.

The energy education programme is introduced in the Senior Phase so that learners can see energy-saving as integral to their lives and put it into practice as they grow. The activities are simple and can be adapted by the educator. The activities are within the context of the Curriculum and Assessment Policy Statement (CAPS) of the Department of Education (DoE).

Note: The Eskom guides are in English. The educator will need to translate them into the Home Language.

Educators need to consult the Department of Education's CAPS policy guides for details of the skills, content and assessment within the relevant Phase and Grade.

Home Language

The **Home Language level** provides language proficiency that reflects the basic interpersonal communication skills required in social situations and the cognitive academic skills essential to learning across the curriculum. Emphasis is placed on teaching listening, speaking, reading and writing skills at this language level. This level also provides learners with a literary, aesthetic and imaginative ability that will provide them with the ability to recreate, imagine, and empower their understanding of the world they live in. However, the emphasis and the weighting of listening and speaking from Grade 7 onwards, are lower than those of the reading and writing skills (CAPS, DoE, 2011, p13).

The language skills

The Home Language curriculum is packaged according to these skills (CAPS, DoE, 2011, p14):

1. Listening and Speaking
2. Reading and Viewing
3. Writing and Presenting
4. Language Structure and Convention

Language teaching approaches (CAPS, DoE, 2011, p14):

The approach to teaching language in these documents is text-based, communicative, integrated and process orientated. The text-based and the communicative **approaches** are both dependent on continuous use and production of text.



The **text-based approach** explores how text works. The purpose of a text-based approach is to enable learners to be competent, confident and critical readers, writers, viewers and designers of text. It involves listening, reading, viewing and analysing text to understand how it is produced and what its effects are. Through this critical interaction, learners develop the ability to evaluate text. The text-based approach also involves producing different kinds of text for a particular purpose and audience. This approach is informed by an understanding of how text is constructed.

A **communicative approach** suggests that when learning a language, a learner should have a great deal of exposure to the target language and many opportunities to practise or produce the language for communicating in social or practical purposes. Learning a language should be carried over to the classroom where literacy skills for reading/viewing and writing/presenting are learned by doing a great deal of reading and learning to write by practicing to write.

Language teaching occurs in an integrated way, with the teacher modelling good practice and the learners practising the appropriate skills in groups before applying these skills on their own. The structure of each lesson should be one that engages the whole class before practising in groups and applying the new skill individually.



For the educator to take note:

- The energy-wise message is integral to all the activities.
- You may use the activities as they are.
- You can adapt or change the activities.
- You can use other resources where you see appropriate.
- Adapt the activities to suit the grade you teach.
- Adapt the activities according to the level of the learners (consider language or any other barriers).
- Share and discuss the activities with other educators in the same phase and grade.
- You can design your own activities that best suit the level of learners and grade you are teaching.
- Practice the energy-saving behaviour so you become an example of what is expected.
- Share your knowledge and practice on energy-wise education with everyone at school, at home and in the community.

Thank you for taking care of our earth

Term 2

Activity 1 has reference to the following extract from the CAPS policy document (DoE, 2011, p67).

Skills: Reading and Viewing

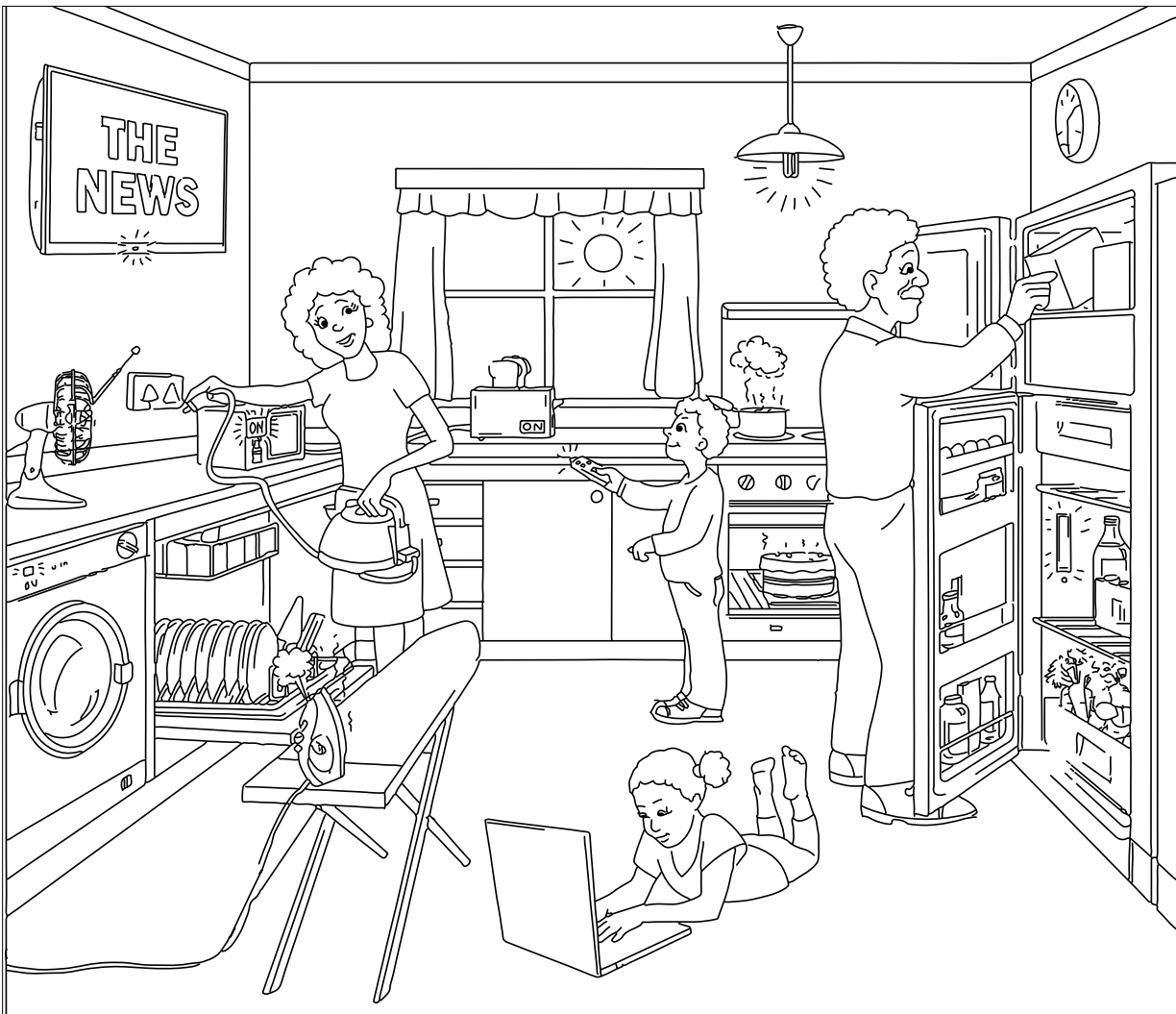
GRADE 7 TERM 2 CONTENT				
Weeks	Listening and Speaking	Reading and Viewing	Writing and Presenting	Language Structures and Conventions
1-2	<p>Speaking and Listening strategies</p> <p>Listen and comprehension:</p> <ul style="list-style-type: none"> Explain listening process Take notes Answer questions <p>Tell a story</p> <ul style="list-style-type: none"> Characterization Diction Interpret mood, tone, atmosphere, time-line, ironic twists and ending 	<p>Library text like youth novel/drama</p> <ul style="list-style-type: none"> Key features of literature text, such as character, charactersation, plot, conflict, background, setting, narrator, theme <p>Reading process</p> <ul style="list-style-type: none"> Pre-reading (introduce text) During reading (features of text) Post-reading (answer questions, compare, contrast, evaluate) <p>Reading/viewing for comprehension (use written and/or visual text such as cartoons/strips)</p> <ul style="list-style-type: none"> Skimming Scanning Intensive reading Make inference (characters, setting, milieu, message) Infer meaning of unfamiliar words through your word attack skills Emotive language 	<p>Writing: narrative essay</p> <p>Paragraph conventions</p> <ul style="list-style-type: none"> Topic sentence of paragraph Main and supporting ideas Logical order of paragraphs Conjunctions for cohesion Register <p>Focus on the writing process</p> <ul style="list-style-type: none"> Planning Drafting Revision Editing Proofreading and presenting 	<p>Word level work: Complex, nouns, predictable and object, dual use of some nouns</p> <p>Finite verbs</p> <p>Adjectives: comparative superlative</p> <p>Sentence level: subject and predicate, subject verb agreement, simple sentences, statements, simple present tense, simple past tense.</p> <p>Word meaning: synonyms, antonyms, literal, figurative, emotive language</p> <p>Punctuation: full stop, comma, exclamation mark, question mark.</p>

- * Writing and presenting skills can also be integrated into this activity.
- * You can also integrate the language structure and convention into this activity.
- * A visual text (an advertisement) has been used as the stimulus in this activity.
- * You can add more questions to those given.
- * Remember to emphasise the need to use energy wisely.

Activity 1: Picture interpretation



We use many appliances in our homes that all consume electricity. If we waste energy by leaving appliances on when they are not needed, we are wasting scarce resources like coal and water. If we run out of coal, we will have to use expensive fuels like gas or nuclear to make electricity. The picture below shows a family using their appliances and aims to make learners aware of the items that all consume electricity. Some appliances do not need to be on. Leaving a fridge door open too long, using lights when there is sunlight outside, leaving appliances on standby mode, all wastes electricity. Someone in the family should take responsibility for ensuring the family does not waste electricity. We need to save electricity as it is a scarce and expensive resource.



The family in the picture depends on using the common type of appliances which consume electricity.



- Use an A4 picture of the family for class discussion.
- Put the learners in groups or in pairs and give them about 10 minutes to discuss the picture.
- Class discussion: Ask the learners questions like – who are the characters in the picture?/where is the scene taking place?/what are the main activities in the picture?/what message does the picture convey?
- After the class discussion give the learners the worksheet to complete on their own.
- Review the worksheet with the learners.

Study the picture and then answer the questions.



Questions:

1. List the appliances that use electricity as shown in the picture. [Iron/radio/ TV fan/refrigerator/oven/stove/microwave/air-conditioner/laptop].
2. Why do you think it is necessary to save electricity? [We should not be wasteful/in South Africa we are dependent on coal for electricity – we are wasting our coal resources by not using electricity wisely/coal is a non-renewable resource – it will not last forever].
3. Why do you think that there is no need for the light to be on? [It is 2.30pm – the sun is out – natural light can be used].
4. In your own words give reasons why the family is not using electricity wisely. Use examples from the picture. [The light is on although there is enough natural light/the father has both doors of the refrigerator open/ the mother has the iron on – but is doing something else].
5. Who do you think should be responsible for saving electricity in the family? [All the members of the family].
6. You are a part of the family. Give the family advice on how to use electricity wisely by correcting the mistakes shown in the picture. This advice can be given to the rest of the class orally by learners. [Use natural light whenever possible/close the refrigerator door as quickly as possible/use appliances like the iron immediately/try to focus on the use of one appliance at a time/switch off appliances that are not in use e.g. the microwave oven].
7. The TV has a remote control. What do you think is the correct way to switch off the TV when they go sleep at night? Explain your answer. [The correct way is to switch your TV off, at the TV button and also at the plug. If the TV is switched off using the remote it is not completely off – it is still using energy].



Energy-saving

Term 2/Term 3

Activity 2 has reference to the following extract from the CAPS policy document (DBE, 2011, p68).

Skills: Reading and Viewing

Weeks	Listening and Speaking	Reading and Viewing	Writing and Presenting	Language Structure and Conventions
7 - 8	<p>Listening and Speaking strategies</p> <p>Listening comprehension (written/text/TV news presentation)</p> <ul style="list-style-type: none"> • Explain listening process • Take notes • Write answers <p>Different forms of oral communication: debate (on advertising)-</p> <ul style="list-style-type: none"> • Choose appropriate topic • Present argument • Logically • Use cohesive devices appropriately • Use correct vocabulary, language structures • Use manipulative/emotive language • Follow procedures 	<p>Reading/viewing of comprehension (use written and /or visual text such as advertisements)</p> <ul style="list-style-type: none"> • Skimming • Scanning • Intensive reading • Make reference (character, selling, milieu, messages) • Inferring meaning and conclusion • Infer meaning of unfamiliar words by word attack skills • Manipulative language • Formal/informal language <p>Literary text such as a novel</p> <ul style="list-style-type: none"> • Key features of literature text: such as character, characterization, plot, conflict, background, setting, narrator, theme <p>Reading process</p> <ul style="list-style-type: none"> • Pre-reading (introduce text) • During reading (feature of text) • Post-reading (answer questions, compare, contrast, evaluate) 	<p>Write transactional texts</p> <p>Advertisement/posters</p> <ul style="list-style-type: none"> • Requirements of format • Purpose, target group and context • Word choice and sentence construction • Visual elements, such as font types and size, headings, symbols, colour) • Manipulating/persuasive language <p>Focus on the writing process</p> <ul style="list-style-type: none"> • Planning • Drafting • Revision • Editing • Proofreading and presenting 	<p>Write a level: proper nouns, gender, plural singular</p> <p>Adjectives: demonstrative, relative</p> <p>Sentence level: direct and indirect speech, simple and compound sentences</p> <p>Word meaning: synonyms, antonyms, literal and figurative meaning</p> <p>Punctuation and spelling: colon, semi-colon</p> <p>Dictionary use</p>

* Writing and presenting skills can also be integrated into this activity.

* You can also integrate language structure and convention to this activity.

* A visual text (an advertisement) has been used as the stimulus in this activity.

* You can add more questions to those given.

* Remember to emphasise the need to use energy wisely.

Activity 2: Interpreting an advertisement



- Use an A4 picture of the family for a class discussion.
- Ask the learners to scan through the advertisement.
- Class discussion: Ask the learners questions like – what is the advertisement about?/what message(s) is the advertisement conveying to the reader?/would you buy the products – what are your reasons? Give learners an opportunity to express their views.
- After the class discussion give the learners a worksheet to complete on their own.
- Review the worksheet when the learners are done.

Read the advertisement carefully.

Discuss the advertisement with your friends and then fill in the answers.

Energy-saving

It is now necessary!

Stay chilled with our new refrigerator.
Definitely uses 34% less energy than old refrigerator

Some energy-saving tips:

- Close your fridge door quickly so it does not use extra power to get back to its cooling level
- Switch off lights in unoccupied rooms
- Use natural light whenever you can.

Energy Experts - 28 Universe Road, Durban

VISIT US TODAY

1. Who do you think the advert is targeted at? Why do you say this?
[People who are in need of a new refrigerator/people who want to save energy/people who care about the environment/all people - the advert uses words like – “it is necessary”].
2. Why do you think the advert starts with “energy-saving”?
[To catch the attention of the reader/saving energy means saving money and saving a scarce expensive resource/people are usually attracted to some kind of saving].
3. The phrase “it is necessary” immediately follows “energy-saving”. Why do you think it is necessary to save energy? [It is highlighting the fact that electricity is a scarce and expensive resource, if it is wasted, it will cost you money and will waste scarce resources].
4. How does the design of the advert persuade the reader? [Hint: Look at font types and size – there is a variation, the persuasive words are boldly highlighted headings – the advert continues the flow of energysaving under headings of the product and energy-saving tips/relevance of the picture - the picture shows the product – appealing to the sense of sight/choice of words - the word “definitely” is making a promise/use of language – the phrases are to the point length and size – the advert is short].
5. What promise does the advert make? [There will be definite savings in energy with the refrigerator in the advert].
6. Do you think that the company is really interested in the environment and saving electricity? Give a reason for your answer. [Yes.They give general energy saving tips related to other products and behaviour/read the responses of the learners – there may be other opinions].
7. List three ways in which you can save electricity at home as given in the advert. [Close your fridge door quickly so it does not use extra power to get back to its cooling level/switch off lights in unoccupied rooms/use natural light whenever you can].



For more information on the schools programme, please visit www.eskom.co.za/idm.