

My home: a healthy river!

Activity Book for the Eastern Cape Grade 1-3 Foundation Phase Learners



Teacher's facilitation guide

Dear Educator

The authors of this book hope that you will find it useful in your classroom and that your learners will enjoy learning about water and rivers.

Learning Outcomes in the Foundation Phase

This book can be successfully used across all Foundation Phase grades, however, each teacher must adapt it and facilitate it so as to suit the needs of their learners. The book can be used to meet the following learning outcomes:

Languages: LO 3 Reading and Viewing LO 4 Writing LO 5 Thinking and Reasoning.

Mathematics: LO 2 Patterns, Functions and Algebra.

Natural Science: LO 3 Science, Society and the Environment.

Social Science: Geography LO 3 Exploring Issues.

Life Orientation: LO 1 Health Promotion.

A guide to each activity

It is anticipated that the level of teacher assistance will vary depending on the age and capacity of the learners, as well as the task. You, the educator, are the best person to judge the degree of facilitation necessary.

Page 1: Learners should be able to add two of their own pictures such as: washing clothes, watering plants, washing the floor, washing dishes, cooking etc. Point out to learners that the girl washing her hands under the tap is not water wise. She is washing her hands (which is good) but not using soap and she is wasting water. Tell them to wash their hands with soap and to use as little water as possible (be water wise). This can be done by closing the tap while lathering their hands with soap and thereafter opening the tap again to rinse off their hands.

Page 2: The boy with the wheelbarrow gets his water from the stand alone tap. The lady with the kettle gets her water from the kitchen tap and the girl collects water from the river. Point out to learners that if water is fetched from the river it should always be made safe first by adding 5ml bleach to 20-25 litres of water, mixing it well and letting it stand for at least 2 hours, preferably overnight. Alternatively, they can boil the water until it bubbles for 1 minute.

Page 3: Learners should see that the river water is diverted to the water purification plant, the reservoir and houses via pipelines.

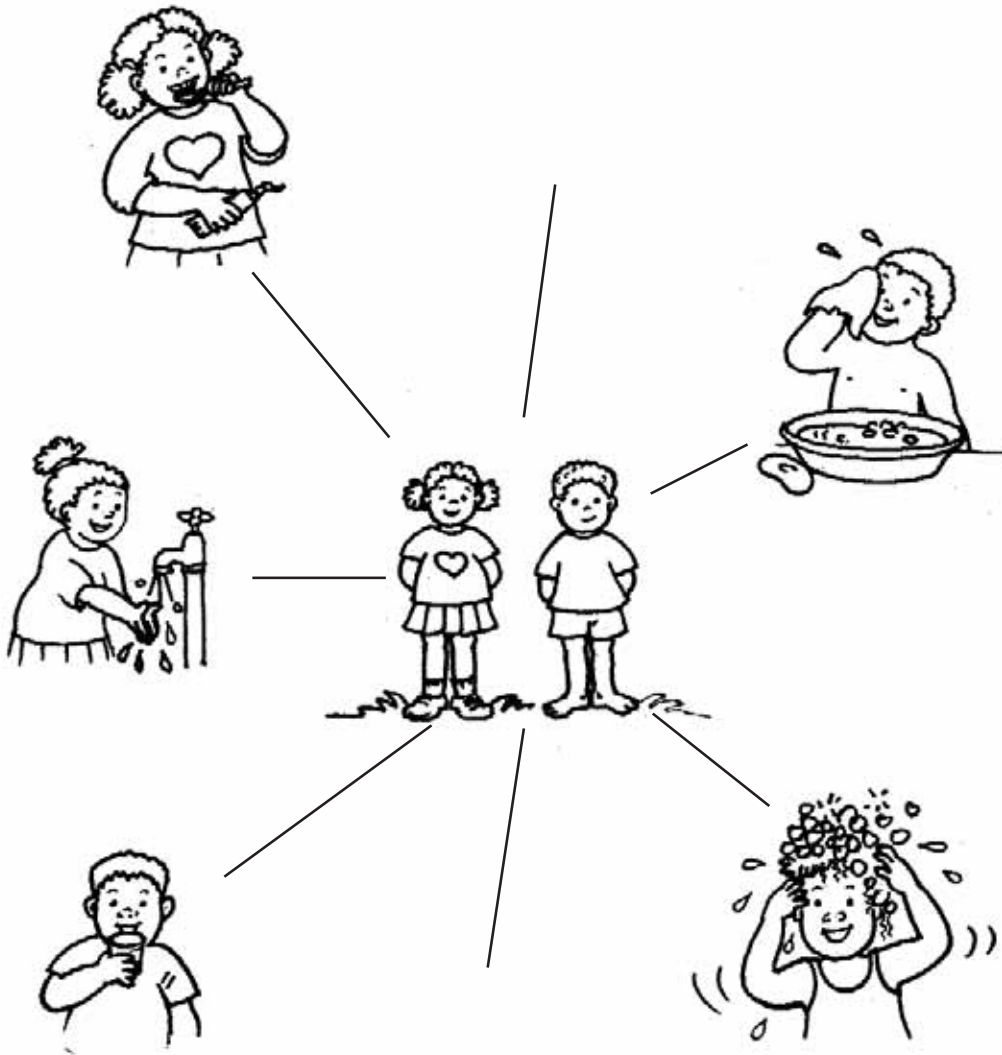
Page 4: Learners should be able to note at least some key words (or sentences) for using water such as: gardening; watering animals, washing dishes, washing clothes, cooking, building houses, washing the floor and drinking water. Point out to learners that the boy drinking water from the tap is wasting water. He should rather use a cup.

Page 5: Make sure that learners recognise how we use water for fun e.g. fishing, boating, swimming, games. However, warn learners that rivers can also be dangerous, they can come down in flood and they can contain bacteria that can make them ill.

Page 6-16 continued at the back

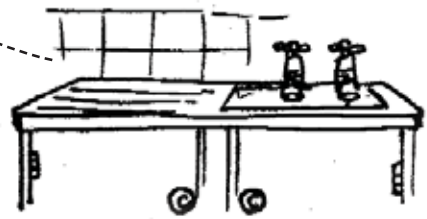
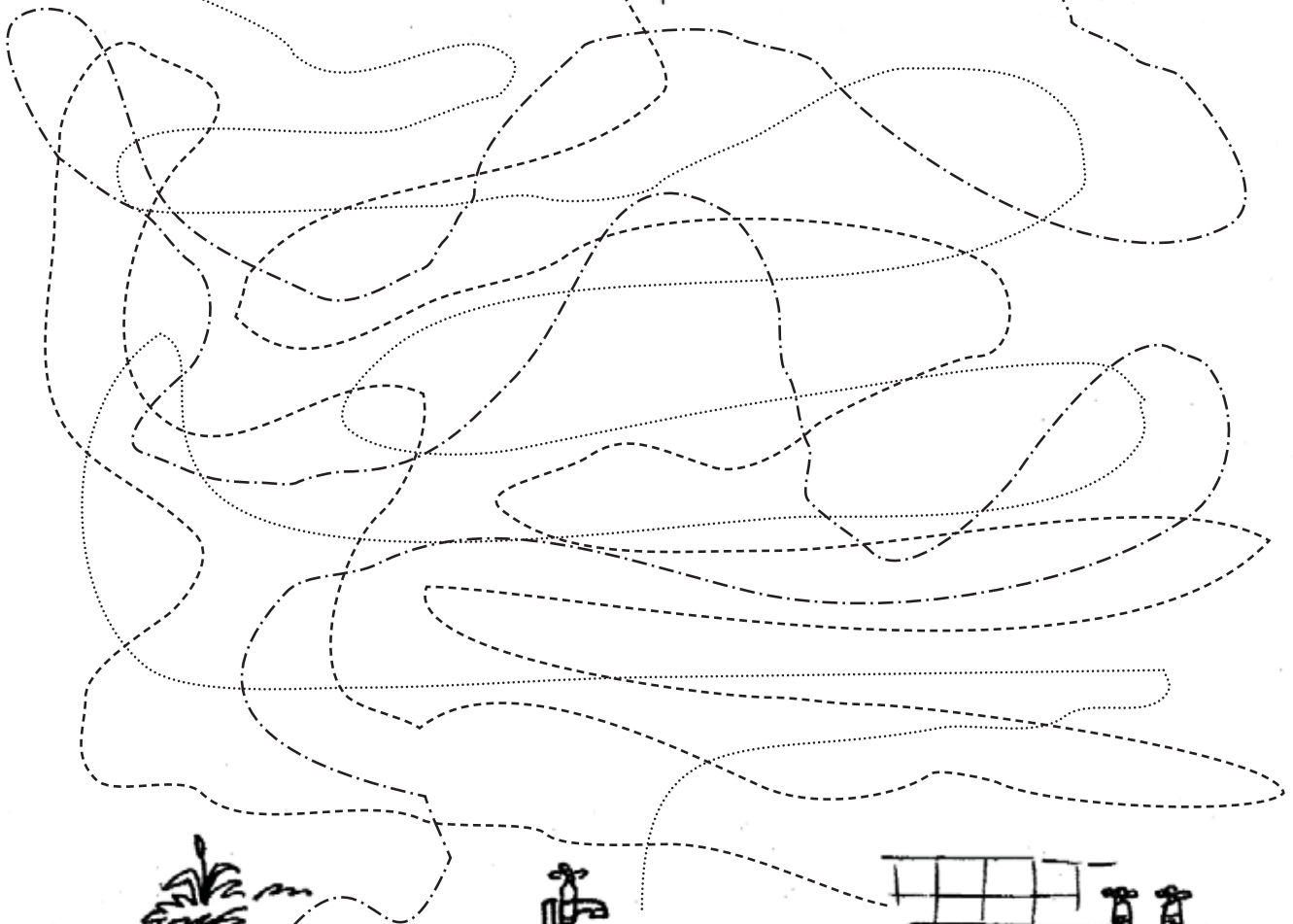
How do I use water?

Draw pictures in the open spaces

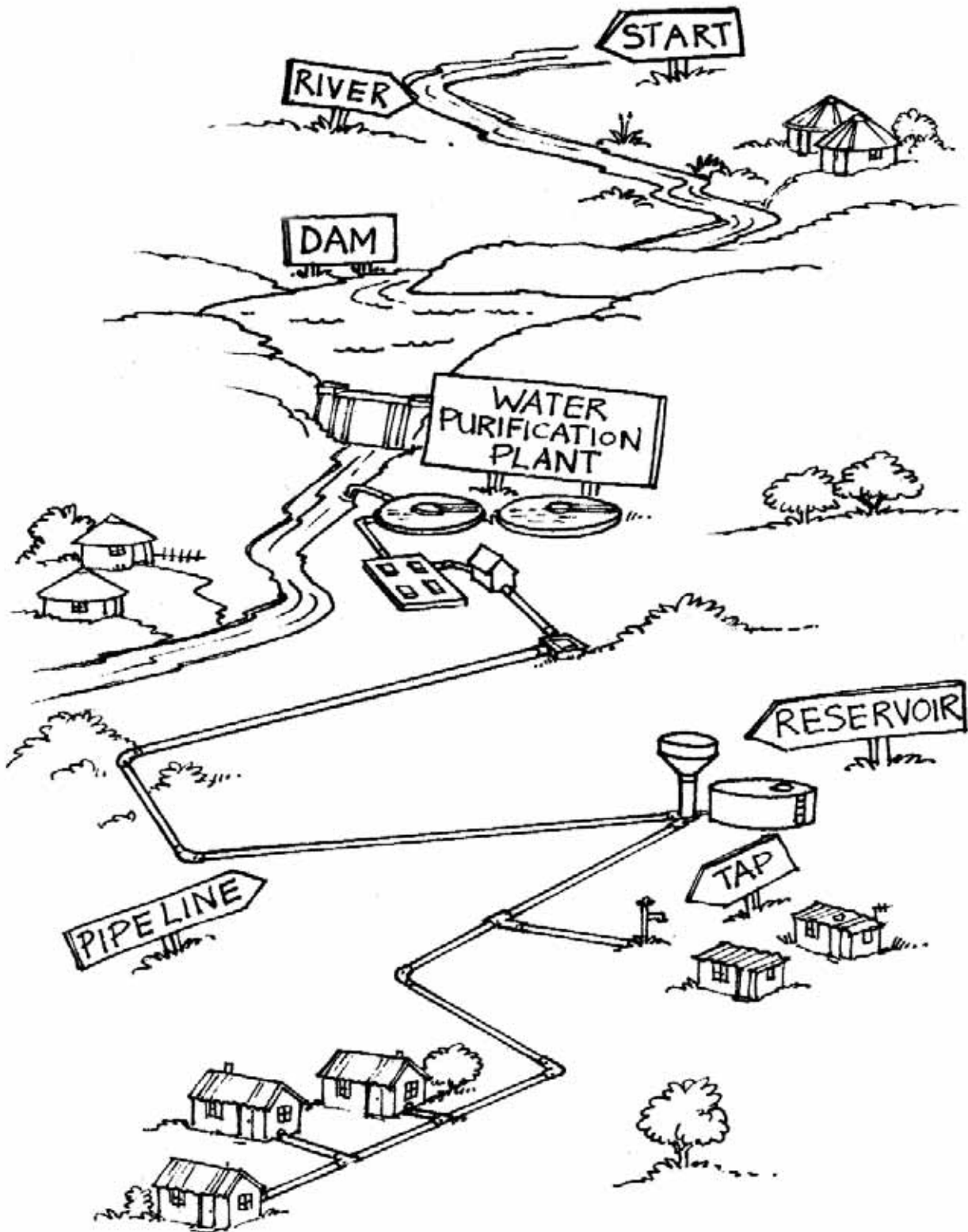


How do we get water?

Follow the lines



Follow the route of the river with your finger



How do we use water?

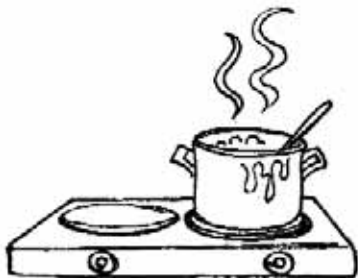
Write your own sentence:











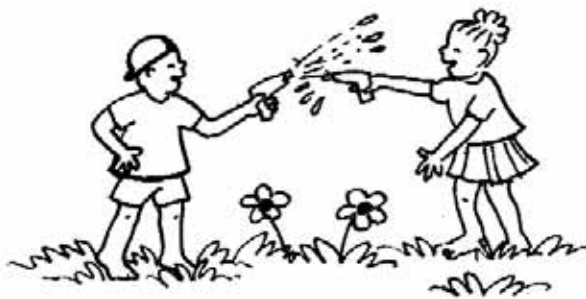






Let us play with water!

Spot the difference:

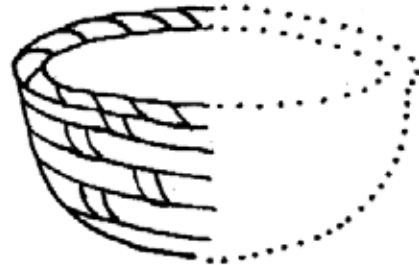


The river meeting our needs

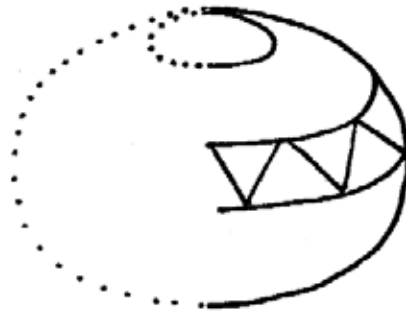
Complete the mirror image:



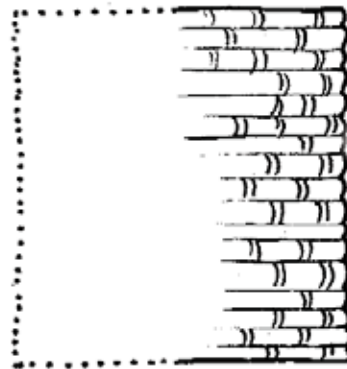
Reeds



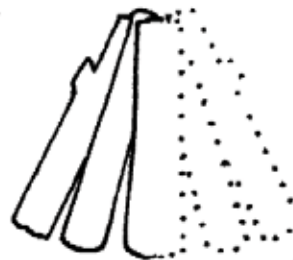
Clay



Reeds



Alien Tree



The spiritual uses of the river

Who are these?

Fill in the Xhosa word

Fill in the English word



Who are these?

Fill in the Xhosa word

Fill in the English word



Talk to a friend:

What are abakhwetha using the river for?



A healthy river is a happy river

Bio-monitoring



Wetlands



Perhaps
you want to become a
scientist...?



What can we use a healthy river for?

We can use the river for activities such as **fishing, sailing, boating, swimming, picnics.**

Draw a picture of yourself doing one of these activities:

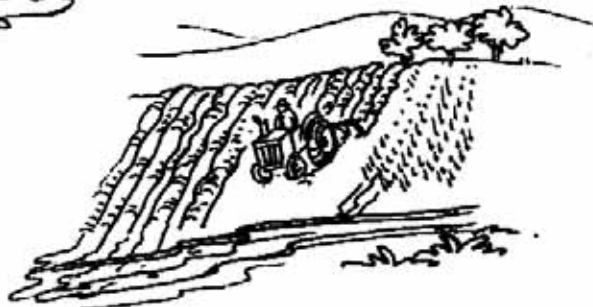
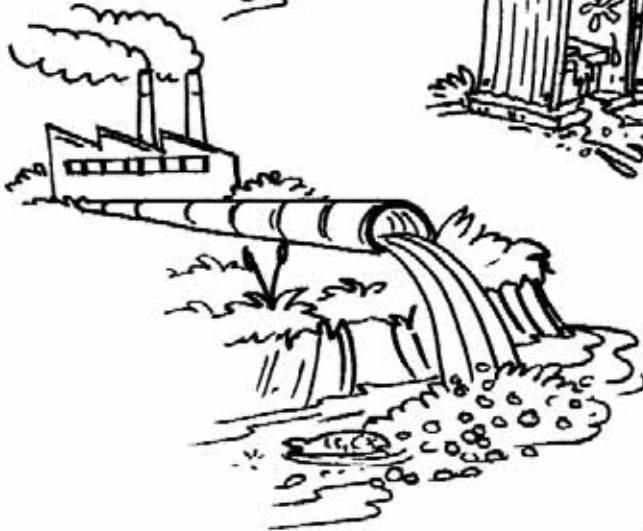
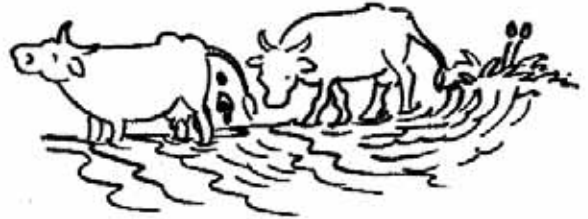
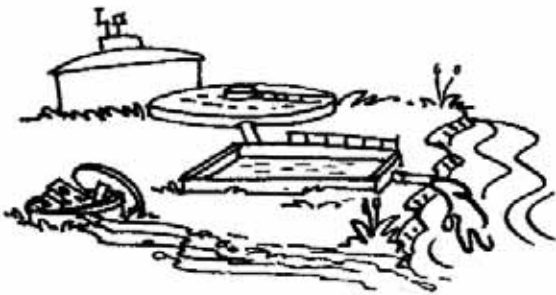
This river is sad

Put a "X" next to the things that make the river sad.



Why is the river sad?

Name what is making the river sad:



Wasting water

Who is wasting water? Mark the pictures:



What can we do to make the river happy?

Which one is you?

I do not care



I Care



I do nothing



I take action



Leave litter on the ground

Clean up
the litter



Unhealthy river



Healthy river

I am an ill or sad person



I am a
happy/healthy
person



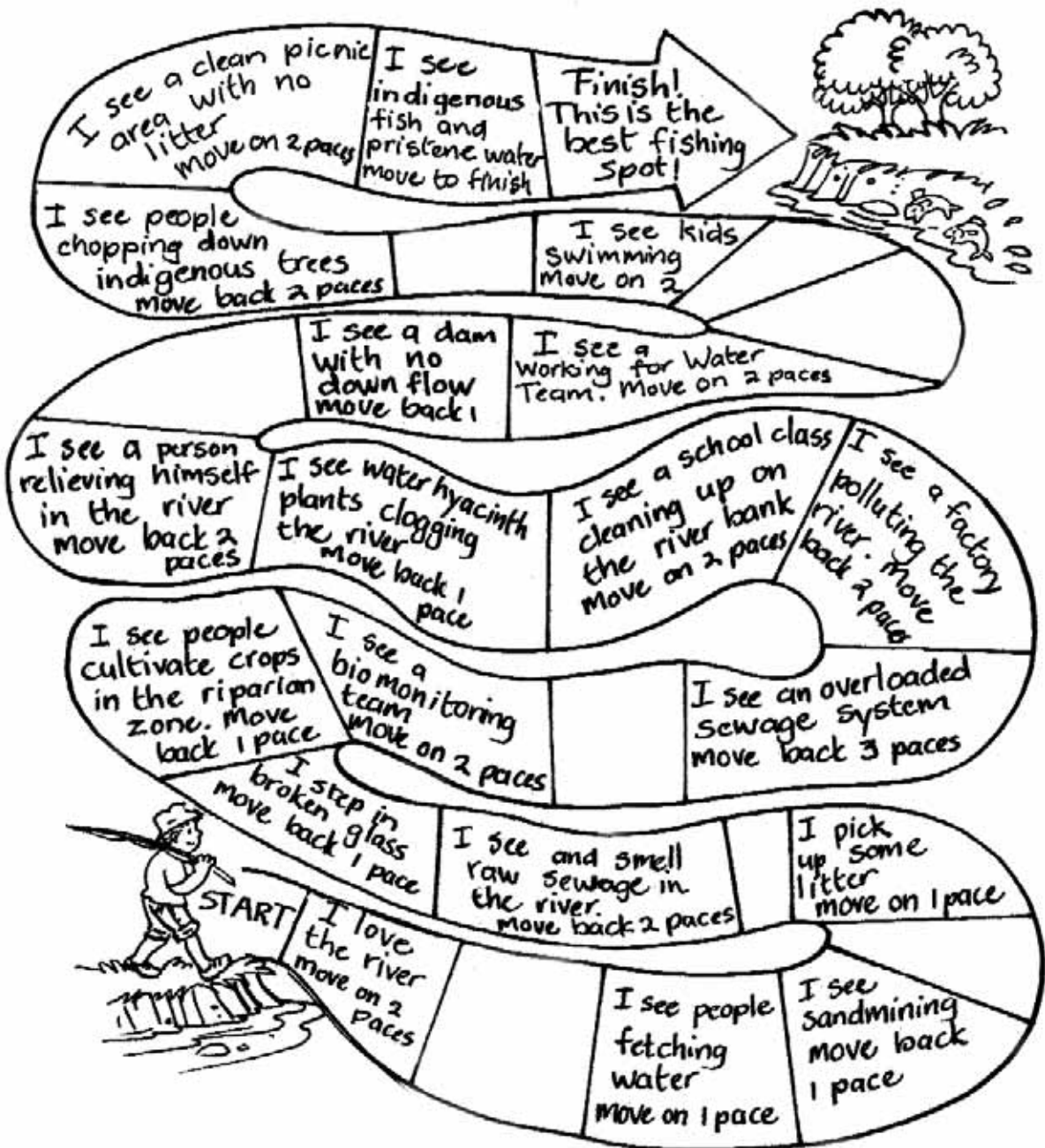
Extension activity:
Snakes and ladders game

Use a dice and markers

| | | | | | | |
|----------------------------------|--------------------------------------|------------------------|---------------------------------|------------------------------------|--------------------------------------|------------------------------|
| 80 FINISH | 79 TOXIC DUMPS | 78 | 77 Pesticide spraying | 76 CLEAN RIVER | 75 | 74 WATER HYACINTH |
| 65 | 66 | 67 | 68 POLLUTE RIVERS! | 69 | 70 | 71 |
| 64 | 63 POLLUTE RIVER! | 62 POISON RIVER | 61 UPGRADE SEWAGE SYSTEM | 60 | 59 Healthy COMMUNITY | 58 DEplete OXYGEN |
| 57 chop down indigenous trees | 56 | 55 | 54 Help our Rivers | 53 | 52 | 51 |
| 49 | 48 | 47 | 46 Conserve indigenous trees | 45 CARE FOR OUR RIVERS | 44 Join a Working for Water Group | 43 CAUSE EROSION |
| 42 | 41 | 40 | 39 | 38 | 37 WASTE WATER | 36 |
| 35 | 34 | 33 Fish die! | 32 | 31 use alien plants as firewood | 30 | 29 a clean catchment area |
| 28 | 27 | 26 attract Birdlife | 25 | 24 | 23 | 22 |
| 21 Alien fish! | 20 | 19 | 18 DRY environment | 17 | 16 | 15 |
| 14 | 13 conserve indigenous flora | 12 | 11 | 10 | 9 protect Wetlands! | 8 |
| 7 | 6 loss of indigenous fish species | 5 | 4 Remove alien plants | 3 | 2 you do not litter | 1 START |

Extension activity:
River bank game

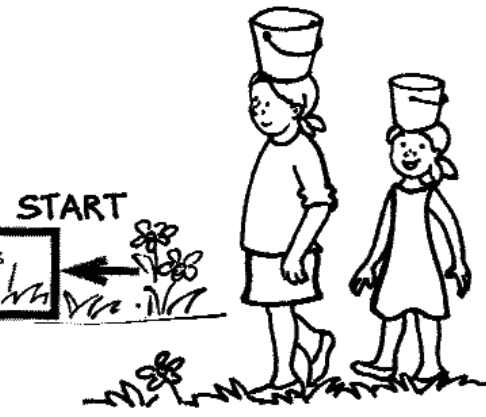
I, am walking along the river bank.
 Help me find the best fishing spot.


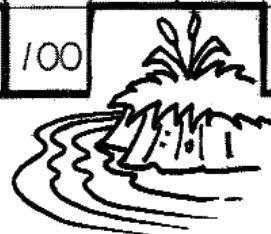


Revision activity:

Fetching water game

Help the girls to get to the river. Follow the numbers 1-100. Don't take the wrong path!



| | | | | | | | | | | | | | |
|----|----|----|----|-----|---|----|--|----|----|----|----|----|--|
| 12 | 11 | 10 | 9 | 4 | | 2 |  | | | | | | |
| 13 | | | 8 | | | 3 | | | | | | | |
| 14 | 15 | 16 | 7 | 6 | 5 | 4 | | | | | | | |
| 16 | | 17 | | 9 | | 6 | | | | | | | |
| 20 | 19 | 18 | 19 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 38 | |
| 21 | | | 27 | | | | | | | | 36 | 37 | |
| 22 | 23 | 24 | 25 | 26 | 29 | 30 | 47 | 46 | 45 | 41 | 40 | 38 | |
| | 26 | 27 | | 28 | | | 48 | | 44 | | | 39 | |
| 56 | 55 | 54 | 53 | 52 | 51 | 50 | 49 | 44 | 43 | 42 | 41 | 40 | |
| 57 | | | | | | | 48 | | | 40 | | 41 | |
| 58 | 59 | 62 | 63 | 64 | 65 | 66 | 69 | 70 | 85 | 86 | 47 | 46 | |
| | 60 | 61 | | | 60 | 67 | | | 84 | 87 | 88 | | |
| 75 | 73 | 72 | 71 | 70 | 69 | 68 | 69 | 82 | 83 | 85 | 89 | 90 | |
| 76 | | 73 | | | | 79 | 80 | 81 | | | | 91 | |
| 77 | | 74 | 75 | 76 | 77 | 78 | 76 | 98 | 97 | 96 | | 92 | |
| 78 | 79 | 80 | | 100 |  | | 100 | 99 | | 95 | 94 | 93 | |

Teachers facilitation guide (continued)

Page 6: Learners should see that rivers give us important things such as reeds to make baskets and mats, clay to make pots and wood for fire. It is best to use wood from alien invasive plants instead of indigenous trees and bushes. (Alien plants are plants that are introduced into a country or region that is not part of their natural range, while indigenous plants occur naturally in an area.)

Page 7: Discuss with learners that the river is also used for religious ceremonies such as baptisms and for traditional cultural practices such as circumcision schools.

Page 8: Rivers need to be checked to see if they are healthy. This can be done by scientists who collect fish and aquatic insects and write reports on the health of the river to make sure that wetlands are not destroyed (Wetlands are land areas that are wet for at least for part of the year and contains plants like reeds that are adapted to grow in such wet areas. Wetlands have a special function and are therefore important to us)

Page 9: Learners should be able to use work covered in this book, as well as, their own experiences to draw the required picture.

Page 10: People do many things that are harmful to rivers. This includes: (1) poor farming which causes soil to end up in the river, (2) the dumping of dirty water into rivers, (3) leaking toilets, (4) washing clothes in rivers, (5) defecating in rivers, (6) dumping rubbish in rivers, (7) allowing alien vegetation to grow, (8) allowing animals to drink directly from the river. All of these activities pollute the river water, cause insects and fish to die and people who drink this dirty river water can get sick.

Page 11: The river is sad (unhealthy) from the (1) poorly maintained sewer systems, (2) people using the river as a toilet, (3) people planting crops right on the river banks, (4) cutting down indigenous vegetation (5) washing clothes in the river, (6) animals drinking straight from the river (7) damaged or non-functioning toilets (8) blocked sewers (9) ploughing across the contours (down slope).

Page 12: Water is wasted when we (1) play with water, (2) leave taps running, (3) leave taps dripping, (4) play with the hosepipe. Point out to the learners that all leaks should be fixed.

Page 13: Discuss with the learners if they should leave the river unhappy or do something to make the river happy. Let the learners identify themselves in the picture. Encourage the learners to care about the river in order to take corrective action.

Page 14 & 15: These are extension activities that can be used when you feel necessary.

Page 16: This is a nice revision activity for mathematics.

To Conclude: Point out to the learners to remember that germs can make us sick. They should always wash their hands with soap and water or ash after they have been to the toilet, after changing a baby's nappy, before touching food and before eating.



DEPARTMENT: WATER AFFAIRS AND FORESTRY



DEPT: ENVIRONMENTAL AFFAIRS AND TOURISM



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