

**Lesson Plan**

**WEATHER**

**Standard:** V

**Lesson:** Science 5

**Topic:** Moisture

**Objective:** Students will identify the importance of different types of moisture on the environment.

**References:** p. 48 MacMillan, p. 65-67 Mture

**Methods:** Drawing

**Time:** :40

**Materials:** picture of moisture (4), cards/paper, pencils

<b>Time:</b>	<b>Activity:</b>	<b>Methods/Reminders:</b>
:03	1. Warm Up	<ul style="list-style-type: none"> <li>• Sageni Sageni Sapopo</li> </ul>
:15	2. Brainstorm	<ul style="list-style-type: none"> <li>• Gather ideas from students about what is moisture.—Mist, Fog, Rain, Dew.</li> <li>• (rain is not the only form of moisture in our environment)</li> <li>• Why is it important?</li> </ul>
:20	3. Groups	<ol style="list-style-type: none"> <li>1. Mist</li> <li>2. Dew</li> <li>3. Fog</li> <li>4. Rain</li> </ol>
:02	4. Pictures	<ul style="list-style-type: none"> <li>• Each group collaborates to draw pictures of their moisture using the pictures given as guides</li> <li>• EVERY picture must ...               <ul style="list-style-type: none"> <li>○ be linked to habitat.</li> <li>○ Have a short message written at the bottom that links it to habitat...ex, if it is a picture of dew on a flower with an insect...they could write, 'dew provided this insect drinking water to survive.'</li> </ul> </li> <li>• Make a collage of their pictures and put on the notice board.</li> </ul> <div data-bbox="911 1527 1326 1816" style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p style="text-align: center;"><b>Moisture</b></p> <p style="text-align: center;"><b>and how it effects habitat</b></p> </div>
	5. Closing	

**Lesson Plan****WATER****Standard:** IV**Lesson:** 3 Social Studies**Topic:** Water Conservation Methods**Objective:** To explore how to conserve water**Reference:** Page 37 E &B**Methods:** Outdoor activity**Time:** One-40 minute period**Materials:** blackboard, chalk, paper, pencils

<b>Time:</b>	<b>Activity:</b>	<b>Methods/Reminders:</b>
:10	1. Warm Up: Refer to Role plays	<ul style="list-style-type: none"> <li>• What is water conservation? Why is it important?</li> <li>• How can we conserve water in those situations?</li> <li>• Make list of student's ideas on board.</li> <li>• Where else is water wasted in our village?</li> </ul>
:25	2. Field Work	<ul style="list-style-type: none"> <li>• Go outside and look for place where water is wasted (e.g. tap runoff)</li> </ul>
	3. Return to classroom to discuss	<ul style="list-style-type: none"> <li>• Make a list of alternative ways of conserving water at a specific site. (Use student input...do not tell the students, ask them)</li> </ul>
:05	4. Wrap Up	<ul style="list-style-type: none"> <li>• Task/Homework: Design a strategy to reduce water wastage at a specific site (e.g. tap).</li> <li>• Discuss homework and students' plan during beginning of next lesson. Choose best strategy for reducing water and have students implement their strategy.</li> </ul>

**Lesson Plan****WILDLIFE****Standard:** I**Lesson:** 2**Topic:** Our Environment: living organisms: wildlife**Objective:** Students will differentiate between different types of wildlife**References:** p.42, 44 Mture, p. 35-40 MacMillan**Methods:** Stories/Riddles**Time:** :30**Materials:** attached Riddles

<b>Time:</b>	<b>Activity:</b>	<b>Methods/Reminders:</b>
:05	1. Warm Up	<ul style="list-style-type: none"> <li>▪ Lion and Impala (*same game as cat and mouse)</li> </ul>
:20	2. “Who am I” riddles	<ul style="list-style-type: none"> <li>▪ Read each riddle individually (DON’T SAY WHAT ANIMAL) and have class guess what wildlife is being described.</li> </ul> <p>*feel free to add more or your own hints...just don’t give the answer away! Do as many as time allows.</p>
:05	3. Closing	<ul style="list-style-type: none"> <li>▪ Have each student think of their own riddle.</li> </ul>

**Riddles:**

1. **Crocodile:** I live in water. I am one of the oldest animals on earth and I have a very big mouth.
2. **Giraffe:** I have four very long legs and I eat the leaves of acacia trees. It is hard for me to drink water because of my really long neck.
3. **Fish:** I live underwater and I can not survive outside of the water. I have scales along my body. Instead of legs, I have fins!
4. **Snake:** I slither around because I don’t have any legs. My favorite meal is a big rat!
5. **Scorpion:** I am small and I like to hide under rocks. If you are not careful and you scare me, I will sting you!
6. **Monkey:** You may think I am a nuisance in your fields but really I just like to play!
7. **Hornbill:** I am a friendly bird. I think I am beautiful with my long black and white tail and my big orange beak.
8. **Chameleon:** I move slowly and change colours when I am scared. Don’t be afraid of me, I eat bugs.
9. **Bees:** I buzz as I move and I make honey.
10. **Lion:** I am golden in colour and I am the king of the park!
11. **Elephant:** I am one of the biggest animals in the park. My favourite food is the bark of the baobab tree. When I am an adult, I have HUGE tusks.
12. **Hippo:** I live in the water, but at night I travel long distances out of the water in search for food. I need lots of grasses because I am really fat.

**Lesson Plan**

**SOIL, FORESTS, FIRE**

**Standard:** V

**Lesson:** Science 1

**Topic:** Tree/plant changes within our environment

**Objective:** Students will understand plant changes due to age.

**References:** p. 46 Macmillan, p. 74 Mture

**Methods:** Field study, Experiment,

**Time:** :40

**Materials:** string, ruler, teacher information, calculator

<b>Time:</b>	<b>Activity:</b>	<b>Methods/Reminders:</b>
:05	1. Warm up	<ul style="list-style-type: none"> <li>▪ Ask the students their age: How old are you? When were you born—what year, what month, what day? Where were you born?</li> <li>▪ Line up students tallest to shortest. Ask the students to note who they are standing next to. Now, have them line up oldest to youngest. Notice how the line changes. With people, you can't tell their age by looking at their height, but with trees, you can...</li> <li>▪ Let's see how!</li> </ul>
:10	2. Introduction	<ul style="list-style-type: none"> <li>▪ Then ask them if they know that plants have age too.</li> <li>▪ Introduce the importance of keeping age records for trees and show different ways of estimating trees.                             <ul style="list-style-type: none"> <li>~ Tree age importance: how long it takes a tree to grow. Age of a forests, how long it will take for a forest to rehabilitate itself if destroyed.</li> <li>~ Tree ring counting and Formulas (see attached sheet)</li> </ul> </li> <li>▪ Put students into groups.</li> </ul>
:10	3. Outdoor Activity	<ul style="list-style-type: none"> <li>▪ Go outside and have the students watch as the teacher demonstrates how to take the measurement.</li> <li>▪ Have each group then go and measure a tree.</li> </ul>
:10	4. Classroom activity	<ul style="list-style-type: none"> <li>▪ Returning to the classroom, demonstrate the use of the formula.</li> <li>▪ Have each group try to figure out the age of their tree. Help the students by assisting in the calculation with a calculator.</li> </ul>
:05	5. Closing	<ul style="list-style-type: none"> <li>▪ Close by summarizing the importance of knowing tree age and why it is good to know how to use the formula as well as count tree rings (ie, to count tree rings, the tree must be cut, but to use the formula, the tree can still remain intact).</li> </ul>