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**BIBLIOGRAPHY**
WATER IS LIFE
1. Where does water come from?

ACTIVITY
At the end of this activity you will be able to:
• Read and use a dictionary to check new and difficult words so as to understand written texts. Identify sources of water.

You will need:
• Worksheet
• Workbook
• Pencil
• Dictionary

ACTIVITY 1A:
• What do you use water for at home?
• Where does water come from?
• Is that all where we can get water from?
• Read the following fact sheet
FACT SHEET: When it rains

When it rains, the raindrops fall and get soaked into the ground. Some of the rain water makes puddles or ponds on side walks or on the ground. But if it rains heavily and the soil can hold no more, the water runs down the mountains, around the rocks, roots of trees and finally comes together to form small streams. Several streams join together to form a river. When the ground flattens the river either keeps on running past villages, towns, cities until it reaches the ocean or it slows down and sometimes forms lakes. Some of the water soaks into the ground to become groundwater which comes out at different places as springs.

People have different ways of collecting rain water. Some people put up gutters on their roofs so as to collect this water into big tanks. Some fetch their water directly from the river with their buckets and pots. Some people direct the water from the river to the dams or reservoirs where it is cleaned and stored for our taps. Some people dig into the soil and pump the groundwater to the wells from where people can fetch their water.

Your Educator will teach you how to use the dictionary.

**ACTIVITY 1B**
Look for the meaning of the following words.

<table>
<thead>
<tr>
<th>WORD</th>
<th>MEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. pond</td>
<td></td>
</tr>
<tr>
<td>2. stream</td>
<td></td>
</tr>
<tr>
<td>3. ocean</td>
<td></td>
</tr>
<tr>
<td>4. lake</td>
<td></td>
</tr>
<tr>
<td>5. spring</td>
<td></td>
</tr>
<tr>
<td>6. river</td>
<td></td>
</tr>
<tr>
<td>7. reservoir</td>
<td></td>
</tr>
<tr>
<td>8. tap</td>
<td></td>
</tr>
<tr>
<td>9. well</td>
<td></td>
</tr>
</tbody>
</table>

**ASSESSMENT**
You will be assessed on your ability to:

- Read and use a dictionary to check the words.
2. Sources of water

ACTIVITY:
At the end of this activity you will be able to:
• Label the picture to demonstrate your understanding of a water cycle.
• Dramatise the water cycle.

Did you know?
Water from rain goes back to the cloud.

ACTIVITY 2A: THE WATER CYCLE

1. Your teacher will narrate the story to you.
2. Listen carefully to the story.
3. Select the following words and write them in the blocks provided.
   Sun, cloud, rivers, raindrops, streams, ocean, vapour

(b) Write down the words the teacher narrates, on the following blocks.
ACTIVITY 2B

NAME: ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

DATE: ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Label the picture below as follows:
- Write the following names in their right places (sun, clouds, sea, stream, rivers)
- Colour in your picture.

• Write short sentences to describe the steps of the water cycle again.

ASSESSMENT:

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I was able to complete the steps in the water cycle.</td>
<td></td>
</tr>
<tr>
<td>2. Label the picture of the water cycle.</td>
<td></td>
</tr>
<tr>
<td>3. I can now describe the water cycle.</td>
<td></td>
</tr>
</tbody>
</table>
Water is life

3. Uses of water

ACTIVITY OUTCOME:
At the end of this activity you will be able to:
• Exploit pictures and relate them to your own experiences.
Can plants, animals and people live without water?

ACTIVITY 3A:
Look carefully at the picture below and answer the following questions:
• Mention things that use water.
• Complete the table on the water uses by mentioning under plants, animals and people, how water is used.
USES OF WATER POSTER

<table>
<thead>
<tr>
<th>PEOPLE</th>
<th>ANIMALS</th>
<th>PLANTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**ACTIVITY 3B:** How much water do we use?

1. Work with your partner for this activity.
2. Use the uses of water worksheet.
3. Put a tick next to the use of water at home and at school for two (2) days.
4. You must put as many ticks as you use water.
5. Add your own uses that are not listed in the worksheet.
6. Count the number of ticks in each use and add the total.

**USES OF WATER WORKSHEET**

<table>
<thead>
<tr>
<th>NAME:</th>
<th>&gt;Date:</th>
</tr>
</thead>
</table>

Put a tick (√) next to the uses of water.

<table>
<thead>
<tr>
<th>USES OF WATER</th>
<th>HOME</th>
<th>TOTAL</th>
<th>SCHOOL</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flushing toilet</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watering the garden</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Making ice cubes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Washing dishes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Washing hands</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drinking</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steam iron</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pools / dams</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Washing clothes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Washing bodies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Washing cars</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooking</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brushing teeth</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Extended Activity

Read the following uses of water.

USES OF WATER

- We use water to prepare food, coffee, tea etc.
- To drink, 7/8 glasses per day.
- Washing (clothes, body etc)
- Plants
- Household use: washing of dishes, floors, windows etc.

ACTIVITY 3C:

- Draw a picture of yourself using water e.g. (washing yourself) and write 1 or 2 sentences about yourself.
- Complete the following sentences by filling in the missing word.

Washes, drink, tea

(a) I ____________ a glass of water.

(b) Mother makes __________________ with water.

(c) The girl __________________ herself.

ASSESSMENT

AT HOME
1. List the things that use water regularly.
2. List those that use water sparingly/ sometimes.
3. List the things that can live without water.

AT SCHOOL
4. List the things that use water regularly.
5. List those that use water sparingly/ sometimes.
6. List the things that can live without water.
WATER USE EFFICIENCY
4. Get water wise

ACTIVITY:

In this activity you will be able to:

• Identify the good and bad practices that save and waste water, respectively.
• Discuss the ways of saving water.

BACKGROUND INFORMATION

Water use efficiency

Water is a scarce resource, yet so many people continue to use and waste it as if there were an endless supply. If you waste something, you use it too much, or use it for no purpose. South Africa is classified as a semi-dry country and many people do not have enough water. It also costs a great deal of money to manage our dams and water transfer systems so that people receive enough water. We must all learn **not to waste water**.

**ACTIVITY 4A:**

Answer the following questions.

1. Have you ever noticed any leaking taps at home?
2. What do you do at home when you see a leaking tap?

3. Why is it necessary to do that?

---

Did you know?
If you have a 12 litre toilet cistern, you can save water by placing a filled 2 litre plastic bottle in the cistern.
Use this list to do a quick check of local patterns of water use at school, in and around your home and your local community.

- Put a tick (√) at a good practice and a cross (X) at a bad practice, noting ideas to save water.
Drinking from a bucket with unwashed hands

Using a ladle and cup

Animals drinking at a water point

Fenced spring with water troughs for animals

Bathing and washing clothes in a river or spring

Bucket washing with a drain pit

A running tap for teeth or drinking

Cup for brushing teeth or drinking

Open gutters

Rainwater tanks

Total Bad

Total Good
Read the following water saving tips.

- Use water in such a way that it is not wasted.
- Do not water your garden unnecessarily.
- Make sure that all taps are tightly closed.
- Wash your cars with water in a bucket.
5. Do not waste water

ACTIVITY 5A: USE WATER WISELY

In groups compare the pictures below:

PICTURE A

PICTURE B

• Answer the questions.

1. Which family is using water carefully?

2. What has this family done to save water?
3. Find 10 differences between the two families.

(a)-------------------------------------------------------------

(b)-------------------------------------------------------------

(c)-------------------------------------------------------------

(d)-------------------------------------------------------------

(e)-------------------------------------------------------------

(f)-------------------------------------------------------------

(g)-------------------------------------------------------------

(h)-------------------------------------------------------------

(i)-------------------------------------------------------------

(j)-------------------------------------------------------------
WATER QUALITY
Water Quality

6. Safe and unsafe water

ACTIVITY:
At the end of this activity you will be able to:
• Identify pollutants in your sources of water.

ACTIVITY 6A:
• Work as individuals for this activity.
• Study the poster and work on the following questions.
CHOLERA POSTER WORKSHEET

NAME:-----------------------------------------------------------------------------------------

DATE:------------------------------------------------------------------------------------------

You must use your workbook for this activity.
1. How many people are in the picture?
2. What are they doing?
3. Circle the activity which can be dangerous to their lives.
4. In pairs discuss what this water can be used for.
5. Tick yes or no in the column of water use

<table>
<thead>
<tr>
<th>We can use this water to/for</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Drinking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Washing own bodies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Washing dishes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Watering gardens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Washing cars</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Cooking</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ACTIVITY 6B:

Purification of Water

Methods of Purification

How to clean dirty water

• What will we do?

You will need:

• Unclean water, bleach, purification tablets, filter paper / material (cheesecloth etc.) salt water.

Discuss the following:

• Where do we get water from?
• Is all water pure to drink?

Let's look at different ways / methods of purifying water.

• Boil water.
• Add 1 tablespoon of Bleach to 20L of water.
• Using filter paper.
• Purification tablets (available from pharmacies)
• Use material to filter the water (all dirt will remain)

• Fill in the missing words.

Bleach, sand, water, boil

1. To clean water you can ___________________ the water.

2. Add one teaspoon of ___________________ to 20L of water.
ACTIVITY:
At the end of this activity you will be able to:
Demonstrate ways to clean water.

Read the paragraph in the box and do the activity later.

Loyiso’s mother fetched the dirty water from the river. She prepared food for Loyiso’s little brother. The water had germs, which caused diseases. Now Loyiso’s little brother is sick.

1. Why is Loyiso’s brother sick?
2. Can the water with germs be made clean?

Let us look at the ways we can purify water.
3. Study the two (2) methods used by Loyiso to clean dirty water.

Did you know? Water with germs can be cleaned, and be made ready to use.
METHOD 1: Boiling the water

METHOD 2: Using Bleach

ASSESSMENT

1. What amount of Bleach do you put in 20 Litres of water

2. What does Bleach do to the germs in dirty water?

3. How long do you wait before we drink water with Bleach?
SANITATION, HEALTH AND HYGIENE
Sanitation, health and Hygiene

7. Use and care of sanitation facilities

ACTIVITY:
At the end of this activity you will be able to:
• Take care of your toilets.
• Make a glucose solution.

ACTIVITY 7A:
Answer the following questions.

1. Tick the kind of toilet that you have at home and at school.

1. [ ]
2. [ ]
3. [ ]
4. [ ]
5. [ ]
6. [ ]
How do you take care of the toilets?

• Complete the sentences by using the following words.

Food, wash, soap, toilet, touching, water

1. ________ your hands when you come from the ________________.

2. Make sure that you ________ your hands before ________ any ________.

3. Use _____________ and clean ________________ to wash your hands.

3. Why do we clean toilets on a daily basis?

4. Why do we need water for toilets?
ACTIVITY 7B:

Recite the poem

Rhyme –

“I can stop Cholera”
How, Use a toilet,
Wash your hands,
Use clean water,
Wash all food.
So can you?
Yes, I can.
I can stop Cholera.

BACKGROUND INFORMATION
• Loyiso’s brother had diarrhoea; he used the solution to cure the disease.
• You must make your own glucose solution.

1/2 of SAFE WATER
8 teaspoons of SUGAR
Half a teaspoon of SALT
Mix well

Grade 2 Learner Workbook
32
How – 1. Boil 1 litre of water
   2. Let it cool
   3. Add 8 teaspoons of white sugar and ½ spoon of salt.

LETS CURE DIARRHOEA

Look at Loyiso’s brother’s table below and answer the following questions in your workbook:

- How many days did it take Loyiso’s brother to get better?
- How many cups of solution must he drink a day when he is still sick?
- Complete the table by drawing the number of cups to be taken on Friday.

<table>
<thead>
<tr>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
</tr>
</thead>
<tbody>
<tr>
<td>🍼</td>
<td>🍼</td>
<td>🍼</td>
<td>🍼</td>
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</tr>
</tbody>
</table>

ACTIVITY 7C:

ENRICHMENT ACTIVITY – LOYISO’S MOTHER SPREADS THE WORD!

Read how Loyiso’s mother spreads the word:

**FACT SHEET**

Loyiso’s mom took the child to the clinic and she found out that at least 8 babies get sick with diarrhoea every week. The clinic gives them one injection per week.

She was shocked at such a high rate of baby sickness. She decided to teach the other mothers in her community the lessons she learnt from her son. She was going to do two things. Firstly, she decided that she was going to make the water used by her community safe. She bought a bottle of bleach and put up a sign on her gates for all the people who come from the river to see. People coming from the river stopped at her gates and asked her to make their water safe.

Secondly she decided to go to the clinic and offered to prepare a solution for people suffering with diarrhea. This worked very well.
- Why did Loyiso’s mother take the child to the clinic?
- How does a clinic cure children with diarrhoea?
- How much does it cost to cure diarrhoea at the clinic?
- If 8 babies go to the clinic for diarrhoea per day, calculate:
  - How many babies visit the clinic in day 3 and day 5?

Use the following worksheet:

<table>
<thead>
<tr>
<th></th>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of babies</td>
<td>8 babies per day</td>
<td>16 babies</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Find out at school or in your community if there are any learners that suffer from diarrhoea.
- Learn how you can help them to cure it.
Water Safety

8. Safe ways of swimming

OUTCOMES FOR THIS ACTIVITY

At the end of this activity you will be able to:

- Find words from the word search.
- Make meaning of letters and words

Rural splash

- Never swim alone
- Do not stand on an overhanging bank as it can collapse and you will fall in
- If caught in a fast current, float feet first to protect head and body from injury
- Before entering the water check the presence or strength of a current - throw something that floats into the water to test the current
ACTIVITY 8A:

Fill in the missing words

Read the River Safety tips and use the words in the word bank to complete the sentences below.

Fast, break, water, feet, rocks, alone, fall, body, dive, depth

• Never swim ____________________________.
• Do not stand on an overhanging bank as it can ____________________ and you will ____________ in.
• Before entering the ____________________ check the current. Throw something that floats into the water to see how ___________________ the water is moving.
• If caught in fast current, float ________________ first to protect your head and ______ ________________.
• Be careful of underwater obstacles such as ________________ or branches of trees.
• Never ____________________ into the water – always walk in.
• Check the ________________ with a long stick as you walk in.

ACTIVITY 8B:

Read through the following sentences and together with your educator, decide whether each one is a correct or incorrect behaviour or actions. Make a tick in the DO and DO NOT column.
WATER SAFETY

Look at the Rural Splash poster and then do this exercise. Read the statements below and match them to the DO and DO NOT column.

<table>
<thead>
<tr>
<th>ACTION</th>
<th>DO</th>
<th>DO NOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Swim only if there is a lifeguard or if a grown-up gives you</td>
<td></td>
<td></td>
</tr>
<tr>
<td>permission to swim.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Stand up in a boat.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Take swimming lessons.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Follow water safety rules.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Swim with an adult.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Swim if you are tired.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Wade into the water feet first if you’re swimming in a lake,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dam or river.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Wear a life jacket when you are in a boat.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Get out of water right away if you hear thunder or see lightning.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Eat sweets or chew gum when you are swimming.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Dive off rocks into a river, lake, or dam.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Run along the bank of a river.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
RURAL SPLASH
Read the following safety tips.

SAFETY TIPS

• Never swim alone.
• Do not stand on an overhanging bank as it can collapse and you will fall in.
• Before entering the water check the presence or strength of a current – throw something that floats into the water to test the current.
• If caught in a fast current, float feet first to protect your head and body from injury.
• Be aware of underwater obstacles such as rocks or branches of trees.
• Never dive into the water – always walk in and check the depth with a pole as you move, looking out for any dangerous hazards on the river bottom.
• Beware of animals underwater, such as crocodiles, and hippos.
• Enter cold water slowly and remain in for short periods of time to avoid hypothermia.
FORESTRY
AND IAP’S
ACTIVITY:
You will be able to:

• Identify the parts of the tree.
• List functions of the tree
ACIVITY 9A:

• Colour and label the parts of the tree.
ACTIVITY 9B:

• Listen carefully as your teacher reads out the functions of the tree.
• Answer the following questions.

1. Which part of the tree holds the tree in its position? ........................................

2. Which part of the tree absorbs water? .................................................................

3. Which part of the tree makes food for the tree? ..................................................

4. Which part of the tree transports water from roots to leaves? .........................

5. What is the firewood used for? ...........................................................................

6. Mention any three functions of a tree? .............................................................

7. Write a sentence using the following words
   (Water, sun, trees, plants, fruit)

ASSESSMENT

You may use the following assessment sheet

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I was able to mention the functions of a tree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I was able to formulate a sentence using the given words</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I was able to give the functions of the parts of a tree</td>
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BIBLIOGRAPHY

Department of Education. Pretoria (2002). Revised National curriculum statement (Grades R – 9), Arts and Culture.


Department of Water Affairs and Forestry, Trees and Forests, Republic of South Africa.


Swimming South Africa