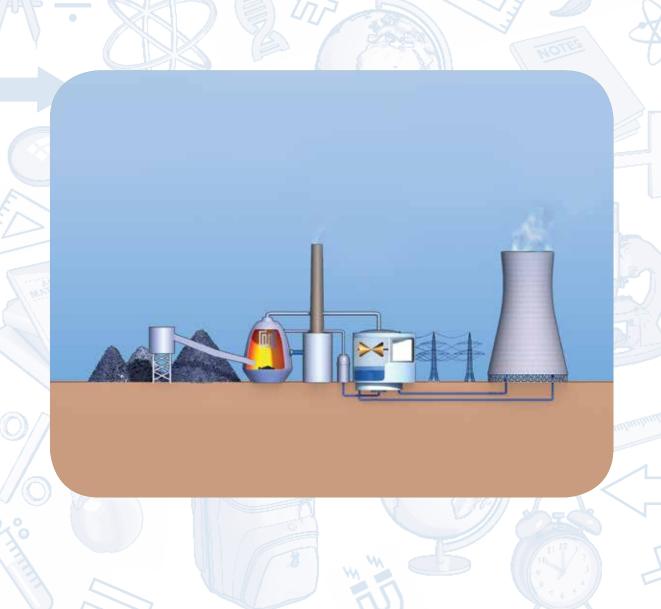
## The value of our electricity

Intermediate Phase (Grade 4,5 & 6) 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 being introduced in the Intermediate Phase so that learners can see energy-saving as integral to their lives and put into practice as they grow. The activities are simple and can be adapted by the educator.

The subjects in the Intermediate Phase (Grades 4,5 and 6) are:

- Home Languange
- First Additional Language
- Mathematics
- Life Skills
- Natural Science and Technology
- Home Languange
- Social Science

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 for details of the skills, content and assessment within the relevant phase and grade.



## How to save energy

#### **English Home Language**

The **Home Language level** provides for language proficiency that reflects the basic interpersonal communication skills required in social situations and the cognitive academic skills essential for learning across the curriculum. Emphasis is placed on teaching the listening, speaking, reading and writing skills at this 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.

The Home Language curriculum is packaged according to the following skills:

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

In the Intermediate Phase energy education can be used to develop the packaged skills for English Home Language. Table I shows examples of activities and how energy education can be integrated. The skills to be developed are suggested for each activity. The educator needs to adapt the level of the activity according to the grade and assessment.



## How to save energy

Activity	Description of Activity	Skills to be developed
Activity I  Comparing Lights: Picture of the 2 ladies	<ul><li>Finding differences</li><li>between the pictures</li><li>Paragraph writing</li></ul>	<ul><li>Reading and viewing</li><li>Writing and presenting</li><li>Language structure and convention</li></ul>
Activity 2  How is electricity generated?	<ul><li>Discussion</li><li>Answer the questions</li><li>Paragraph writing</li></ul>	<ul> <li>Reading</li> <li>Listening and speaking</li> <li>Writing</li> <li>Language structure and convention</li> </ul>
Activity 3 Story: <b>Good Habits</b> by Dr. Rajen Pillay	<ul><li>Listen to the story</li><li>Answer the questions</li><li>Conduct an interview</li></ul>	<ul><li>Listening</li><li>Writing</li><li>Speaking</li></ul>
Activity 4 Picture Energy-wise Family	<ul><li>Reading and viewing</li><li>Story writing</li></ul>	<ul><li>Reading</li><li>Writing</li><li>Language structure and convention</li></ul>

Table I. Energy Education integration - English Home Language



### 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.
- Saving energy means we don't have to produce so much, using our limited natural resources and limiting the amount of pollution we create, thus taking better care of our environment.

Thank you for taking care of our earth

4



The activities (Activities I and 2) which follow have reference to the following extracts from the Department of Education's (2011) policy document - English Home Language (Intermediate Phase Grades 4, 5 and 6).

	Grade 4 Term 3			
Skills	Learning and speaking (oral)	Reading and viewing	Writing and presenting	Language structure and convention
Week 7-8	Listen to and discuss information texts e.g. a weather report  Text from the textbook or Teacher's Resource File (TRF)  Introductory activities: prediction  Listen to specific details  Discuss usefulness of the information  Link information to own life  Discuss possible effects on people  Compare conditions in different places, indicates preferred destinations with reasons  Participate in discussions justifying own opinion  Identify features of weather reports: register and the nature of language used  Use interaction strategies to communicate effectively in group situations  Interpret and discuss more complex visual texts	Read information texts e.g. weather reports from a newspaper, a textbook or Teacher's Resource File (TRF) - Pre-reading:     predicting from     title heading and     pictures - Use reading     strategies: skims     to get the general     idea, scans for     specific details - Identify the way the     text is organised - Compare     differences and     similarities in     different places - Reads information     texts with visuals     e.g. map - Use reading     strategies, e.g.     make predictions     and use textual and     contextual clues - Interpret visuals - Use a dictionary     for vocabulary     development	Write information texts e.g. a weather chart - Select appropriate visuals and content for the purpose - Present information using a map, chart, graph or diagram  Writing process: - Planning/ pre-planning - Draft - Revise - Edit - Proofread - Present	Word level work: adjectives (attributes)  Sentence level work: simple past tense  Spelling and punctuation: dictionary use



Grade 5 Term I				
Skills	Learning and speaking (oral)	Reading and viewing	Writing and presenting	Language structure and convention
Week 3-4	Listen to and discuss information texts from a textbook or Teacher's Resource File (TRF)  - Introductory activities: prediction  - Participate in discussions, explain own opinion  - Identify and explain cause and effect  - Comment on the social, moral and cultural values  - Ask critical questions  - Express and justify own opinion with reasons  - Uses interaction strategies effectively in group situations  Present unprepared speech  - Has beginning, middle and ending  - Uses logical organisation of ideas  - Selects appropriate language and style for audience and purpose  - Uses appropriate intonation  - Uses appropriate body language, posture and presentation skills e.g. adjusts tempo, volume and pace  - Uses appropriate information and facial expression	Read information text  - Pre-reading, predicting from title heading and pictures  - Discuss central ideas and specific details  - Comments on choice of pictures in text  - Use reading strategies e.g. uses textual and contextual clues  - Share ideas and offer opinion using speculation  - Uses a mind-map/ notes to summarise information  - Uses a dictionary for vocabulary development	information texts  - Write 3-4 paragraphs  - Use relevant content appropriate to the audience and purpose of the text  - Express information clearly  - Organise content logically  - Write a topic sentence and include relevant information to develop a coherent paragraph  - Link sentences into coherent paragraph using pronouns, connecting words and coherent punctuation  - Use a variety of sentence types  - Use appropriate grammar, spelling and punctuation  Use the writing process  - Brainstorm ideas using mind-maps  - Produce first draft - Revise  - Proofread  - Write a final draft  - Present neat and legible final draft	Word level work: finite verbs and infinite verbs  Sentence level work: subject-verb agreement tense  Word meaning: personification, proverbs, idioms, similes



	Grade 6 Term 2			
Skills	Learning and speaking (oral)	Reading and viewing	Writing and presenting	Language structures and conventions
Week 7-8	Listen to and discuss information texts e.g. a weather report Text from the textbook or Teacher's Resource File (TRF) - Introductory activities: prediction - Listen to specific details - Discuss usefulness of the information - Link information to own life - Discuss possible effects on people - Compare conditions in different places, indicates preferred destinations with reasons - Participate in discussions justifying own opinion - Identify features of weather reports: register and the nature of language used - Use interaction strategies to communicate effectively in group situations - Interpret and discuss more complex visual texts	Read information texts e.g. weather reports from a newspaper, a textbook or Teacher's Resource File (TRF) - Pre-reading:     predicting from     title, heading and     pictures - Use reading     strategies: skims     to get the general     idea, scans for     specific details - Identify the way the     text is organised - Compare     differences and     similarities in     different places - Read an     information text     with visuals e.g.     map - Use reading     strategies, e.g.     makes predictions     and uses textual     and contextual     clues - Interpret visuals - Use a dictionary     for vocabulary     development	Write information texts e.g. a weather chart  - Select appropriate visuals and content for the purpose  - Present information using a map, chart, graph or diagram.  - Writing process:  - Planning/ pre-planning  - Draft  - Revise  - Edit  - Proofread  - Present	Word level work: adjectives (attributes)  Sentence level work: simple past tense  Spelling and punctuation: dictionary use
WEEK 9 - 10		SUMMATIVE	ASSESSMENT	



### **Activity I: Comparing energy use**



Energy saving is essential for every household in South Africa. With electricity being a scarce resource and with the high cost of electricity it is important that we don't waste it and that we use energy saving appliances in our homes. Leaving lights on in a room not being usesd, or filling your bath to the top with hot water or leaving the television on when no one is watching are all wasteful practices. Leaving the fridge door open for long periods of time or heating or cooling rooms where there is no one in it, will cause you to spend money on energy you did not need. Saving energy means saving money and resources.

- Give each learner an A4 worksheet of the 2 ladies.
- Picture A is on the left and picture B is on the right.
- Tell the learners they need to find differences between picture A and picture B on their own. [Individual activity].
- Learners need to number corresponding differences on each picture e.g. 1,2,3...
- Give the learners about 5 minutes for the activity.
- Use prestik or a magnet to place an A2 poster of the 2 ladies on the board.
- Tell the learners to give you the differences between the pictures. They should put up their hands if they want to answer. They have to come to the board and point out each difference on the poster.
- Have a discussion about the two pictures as the learners give the differences: e.g. when the learners say that the lady in picture A is happy and the lady in picture B is sad, follow-up with, why do think the lady in picture A is happy? [She is using energy wisely; she is using energy-saving lights; she has a low account].
- After the discussion give each learner a worksheet. Tell them to answer the questions individually in their books. Questions 1, 2 and 3 can be done in one lesson and the rest of the questions in another lesson.
- Note the following:





Questions 1, 2, 3 and 4	For Grades 4, 5 and 6
Questions 1, 2, 3, 4 and 5	For Grades 5 and 6
Questions 1, 2, 3, 4, 5 and 6	For Grade 6





Picture A Picture B





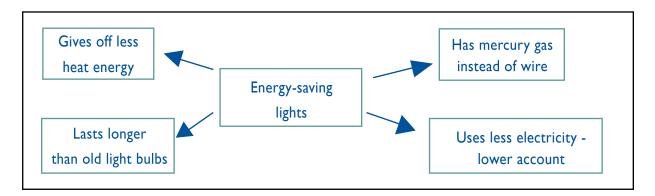
1. Write down the differences between pictures A and B.

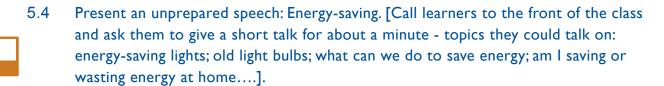
	Picture A		Picture B
1.	Uses energy-saving lights	1.	Uses old light bulbs
2.	The bin is empty	2.	The bin is full
3.	The lady is smiling	3.	The lady is sad
4.	The lady's hair is black	4.	The lady's hair is grey/white
5.	The account is low	5.	The account is high
6.	The temperature is low	6.	The temperature is high
7.	Has a window - natural light	7.	No window
8.	The light is off	8.	The light is on at 8.00am

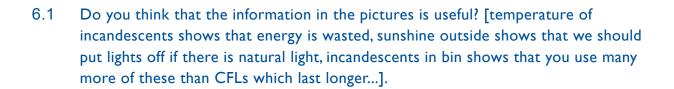
- 2.1 How much is the electricity account in picture A? [R254]
- 2.2 How much is the electricity account in picture B? [R723]
- 2.3 Why do you think that the amounts on the electricity accounts are different? [The lady in picture A: is using energy-saving lights account is lower; she is practising energy-wise tips making use of natural light (window); lights are off at 8.00am].
- 3. Do you think the lady in picture B is doing the right thing by leaving the lights on until 8.00am (in the morning)? Explain why you think so? [Listen to the learners views; you could add that she is not justified because she is not practising energy-saving tips].
- 4.1 Look at the expressions of the lady in both pictures. One is very happy and the other is worried. Which picture shows how YOU are using energy at YOUR home? [This is an open question relating to the learner's life].
- 4.2 Write a paragraph on energy-saving lights (compact fluorescent light CFL). Use the information from the table and the lead in paragraph [Your paragraph should not be more than 100 words].



- 5.1 What do you think is the main idea in picture A? [Shows how we can save energy].
- 5.2 What do you think is the main idea in picture B? [Shows how we waste energy].
- 5.3 Use a mind-map to summarise the information given in picture A. Refer learners to the paragraph on the two different bulbs, the table and the clues the diagram gives them in terms of heat, cost, energy-saving.







- 6.2 How can you use this information to change your daily life? [Read the learners' answer e.g. correct behaviour which results in saving energy].
- 6.3 How can you use this information to inspire other people to change? [Through being an example of practising energy-saving behaviour. Talk to others about energy efficient lighting. Tell others that energy savers cost more but their lifespan is longer, that they save on energy so they save you money, that they use their energy to produce light and not heat like incandescents.].
- Oesign/write an A4 page leaflet on energy-saving lights make the change! [Read the learners' answer].



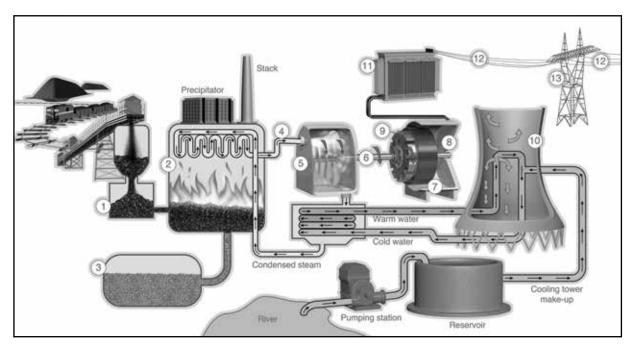
# **Activity 2** How is electricity generated at a power station?



- Ask the learners if they know how electricity is generated (made) at a power station.
   [Listen to their answers. Give the learners time to add on/correct each other].
- Now give each learner an A4 page on: how electricity is generated in a power station?
- Divide the learners into groups of 3 4 and tell them to discuss the information questions 1.1 and 1.2 in the worksheet. [Give the learners about 15 minutes].
- Put up an A2 poster on how electricity is generated in a power station.
- Ask any group to come to the front and explain: how electricity is generated in a power station? [Allow other groups to comment, add or ask questions once the group has finished their presentation].
- Tell the learners to answer question 1.3 in their books, question 1.4 is for Grades 5 and 6 and question 5 is for Grade 6 only.



The diagram below shows how we get most of our electricity in South Africa. We use a natural resource namely coal to provide energy for the process through which we get electricity. Other sources like hydro-electric power stations, nuclear power stations and wind turbines are also used to provide electricity to a lower extent.



- 1. Coal pulveriser (coal mill)
- 2. Boiler
- 3. Ash (burnt coal)
- 4. Water to steam
- 5. Turbine

- Rotating shaft linking the turbine and generator
- Generator made up of a spinning rotor
- 8. Coil of copper wire
- 9. Magnet inside a coil of copper
- 10. Cooling tower
- 11. Step-up transformer
- 12. Transmission cables / lines
- 13. Pylon

#### How electricity is generated

The generation of electricity is the conversion of other forms of energy into an electrical current.

#### **Electricity from coal**

In most modern power stations in South Africa, coal is burned to heat water and convert it into steam. The steam is directed onto the blades of a turbine to make it spin. This in turn spins the magnetic rotor inside the coil to generate electricity.

Once the steam has passed through the turbines, it must be cooled and condensed. The cooling process turns the steam back into water so that it can be pumped back to the boiler for reheating. In the boiler it will be turned into steam again and will restart the cycle.



Many coal-fired power stations are built right next to coal mines. The coal is transported from the mine to the power

station on overland conveyor belts or by using trucks. This saves time and money and helps keep the cost of electricity down.

Electricity can also be generated from water, gas and atoms (nuclear energy)

1.1 Study the diagram. Discuss in your groups how we get most of our electricity in South Africa. [Join each group and guide the learners in their discussions.].



1.2 The words provided below assist learners to see the connection between producing energy and sustainability issues such as renewable and non-renewable energy sources.

#### Impact of burning coal

Most electricity today is generated by burning fossil fuels and producing steam which is then used to drive a steam turbine that, in turn, drives an electrical generator.

Such systems allow electricity to be generated where it is needed, since fossil fuels can readily be transported. The world's supply of fossil fuels is large, but finite.

There are environmental concerns about the emissions that result from fossil fuel burning. Burning fossil fuels results in the conversion of carbon to carbon dioxide, which is then released into the atmosphere. The estimated CO2 emission from the world's electrical power industry is 10 billion tons yearly. This results in an increase in the Earth's levels of atmospheric carbon dioxide, which enhances the greenhouse effect and contributes to global warming. The greenhouse effect means that the earth's atmospheric layer is keeping in the heat generated on earth, making our earth become hotter and hotter.

Ozone, sulfur dioxide, NO2 and other gases are often released when burning fossil fuels. Sulfur and nitrogen oxides contribute to smog and acid rain. Electricity producers addressed this problem by building very tall flue-gas stacks, so that the pollutants would be diluted in the atmosphere. While this helps reduce local contamination, it does not help with global issues.

Power plant designers can fit equipment to power stations to reduce emissions.

Fossil fuel-fired electric power plants that emit carbon dioxide, which may contribute to climate change. In addition, electricity generation has significant impacts on use of water and habitat and animal species.

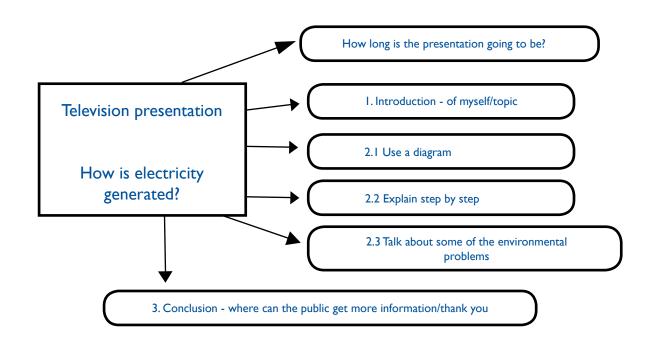
By limiting the use of electricity, we limit the use of fuel burned and in so doing limit the effects on our environment. In effect, by saving energy limits pollution and greenhouse gasses and climate change.



#### Write down the meaning of the following words using your dictionary:

pylon, renewable, non-renewable, pollution, natural, resource, environment, turbine, generator. [Review the words with the learners before they can answer question 1.3].

- Pylon: tall structure for support.
- Renewable: to continue or can be made again or can be replaced (no limit).
- Non-renewable: cannot be made again or cannot be replaced (limited).
- Pollution: to make dirty.
- Natural: given by nature.
- Resource: things we need to live.
- Environment: things around us.
- Turbine: motor/engine that turns e.g. by using the flow of water or gas.
- Generator: machine that can produce/make a form of energy e.g. electricity by turning.
- 1.3 On your own write down how we get electricity. Use the diagram, the words from (1.2) and group discussion to help you. [Carefully mark the learners' work individually to see the logic of the process, sentence construction...].
- 1.4 You are a presenter on television plan how you are you going to present information on electricity generation to the public. [You can guide the learners with the diagram below].





#### **Effects of burning coal**

Electricity is an energy source that needs to be produced. To make electricity you first need some form of fuel to create the energy that is converted to electricity. Most power stations in the world still use coal as their key source of fuel. Coal is also known as a fossil fuel.

The coal is burnt which heats up water which in turn creates steam. This steam is then used to drive a steam turbine which drives a generator that produces electricity. Coal can be transported relatively easily and so it allows us to generate electricity where it is needed. Coal is also readily available and but the supply is not going to last forever.

One of the biggest worries for communities and governments is what burning coal does for our health and the health of our environment. Burning fossil fuels results in large amounts of carbon dioxide, which is a by-product of burning fossil fuels, being released into the air and the atmosphere.

It is calculated that the total release of CO2 (carbon dioxide) into the atmosphere from the world's electrical power industry is around 10 billion tons ever year. This means that the amount of carbon dioxide in the air is increasing rapidly. This has led to a large degree to what is known as the greenhouse effect whereby heat is trapped inside the atmosphere and increasing the temperature of the earth making it hotter and hotter. This in turn has led to what is known as global warming.

There are also a number of other gases that are released into the ozone layer when we burn fossil fuels like coal. These other gases like sulfur and nitrogen oxides contribute to smog (the haziness we see in the air over cities) and acid rain.

Power companies have tried to manage this problem by building very tall chimneys, also called gas-stacks. The gases enter the exhaust stack, which contains equipment that filters out any dust and ash before venting into the atmosphere. The exhaust stacks of coal power stations are built tall so that the exhaust smoke can break up before it touches the ground. This ensures that it does not affect the quality of the air around the station. Although this helps the immediate environment around the power station, it does not help the global problem.

There are things that can reduce the negative effects of power stations like fitting equipment that filters the smoke and reduces the emission but by burning coal and other fossil fuels electric power plants contribute to climate change. The other result of generating electricity in this manner is the impact it has on our water supplies and the animal and plant life around us. Each one of us can make a difference by not using too much electricity and by not wasting electricity. Our responsible behaviour with electricity can ensure that the greenhouse effect is reduced and that climate change is brought under control.

If we all use less, we all win.

1.5 Think about some of the environmental problems that can be caused when using coal to generate electricity. Write a paragraph (about 100 words) on some of the environmental problems we face by using coal as a resource to get our electricity? [greenhouse gasses, sulphur, limited resources, climate change....].



The activities (Activities 3 and 4) which follow have reference to the following extracts from the Department of Education's (2011) policy document - English Home Language (Intermediate Phase Grades 4, 5 and 6).

		Grade 4 Ter	·m 4	
Skills	Learning and speaking (oral)	Reading and viewing	Writing and presenting	Language structures and conventions
Week 3-4	Listen to a short story  Text from textbook or Teacher's Resource File (TRF)  - Introductory activities: prediction  - Listen and relate to own experience  - Identify specific details and keeps to the topic  - Identify plot, setting and characters  - Answer oral setting and characters  - Answer oral questions based on the story  - Retells the story  - Discuss usefulness of the information  Participate in group discussion  - Take turns to speak  - Stay on topic  - Ask relevant questions  - Maintain discussions  - Respond to others' ideas with empathy and respect  - Give balanced and constructive feedback	Read a short story  Text from the textbook or Teacher's Resource File (TRF)  - Pre-reading: predicts from title and pictures  - Use reading strategies: skimming and scanning  - Identify and comment on the plot, setting and characters  - Give reasons for action of the character, understand the vocabulary  - Identify main and support ideas  - Identify and discuss values in the text  - Discuss new vocabulary from the read text  - Use a dictionary Reflect on texts read independently  - Retell story or main ideas in 3 to 5 sentences  - Express emotional response to text read	Writes a friendly letter/diary entry  - Use correct format  - Select appropriate content for the topic  - Use topic and supporting sentences to develop coherent paragraphs  - Link paragraphs using connecting words and phrases  - Use appropriate grammar, spelling, punctuation and spaces between paragraphs  - Use the dictionary to check spelling and meaning of words Use the writing process  - Brainstorm ideas using mind maps  - Produce first draft  - Revise  - Proofread  - Write final draft  - Present neat, legible final draft with spacing between paragraphs	word level work: adverbs of place and degree, tense, conjunctions, pronouns (focus on concepts that have been covered)  Sentence level work: noun phrase, noun clause  Spelling and punctuation: capital letters, full stop, commas, word division



Grade 5 Term 1				
Skills	Learning and speaking (oral)	Reading and viewing	Writing and presenting	Language structures and conventions
Week 7-8	Listen to and discuss story e.g. folklore story (myth/legend) from a reader in the class.  Introductory activities: prediction Identify the central idea, plot, setting, atmosphere and characters of fiction story Distinguish between realistic and unrealistic events Participate in discussions and justifying own opinion Respond sensitively to ideas and suggestions Participate in group discussions Give balanced and constructive feedback on plot, theme and setting	Reading a story, e.g. a folklore story (myth/ legend) from the textbook or class reader  - Use a range of reading strategies: skimming, scanning, contextual clues and previous knowledge  - Explain how writers use vocabulary and language to describe the setting - Read aloud individually with clear expression - Comment on plot, theme, characters and setting - Discuss new vocabulary from the read text - Use a dictionary	Writing a story,  - Use animal characters  - Develop plot, characters and settings  - Select content appropriate to the audience and purpose of the text  - Use language creatively in a variety of vocabulary  - Link sentences into a coherent paragraph using pronouns, connecting words and correct punctuation  Write descriptive/ narrative text  - Choose relevant content  - Stay on topic  - Use descriptive/ narrative vocabulary especially a range of adjectives  - Use figurative language, e.g. similes and metaphors	Word level work: noun, prefixes, adjectives, adverbs, pronouns, conjunctions  Sentence level work: subject, objects, subject-verb agreement, concords  Word meaning: proverbs, idioms, metaphor  Spelling and punctuation: dictionary use, word order

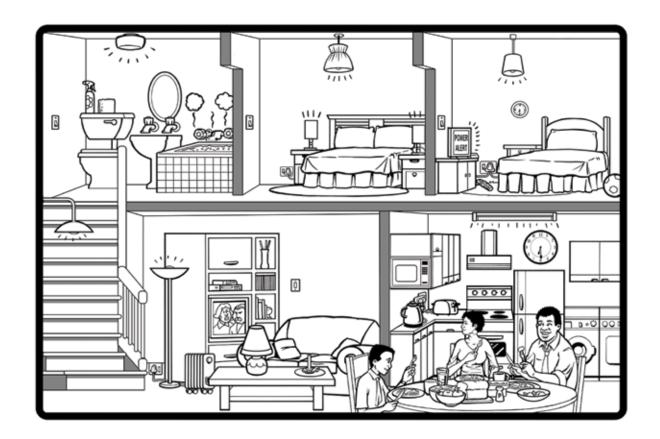


	Grade 6 Term 2			
Skills	Learning and speaking (oral)	Reading and viewing	Writing and presenting	Language structures and conventions
Week 5-6	Listen to and discuss a story  - Introductory activities: prediction  - Identify themes, asks questions, and relates ideas to own life experience  - Identify and discuss how stereotypes are formed  - Discuss response to text  - Link to own life  - Discuss social, moral and cultural values in different texts and comments on how these are conveyed in the text, e.g. stereotyping  - Use presentation skills e.g. volume, pace, pausing, posture, gesture etc.	Read a story from textbook or Teacher's Resource File (TRF) or class reader.  - Pre-reading activities: prediction based on tile and/ or graphics  - Read aloud and silently, adjusting reading strategies to suit the purpose and audience  - Discuss social and cultural values in texts  - Interpret and discuss message  - Show understanding of the text, its relationship to your own life, its purpose and how it functions	Write a story  - Create believable characters  - Show knowledge of the character, plot, setting, conflict, climax  - Plot main events using a flow chart - beginning (exposition), middle (rising, action, climax) and ending (denouement)  - Order logically  - Express ideas clearly and logically  - Use a theme or message	Work level work: auxiliary verbs  Sentence level work: present perfect tense  Wording meaning: idioms



### **Activity 3: Story**

#### Refer to the story: Good Habits



#### Good Habits

My name is Max and this is what happened at dinner last night. Dad sat down to have dinner with mum and I. Mum had cooked a delicious dinner. While sitting at the dinner table mum watched a programme on television. Dad very politely told mum to switch off the TV. Then I shouted out, "Oh no dad, my programme is going to start now."

Dad replied in a soft but clear voice, "Sssshhhhh. Enjoy the food and let's not watch the TV while eating. Besides it is unkind to ignore each other at the table."

"Max," said dad, "I noticed that you had left all the lights on upstairs. I kindly ask that you switch the lights off upstairs." "But why dad?" I asked.

He smiled and replied, "Every time we put something on we are using energy. We are downstairs so there is no need for the lights upstairs to be on. Right now we are wasting energy. Whenever we use energy and even if we are wasting energy, I have to pay for it." Besides do you know that coal is burnt to make or generate electricity? Wasting means that we are polluting the air and using up a natural resource.



"Do not waste food; do not waste water; do not waste energy; do not waste money and do not waste time. Use what we have wisely – it is the right thing to do."

I listened to my dad and so did my mum. Although we did wrong, dad was patient and explained very clearly that saving and using wisely is a good habit.



### **Activity 3.1: Story**



- Ask one of the learners to read the story aloud to the class with expression.
- Ask the learners for their views (what they think about the story). [10 minutes].
- Give each learner a copy of the story. Ask the learners to read the story silently and then answer the questions in their books.
- Learners should first plan and then write the letter in another lesson.
- I. Questions on the Story Good Habits:
- I.I Who is telling the story? [Max].
- 1.2 Who are the people at the dinner table? [Mum, Dad and Max].
- 1.3 Why do you think Max was ashamed of himself? [He lied].
- 1.4 What did mum do wrong? [She watched television while eating].
- 1.5 What are things that Max did wrong? [He shouted at the table; he also wanted to watch television while eating; he left the lights on upstairs; he left the television on upstairs].
- 1.6 Which of your responsibilities can you recognise in the story? [Saving energy and water; not wasting food; healthy eating; being respectful; when and what to watch on television].
- 1.7 Why is it not a good practice to waste energy? [Using up our resources/pay for what you use also wasting money].
- 1.8 What responsibilities did dad teach the family about energy? [When you switch anything on you are using energy; you pay for energy; switch off what you are not using].
- 1.9 List 3 other responsibilities that dad taught the family. [Do not waste water, do not waste time, do not waste food, do not waste time. Do not eat while watching television, be calm].
- 1.10 Was dad angry? What makes you think so? [No. Dad talked calmly and softly].
- I.II What did you like most about the story? [Do not waste...; talk calmly; ...] [Read the answers from the learners].



- 2. Write a letter to your friend telling her/him about what you learnt from the story. First plan your letter.
- 3. What do you think is the biggest mistake Max made? Explain your answer. [He lied, shouted, wanted to watch television while eating, wasted energy left the lights and television on upstairs].
- 4. Max's father thinks that Max is a good boy. What do you think? [He is a good boy he made mistakes, his father taught him the right things, he is prepared to listen and change that is a good quality].
- 5. There is probably a bit of Max in all of us. Write down three values that you have learnt from the story. [Respect; use resources carefully; truth...]
  - Note the following:

Questions 1, 2 and 3	For Grades 4, 5 and 6
Questions 1, 2, 3, 4 and 5	For Grades 5 and 6,
Questions 1, 2, 3, 4, 5 and 6	For Grade 6



# **Activity 3.2:** Interview: Role-play you are a guest being interviewed on *TV*



Reread the story of Max and his parents having dinner. Use the information provided to prepare Max for a TV interview

- This activity is suited for Grade 5 and 6 learners.
- The learners are to conduct a talk show interview on television.
- Divide the learners into pairs.
- Ask the learners to prepare questions that they will ask Max.
- The learners are to decide: one learner is to be the presenter (interviewer) and the other learner is to be Max, a guest on the show.
- Set up 2 chairs in front of the class as a television studio. Be creative bring in a sheet to cover the chairs (to look like lounge chairs) to give a professional appearance.



- Remind the learners: the show is called BE ENERGY-WISE on TV.
- One learner is to be the interviewer (the one who asks the questions on the story)
  and the other learner is to be Max (the guest answering the questions). The
  interviewer should introduce the show.
- Call on any pair to role-play their interview. [Keep time about 4 minutes per pair so you are able to call other learners as well].
- Call another pair of learners to the front. Let them start with the interview. The presenter then invites the viewers (the rest of the class) to phone in and ask Max questions. [Be creative the learners need to pretend that they are dialling and calling in to the live broadcast on television. They need to practice communication manners e.g. greet, give their name and then ask one question].
- The educator can do the last interview and/or announce a competition for the viewers at the close of the lesson.
- The learners need to pretend that they are calling in to answer questions. Give a few learners a chance to answer the questions. [It would be great if you can get a little educational prize for the first learner who gives the correct answer].



Here are some cue questions to help the interviewer:

- 1. Welcome to the BE ENERGY WISE show. Please tell us your name.
- 2. What do you think about your behaviour at the dinner table?
- 3. What is wrong with leaving the lights on upstairs?
- 4. Now Max you went upstairs and switched off the TV using the remote control. Do you think you did the right thing? Why?
- 5. What is the Golden Rule for the use of electricity?

\*NB. When you switch the TV off by remote control, it is not completely OFF - it is on stand-by mode - if there is still a light on, it means that electricity is still being used.

\*NB. Golden Rule: If you are not using it - switch it off.

Now for our viewers at home: answer the questions correctly and you can win a prize. Write down the order in which you think it takes to use the most electricity to the least electricity:

The fridge

Things switched off with a remote control (TV)

The geyser

Answer: (I) The geyser (on 24 hours)

- (2) The fridge (on 24 hours)
- (3) Appliances switched off by remote control (e.g. TV) are not completely off.



### **Activity 4: Story Writing**



- This activity is suited for Grade 5 and 6 learners.
- Give each learner an A4 picture of the "Use Energy Wisely" (Picture of the Family).
- Tell them to write their own story using the picture.
- Provide the following guidelines.

#### Keep the following checklist in mind:



- 1. Your story must be related to the picture and energy use.
- 2. Plan your story first.
- 3. Your story should not be more than 220 words.
- 4. Your story should have a title.
- 5. Your story should have an introduction.
- 6. Your story should have a body.
- 7. Your story should have a conclusion.
- 8. Write complete sentences.
- 9. Write in paragraphs.
- 10. Remember to spell correctly.
- 11. Your punctuation should be correct.
- 12. Read your story two times (twice) to check for any mistakes.



You can ask learners to volunteer to read their stories to the class.



