



**MINISTRY OF EDUCATION
PRIMARY ENGAGEMENT PROGRAMME
GRADE FOUR WORKSHEET TERM 2
SUBJECT: SCIENCE
WEEK 1: LESSON 1
TOPIC: WEATHER**

Name: _____

Date: _____

FACT / TIP:

Weather is the state of the atmosphere over a short period of time. A weather forecast tells us what the temperature will be, if it's going to be rainy, windy, cloudy or sunny.

The different types of Weather Conditions in Guyana.



Rainy Weather



Windy Weather



Cloudy Weather



Sunny Weather

What is temperature?

Temperature is how hot or cold a substance is.

- Items such as boiled water, steam and the sun will have a hot temperature while items such as ice, snow and ice cream will have a cold temperature.
- The atmosphere around us has a temperature.
- People and animals also have a temperature.
- The device used to measure temperature is called a thermometer.
- Temperature is measured in Degree Celsius ($^{\circ}\text{C}$).

OWN YOUR OWN:

1. Define the term "weather".

2. Observe the condition of the atmosphere. State the weather condition you observed.

3. Define the term 'temperature'.

4. List two items other than the ones mentioned above that would have a hot temperature.

5. List two items other than the ones mentioned above that would have a cold temperature.

6. The device used to measure temperature is called a
_____.

HOMEWORK:

With the help of an adult:

1. Gather three substances that have warm temperature and three substances that have cold temperature.
2. Using your sense of touch, observe and compare the differences between the items.
3. Record your observation.

Warm Temperature	Cold Temperature	Comparison

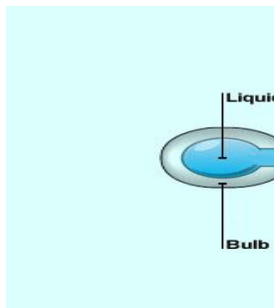
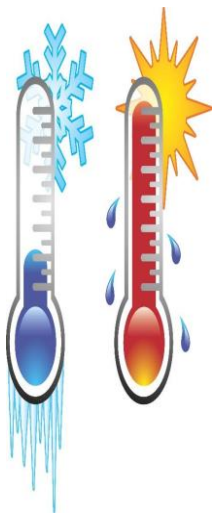


**MINISTRY OF EDUCATION
PRIMARY ENGAGEMENT PROGRAMME
GRADE FOUR WORKSHEET TERM 2
SUBJECT: SCIENCE
WEEK 1: LESSON 2
TOPIC: WEATHER
TOPIC: WEATHER-THERMOMETER**

Name: _____ Date: _____

FACT / TIP:

A thermometer is a device that is used to measure temperature.

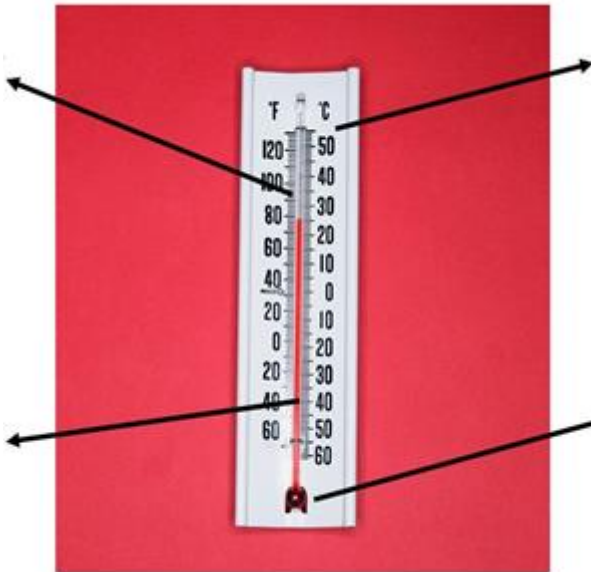


Fun Facts

- The two types of liquids found in a thermometer are; mercury and alcohol.
- Mercury is a chemical element also known as quicksilver while Alcohol is a colourless, flammable liquid which is produced by the natural fermentation of sugar.
- Mercury and alcohol are usually found in a thermometer because they remain in liquid form under severe heat.
- The mercury or alcohol expands in the glass tube when the temperature rises and it contracts when the temperature falls.
- The normal temperature of a person is 37°C while the temperature for air is usually less than 37°C .
- The temperature of boiling water is 100°C while the freezing point of water is 0°C .
- Room temperature is 20°C .
- Carbon dioxide can cause the atmosphere to hold heat. A warmer atmosphere would cause the temperature of the land and ocean to

OWN YOUR OWN:

1. Label the parts of the thermometer below.



- Two liquids found in a thermometer are _____ and _____.
- The normal temperature of a person is _____.
- _____ can cause the atmosphere to hold heat.
- The temperature of boiling water is _____.

HOMEWORK:

1. Experiment

With the help of an adult, use a thermometer to test the temperature of:

- boiling water
- ice
- your body temperature

2. Record your observations.



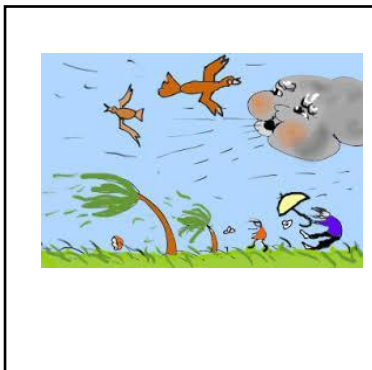
**MINISTRY OF EDUCATION
PRIMARY ENGAGEMENT PROGRAMME
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SUBJECT: SCIENCE
TOPIC: WEATHER
SCIENCE REVIEW - WEEK 1
TOPIC: WEATHER**

Name: _____ **Date:** _____

Read the questions carefully then insert the correct answers.

1. Define the term "weather".

2. Write the name of the weather conditions shown in the pictures below.





3. Define the term "temperature".

4. The device used to measure temperature is called a

_____.

5. Temperature is measured in _____.

6. The gas which causes the atmosphere to hold heat is

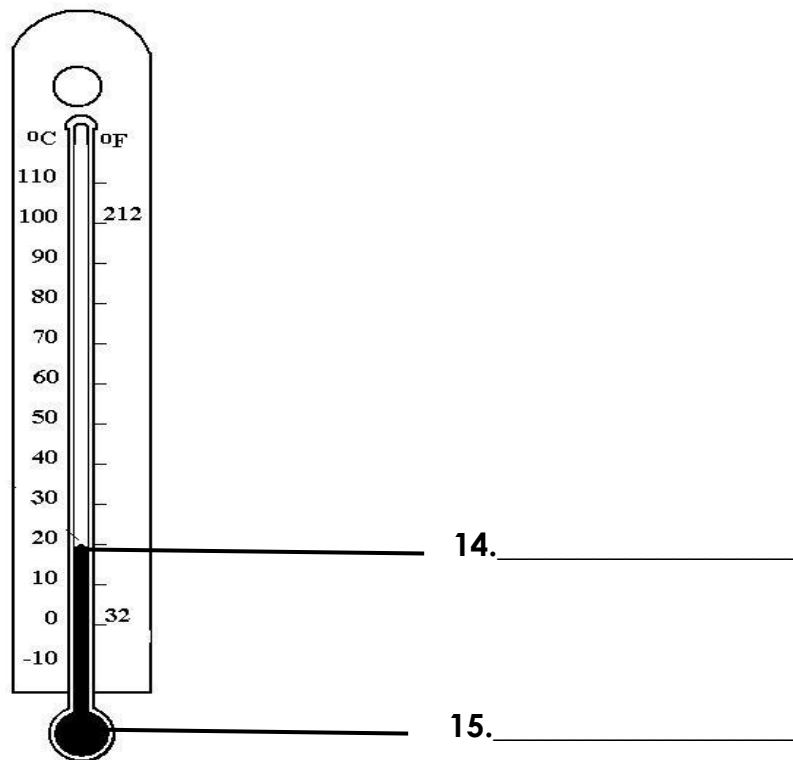
_____.

7. The normal temperature of a person is _____.
8. The boiling point of water is _____ °C while the freezing point of water is _____ °C.

Write true or false.

9. Alcohol is also known as quicksilver. _____
10. The mercury or alcohol expands in the glass tube when the temperature rises. _____.
11. Global warming is when the temperature of the land and water drops. _____
12. Mercury and alcohol are usually found in a thermometer because they remain in liquid form under severe heat. _____.
13. Water freezes at 0°C. _____.

Label the parts of the thermometer below.





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PRIMARY ENGAGEMENT PROGRAMME
GRADE FOUR WORKSHEET TERM 2
SUBJECT: SCIENCE
TOPIC: WEATHER
SCIENCE WEEK 2: LESSON 1
TOPIC: WEATHER-EFFECTS OF TEMPERATURE ON PLANTS**

Name: _____ Date: _____

FACT / TIP:

Temperature is how hot or cold a substance is.

Temperature in our environment can be very hot or extremely cold.

These types of temperatures can affect the plants in our environment.

How extreme heat affects plants in the environment:

- Plants in the environment will droop and their leaves will get brown.
- Plant growth slows down.
- Severe heat can also cause plants to die.



Pictures showing how extreme heat affects plants in the environment.

OWN YOUR OWN:

1. Define the term 'temperature'

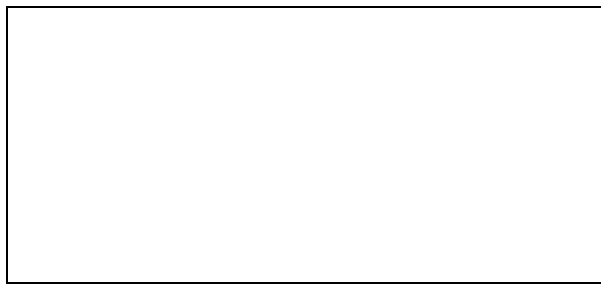
_____.

2. Temperatures in our environment can be extremely _____ or _____.

3. List two ways plants are affected by extreme heat.

4. Draw a healthy plant.

5. Draw a plant that has been affected by extreme heat.



HOMEWORK:

1. Examine plants affected by extreme heat.
 - a. Observe the plants growing in your yard. Pay close attention to the leaves. Can you tell which plants are affected by extreme heat and the ones that are not?
 - b. Compare the brown leaves with the healthy ones.
 - c. Record your observations.
 - d. Paste pictures of the leaves of the plants that are affected by extreme heat and leaves that are not affected.



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SUBJECT: SCIENCE
TOPIC: WEATHER
SCIENCE WEEK 2- LESSON 2
TOPIC: WEATHER-
EFFECTS OF TEMPERATURE ON PLANTS**

Name: _____ Date: _____

FACT / TIP:

How cold weather affects plants in the environment:

- In cold weather, plants grow healthy. The leaves are very green.

How extremely cold weather affects plants in the environment.

- Extremely cold weather can stunt plant growth.
- It can cause a plant to die.
- Water can freeze inside the plant's cells causing it to expand and destroy the plant from the inside.

If a plant is put in a dark place it will grow towards light. Plants need light and water to live and grow healthy.



Pictures showing how extremely cold weather affects plants in the environment.

ON YOUR OWN

1. In cold weather, plants have very green leaves because they grow _____.
2. List two ways plants are affected by extreme heat.
 - I. _____
 - II. _____
3. What happens if a plant is placed in a dark area?

4. Plants need _____ and _____ to live and grow healthy.

HOMEWORK

Experiment

With the help of an adult, gather the items listed below and conduct the experiment.

Items needed:

A small plant

Leaves

An empty tin

Candle

Matches

Procedure

- I. Place the small plant in the freezing compartment of your refrigerator/cooler/ice bucket for twenty-four hours. Record your observations.

Under the supervision of an adult:

- II. Place the candle in the empty tin.
- III. Using the matches, light the candle and place the leaf above the fire so that the heat penetrates the leaf. Record your observation.

Compare the two observations.



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SUBJECT: SCIENCE
TOPIC: WEATHER
LESSON REVIEW: WEEK 2
TOPIC: WEATHER-EFFECTS OF TEMPERATURE ON PLANTS**

Name: _____ **Date:** _____

Read the questions carefully then insert the correct answers.

1. Define the term "temperature".

2. Sandra placed a plant in the freezing compartment of her refrigerator. After a day she noticed some changes in her plant. List two changes Sandra would have noticed.

I. _____

II. _____

3. Tom noticed the leaves of his hibiscus plant were drooping and started to turn brown. What caused the leaves to droop and turn brown? _____.

4. In cold weather, plants grow healthy. The leaves are _____ in colour.

5. Explain in your own words, what happens when a plant is put in a dark place.

6. Plants need _____ and _____ to live and grow healthy.


7. Temperatures in our environment can be extremely _____ or _____.

8. Two effects of extreme heat on plants are:

In the boxes provided below draw a picture of a healthy plant and a plant affected by extreme temperature.

9. 

Healthy Plant

10. 

Plant affected by extreme heat



**MINISTRY OF EDUCATION
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GRADE FOUR WORKSHEET TERM 2
SUBJECT: SCIENCE
TOPIC: WEATHER
SCIENCE WEEK 3: LESSON 1
TOPIC: WEATHER-EFFECTS OF WATER AND WIND ON THE EARTH.**

Name: _____

Date: _____

FACT / TIP:

Effects of water on the earth's surface



During periods of heavy rainfall, large amounts of water can be found on the land. This is called flooding.

Flooding can:

- ✓ Soak the land.
- ✓ Wash away the topsoil.
- ✓ Destroy crops
- ✓ Uproot plants and wash them away.
- ✓ Cause some animals to remove from their homes e.g. ant.

If sea water comes on the land, it will

Kill plants and animals.
Make the soil salty.

Effects of wind on the earth's surface



Heavy wind can also affect the earth. This can:

- ✓ Blow away the earth's surface.
- ✓ High winds can uproot trees and demolish houses.
- ✓ Wind can also carry paper, plastic and other materials.

ON YOUR OWN:

1. Identify the periods Guyana experiences heavy rainfalls.

2. List two ways water can affect the earth.

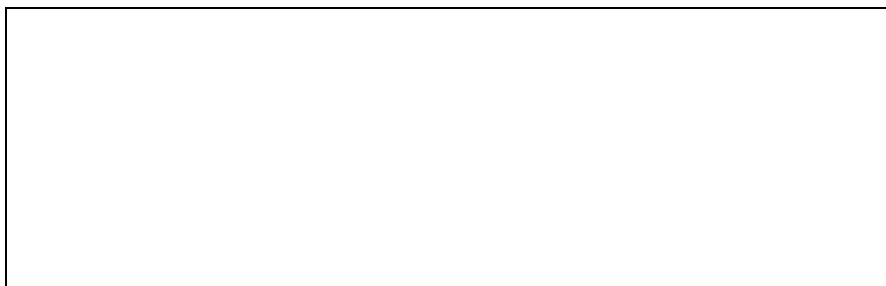
- I. _____
II. _____

3. List two ways wind can affect the earth.

- I. _____
II. _____

4. What happens if sea water comes on the land?

5. Draw pictures to show how flooding affects the earth.



HOMEWORK:

Conduct an experiment to find out the difference between fresh water and salt/sea water?

1. Experiment

Items needed: bowl, water and soil

2. Procedure

- I. Place soil into the bowl
- II. Pour water into the bowl to cover the soil.
- III. Leave for an hour.
- IV. Record your observations.

Findings: The difference between fresh water and salt/sea water



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GRADE FOUR WORKSHEET TERM 2
SUBJECT: SCIENCE
TOPIC: WEATHER
SCIENCE WEEK 3: LESSON 2
TOPIC: WEATHER-EFFECTS OF WATER AND WIND ON THE EARTH**

Name: _____ Date: _____

FACT / TIP:

Erosion is the washing and carrying away of parts of the earth's surface due to factors such as wind and water.

Soil Erosion is when the top layer of soil is washed and carried away.

Causes of soil erosion

- **Wind**-Wind erosion is a natural process that moves soil from one location to another by wind power.



Pictures showing wind erosion

- **Water**-One of the main causes of soil erosion is **water erosion**. Water erosion is the loss of topsoil due to water.



Pictures showing water erosion

ON YOUR OWN:

1. Define the term "erosion"

2. The two agents of erosion are _____ and _____.

3. What is wind erosion?

4. What is water erosion?

HOMEWORK:

1. List three effects of soil erosion.

2. Define the term "prevention"

3. List one way you think we can prevent:

I. Water erosion

II. Wind erosion



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SCIENCE LESSON REVIEW: WEEK 3
TOPIC: WEATHER-EFFECTS OF WATER AND WIND ON THE EARTH**

Name: _____ **Date:** _____

Read the questions carefully then insert the correct answers.

1. Define the term “flooding”

2. One cause of flooding is _____.

3. List two effects of flooding.

I. _____

II. _____

4. Write one effect of salt water on the land.

I. _____

5. Write two ways by which heavy wind can affect the earth.

I. _____

II. _____

6. Define the term “erosion”

_____.

7. The two factors of soil erosion are _____ and

_____.

8. The loss of topsoil due to water is called _____.

9. The natural process that moves soil from one location to another by wind power is called _____.

10. Draw a picture to show how water affects the land.



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GRADE FOUR WORKSHEET TERM 2
SUBJECT: SCIENCE
TOPIC: WEATHER
SCIENCE WEEK 4: LESSON 1
TOPIC: WEATHER-SOIL EROSION AND PREVENTION**

Name: _____

Date: _____

FACT / TIP:

Erosion is the washing and carrying away of parts of the earth's surface due to factors such as wind and water.

Effects of Erosion

- When it rains heavily the water washes away the earth's surface and it goes into the trenches or drains.
- When the tide is falling, it also washes away sand, rocks and shells from the sea shore.
- Loss of soil nutrients.
- During long dry seasons the soil becomes very dry. Plants die and the soil is easily blown away by wind.
- Erosion causes damage to the earth's surface, destroys farms, roads, building foundations and dams. These damages cost a lot to repair.

ON YOUR OWN:

1. List two effects of erosion.

i. _____

ii. _____

2. Experiment

Items needed: Sanitary cup, scissors, water and soil

Procedure

i. Using the scissors, cut small holes under the sanitary cup.

- ii. Place soil into the bowl
- iii. Pour water into the bowl to cover the soil.
- iv. Leave for an hour.
- v. Record your observations.

HOMEWORK:

1. List two ways you think we can prevent erosion.



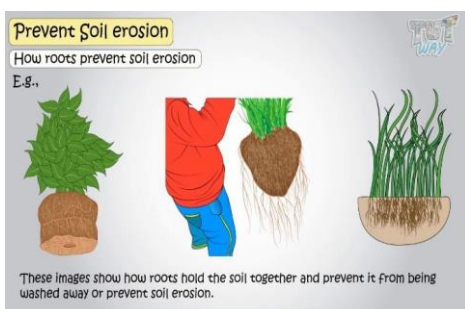
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GRADE FOUR WORKSHEET TERM 2
SUBJECT: SCIENCE
TOPIC: WEATHER
SCIENCE WEEK 4 - LESSON 2
TOPIC: WEATHER- SOIL EROSION AND PREVENTION**

Name: _____ Date: _____

FACT / TIP:

Preventing Soil Erosion. We can prevent soil erosion by:

- Planting trees. The roots hold the soil together and prevent it from being washed away.
- Avoid deforestation. Deforestation is the cutting down of trees.
- Covering the earth's surface. We can use rocks, twigs and mulch to cover the earth's surface to prevent it from being washed or blown away.
- Conserving water. Using less water prevents water erosion.
- Reduce tillage. Tillage is the preparation of land by digging, stirring, and overturning the earth's surface.



Pictures showing ways to prevent soil erosion

ON YOUR OWN

1. List two ways we can prevent erosion.

- I. _____
- II. _____

2. Experiment

Items needed:

One small plant in a container filled with soil (ensure there are holes at the bottom of the container), twigs and leaves, soil, 2 sanitary cups, scissors and water

Procedure

- I. Using the scissors, make holes under the sanitary cups.
- II. Place soil only in the first cup.
- III. In the second cup, place soil, then place the twigs and leaves on top of the soil.
- IV. Pour water into the sanitary cups and the container with the small plant to cover the soil.
- V. Record your observations.



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SUBJECT: SCIENCE
TOPIC: WEATHER
SCIENCE LESSON REVIEW: WEEK 4
TOPIC: WEATHER-SOIL EROSION AND PREVENTION**

Name: _____ **Date:** _____

Read the questions carefully then insert the correct answers.

1. What is erosion?

2. List two effects of erosion.

i. _____

ii. _____

3. Erosion causes damage to _____ and

_____.

4. List two ways we can prevent erosion.

i. _____

ii. _____

5. Why should we plant more?

6. Define the term "deforestation"

7. We can use _____ and _____ to cover the earth's surface to prevent it from being washed or blown away.

8. The preparation of land by digging, stirring, and overturning the earth's surface is called _____.

Write true or false for questions 9 to 11.

9. The long dry season makes the soil become wet. _____

10. Jack planted new trees which caused erosion. _____

11. The nutrients in the soil can be lost due to erosion. _____

For questions 12 to 14 match each picture to the word it best describes

12.



tillage

13.



erosion

14.



deforestation