



Energy Education

Intermediate Phase (Grade 5) (CAPS)

Learner activity sheets and resources

English Home Language



Energy education



Dear Learner,

The demand for electricity is growing. Building new power stations to increase the supply of electricity is costly, time consuming and is one of the solutions.

An immediate solution is to change the way in which we use electricity – that is using electricity wisely without wasting.

Eskom kindly asks **you, the learner**, to please put into practice different ways of using electricity wisely. You are going to learn a lot in energy education. Some of the things you will learn are:

- the changes in technology (use energy-saving lights instead of the traditional old lights),
- how to use technology more wisely (using the switch to switch off remote controlled appliances instead of the remote),
- other energy-wise saving tips,
- and how using energy wisely helps to care for our *environment* – *our earth*.

Do not worry, the energy education will be part of your school work. Be alert and become an example of how to use energy wisely. Share all that you learn with your friends, family and community. Remember to be energy-wise wherever you are – at home, at school and in other places.

Thank you for taking care of our earth.

Activity 1: Which lights should we use?

1. Study the pictures of the 2 ladies which show how they use electricity.

- Write down the differences between pictures A and B.
- Number your differences as 1, 2, 3...



A



B



Picture A

1.

Picture B

1.

Activity 1: Which lights should we use?



2.1 How much is the electricity account in picture A? _____

2.2 How much is the electricity account in picture B? _____

2.3 Why do you think that the amounts on the electricity accounts are different? _____

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? _____

4.1 Look at the expressions on the ladies' faces in both pictures. Which lady shows how you are using energy at home? _____

4.2 Write a paragraph on energy-saving lights (compact fluorescent lights – CFLs). Use the information from the table in which you have written the differences between the pictures of the 2 ladies. *[Your paragraph should not be more than 100 words].*

Activity 1: Which lights should we use?



5.1 What do you think is the main idea in picture A? _____

5.2 What do you think is the main idea in picture B? _____

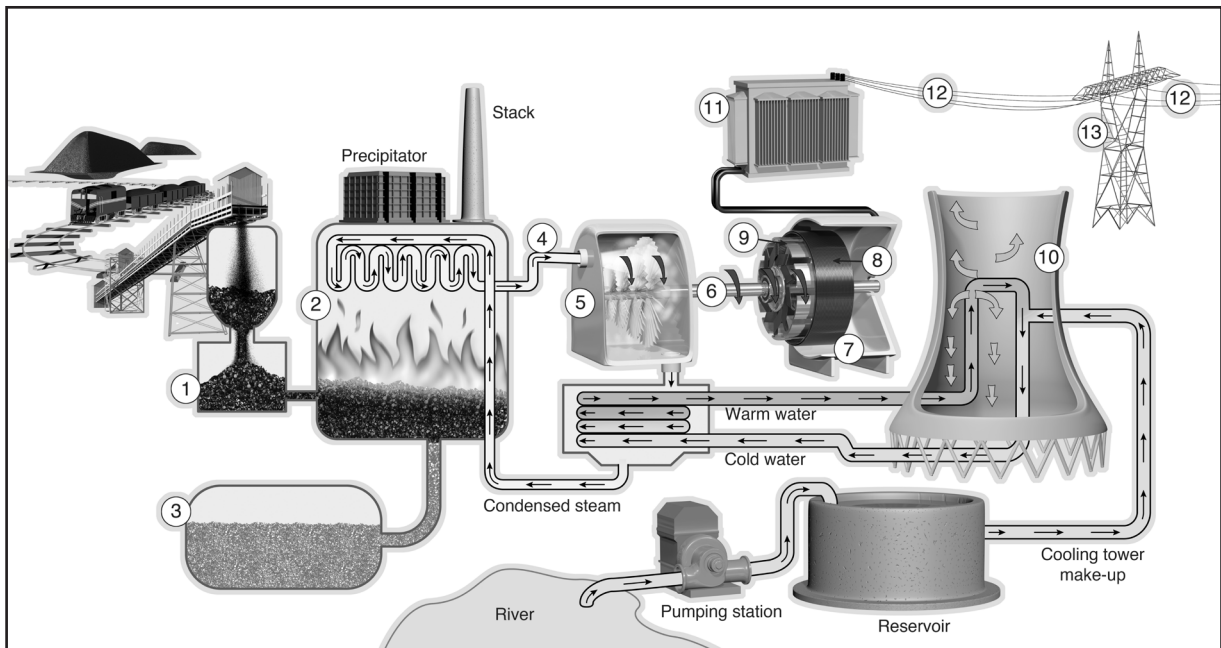
5.3 Use a mind-map to summarise the information given in picture A.

5.4 Write a paragraph on energy-saving.

5.5 Your teacher is going to call you to the front of the class to present an unprepared speech on energy-saving. Be wise and talk about all that you have learnt about energy-saving.

Activity 2: How is electricity generated at a power station?

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 our electricity. Other sources like hydro-electric power stations, nuclear power stations and wind turbines are also used to provide electricity to a lesser extent.



- 1.1 Study the diagram. Discuss in your groups how we get most of our electricity in South Africa.
- 1.2 Write down the meaning of the words on page 6. Select the meanings from the list provided below.

given by nature / tall structure for support / things around us / to continue or can be made again or can be replaced (no limit) / cannot be made again or cannot be replaced (limited) / to make dirty / things we need to live / motor or engine that turns e.g. by using the flow of water or gas / machine that can produce or create a form of energy e.g. electricity by turning

Activity 2: How is electricity generated at a power station?



1. Pylon _____

2. Renewable _____

3. Non-renewable _____

4. Pollution _____

5. Natural _____

6. Resource _____

7. Environment _____

8. Turbine _____

9. Generator _____

Activity 2: How is electricity generated at a power station?



1.4 Think about some of the environmental problems that can be caused when coal is used to generate electricity. Write down the key words of your thoughts.

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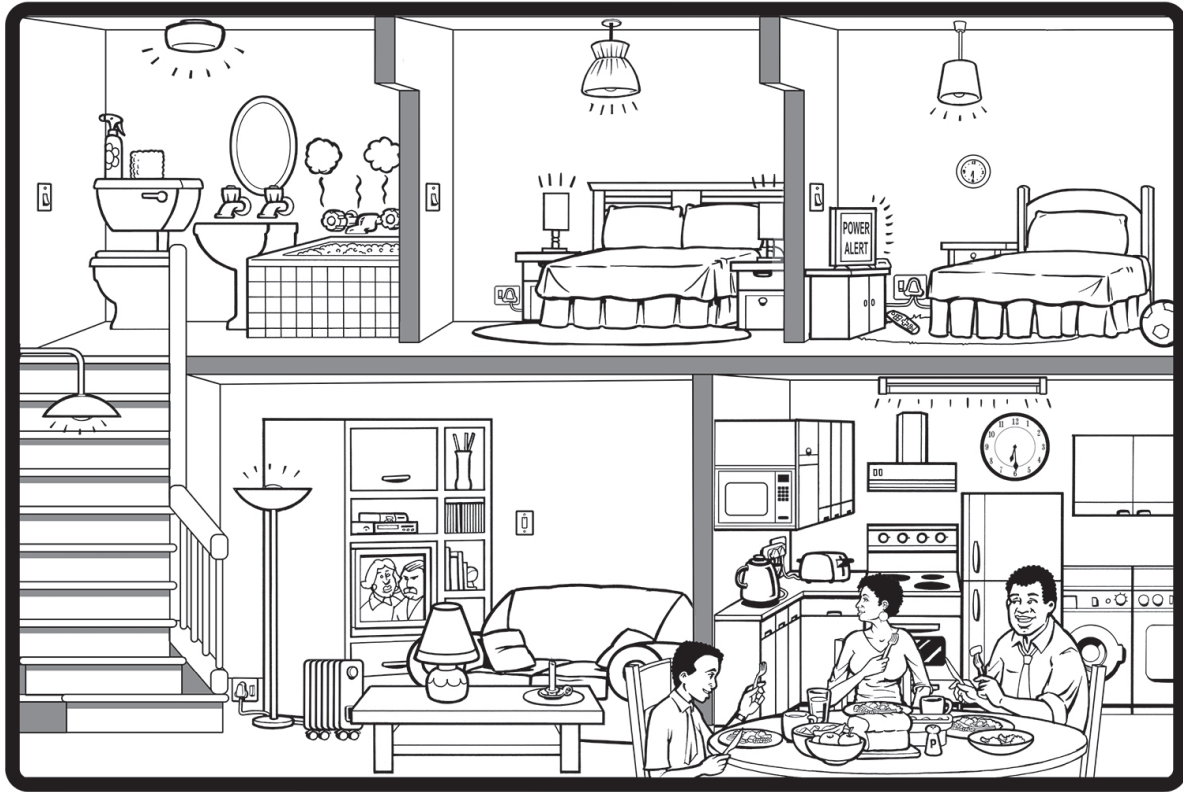
Activity 2: How is electricity generated at a power station?



1.5 Using your key words write a paragraph (about 100 words) on some of the environmental problems we face by using coal as a resource to get our electricity.

Activity 3: Story

Story : Good Habits by Dr. Rajen Pillay



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. Mum watched a programme on television while at the table. 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, eating is a sacred (Godly) activity. We should not eat and watch television at the same time. It is not a good habit. Enjoy the food and not the bad thoughts that are coming from the TV. Besides it is unkind to ignore each other at the table.”

Activity 3: Story

“Max”, said dad, “why did you put the television on upstairs?” I quickly replied, “But it was not me,” while trying to look innocent. Dad gave me that disappointed look but stayed calm. I felt ashamed of myself.

“Son,” 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. Nobody is watching television upstairs. 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 energy wisely is a good habit. I learned that telling the truth the first time is the right conduct and that it gives one inner peace. The **golden rule** for electricity use is: *“If you are not using it, switch it off.”*

Activity 3.1: Story



1. Answer the questions on the story: Good Habits (Dr. Rajen Pillay):

1.1 Who is telling the story? _____

1.2 Who are the people at the dinner table? _____

1.3 Why do you think Max was ashamed of himself? _____

1.4 What did mum do wrong? _____

1.5 What are things that Max did wrong? _____

1.6 Which of your responsibilities can you recognise in the story?

1.7 Why is it not a good practice to waste energy? _____

Activity 3.1: Story



1.8 What responsibilities did dad teach the family about energy?

1.9 List 3 other responsibilities that dad taught the family. _____

1.10 Was dad angry? _____

1.11 What makes you think so? _____

1.12 What did you like most about the story? _____

Activity 3.1: Story



2. Read the story on your own. Retell the story in about five sentences. Write down your sentences. Your sentences should (a) be in the correct tense (b) have the correct conjunctions and (c) have the correct pronouns.



3. In your book write a letter to your friend telling her/him about what you have learnt from the story. First plan your letter.

4. What do you think is the biggest mistake Max made? Explain your answer.

5. Max's father thinks that "Max is a good boy." What do you think?

Activity 3.1: Story



6. There is probably a bit of Max in all of us. Write down three values that you have learnt from the story.

Activity 3.2: Interview – Eskom TV

- This activity is a role-play about a talk show on Eskom TV.
- The show is called - Be energy-wise.
- You are going to work in pairs for this activity.
- One of you is to be the interviewer (the one who asks the questions) and the other learner is to be Max, the guest answering the questions. The interviewer should introduce the show.
- Write down the questions that you would like to ask Max.
- Your teacher will call both of you to the front of the class to conduct the interview.

Activity 4: Story writing

Write a story using the picture of the family - “Use energy wisely”.

- Keep the following checklist in mind when writing the story.
- Tick (✓) the checklist when you have completed writing the story.

Checklist for my story		Tick (✓)
1.	My story is related to the picture and energy use.	
2.	I have planned my story.	
3.	My story is not more than 220 words.	
4.	My story has a title.	
5.	My story has an introduction.	
6.	My story has a body.	
7.	My story has a conclusion.	
8.	I have written complete sentences.	
9.	I have written in paragraphs.	
10.	I have checked my spelling.	
11.	I have checked all punctuation marks.	
12.	I have read my story two times (twice) to check for and correct any mistakes.	