

# Climate Change 1

# WHAT IS WEATHER?

Grades 1–3



## LEARNING OBJECTIVES

At the end of the lesson students will...

- Describe different kinds of weather they experience
- Increase awareness of the daily conditions of the weather

## LEARNING ASSESSMENT

- Discussions with students
- Drawings of the kinds of weather they experience every year

## MATERIALS

- Paper and pencil
- Crayons, if available
- Chart in the Classroom to track the weather conditions each day

## TIME

- One hour for the lesson
- 5–10 minutes per day after

## PROCEDURE

### 01 Introduction

#### Discussion

- What kinds of weather are there? (i.e. sunny and hot, rainy and hot, cloudy but not rainy, windy, storms, etc.)

### 02 Knowledge Sharing

#### Elder Visit

- Invite an Elder into the classroom to discuss their perspective on the weather. Why do we need different kinds of weather? (Sunshine, rain, clouds, wind, etc.)
- Provide time for students to ask questions to the Elder

### 03 Student Activity

#### Individual Activity

- Draw three pictures of different kinds of weather
- Students share their pictures with the class and describe what they drew
- Put the pictures on the wall in groups (rain, sun, wind, etc.)

#### Classroom

- Have a weather chart at the front of the classroom – with 7 days on it
- Each day of the week – the teacher asks the students about what the weather is like today, and notes this on the chart

### 04 Conclusion

Every day talk about the weather briefly with the students and note this on the chart.



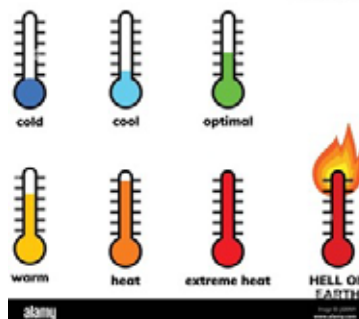
## EXAMPLE OF A WEATHER CHART:

What is the weather like today? (in Miskito)							
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Temperature							
Conditions							

## CONDITIONS



## Temperature ICONS



# Climate Change 2

# SEASONAL CHANGES

Grades 1–3

## LEARNING OBJECTIVES

At the end of the lesson students will...

- Describe seasonal changes and interpret the effects of seasonal changes
- Describe how traditional activities by Indigenous peoples vary with the seasons
- Understand how activities cycle with the seasons

## LEARNING ASSESSMENT

- Discussions with students
- Drawings of seasons and the activities associated with each season

## MATERIALS

- Paper and pencil
- Crayons or coloured pencils

## TIME

- About 2 hours

## PROCEDURE

### 01 Introduction

#### Discussion

- What characterizes each of the seasons in my area?
- How do the sun and rain vary among seasons?
- How do local plants and animals adapt to the changing seasons?
- What activities, ceremonies, and special events are associated with each season?

### 02 Knowledge Sharing

#### Elder Visit

- Invite an Elder into the classroom to discuss their perspective on the seasons and what activities (i.e., planting, weeding, fishing, harvesting, fruit gathering, school cycles, celebrations) happen in each season. The Elder can describe what weather is like in each season. They can explain the activities done in each season and why

Provide time for students to ask questions to the Elder.



### 03 Student Activity

#### Partner Share

- What are the seasons and how is the weather different in each? What are the seasonal activities we do today. Are there differences in the seasons and the activities between now and when the Elder was young? What differences?

#### Individual Activity

- Draw two pictures: one of the Elder experiencing a season as a young person, and another picture of how you experience the same season now
- Age 5: draw pictures
- Age 6: draw pictures and write one sentence for each picture
- Age 7: draw pictures and write two sentences per picture
- Age 8: draw pictures and write a paragraph for each picture

Ideas of differences to draw: different activities, going to school, different celebrations.

### 04 Conclusion

#### Sharing Circle

- In small groups (3–4 students), have students explain their drawings to the others in the group

## Climate Change 3

# WHAT IS CLIMATE CHANGE?

Grades 4–6

### LEARNING OBJECTIVES

At the end of the lesson students will...

- Describe what climate change is and its impacts on people and the planet
- Be able to explain various terms and symptoms of climate change

### LEARNING ASSESSMENT

- Discussions with students
- Short test at end of unit of study

### MATERIALS

- RACHELS or access to textbooks and reference books

### TIME

- 3–4 hours, may be over several days



### PROCEDURE

#### 01 Introduction

##### Discussion

- What do you know about climate change?
- What have you heard in the media or from community leaders about climate change?
- What do you think causes climate change?

#### 02 Knowledge Sharing

##### Elder or Forest Ranger Visit

- Invite an Elder or Forest Ranger into the classroom to discuss what changes they have seen during the course of their lifetime as a result of climate change. How has this impacted the land, forests, weather, plants, animals, and people of the region?

Provide time for students to ask questions to the Elder.

#### 03 Learning

Watch a video or lesson on RACHEL explaining what climate change is.

#### 04 Research

##### Partner Share

Individually or in groups of 2–3 students, look on RACHEL or in textbooks or reference books look up the definitions of the following terms:

- Climate change
- Greenhouse Gases
- Global Warming

And look up how the following are connected to Climate change

- Flooding
- Drought
- Hurricane
- Melting Icecaps
- Rising sea levels
- Diminishing Forests

Students Prepare Presentations on these terms. These can be in written format (i.e. short paragraphs) or in drawings with explanations.

Or students can create a small dictionary or set of cards with pictures and definitions for each of the terms.

#### 05 Conclusion

##### Sharing Circle

- Students share their presentations with the class

Longer lessons can be done on topics like “greenhouse gases” within the science curriculum.

**Climate Change Vocabulary Activity**

<b>Greenhouse Gases</b>  [ ]	<b>Climate Change</b>  [ ]	<b>Global Warming</b>  [ ]	<b>Flooding</b>  [ ]
<b>Drought</b>  [ ]	<b>Hurricane</b>  [ ]	<b>Melting Ice Caps</b>  [ ]	<b>Rising Sea Levels</b>  [ ]

**Climate Change Vocabulary Activity**

Cut out the definitions and match them to the correct boxes.

Carbon and other gases that trap the heat from the sun in the atmosphere.	Too much rain can cause an area to fill up with water.	Changes to the weather including drought, flooding, and storms.	The melting ice means that the sea is getting higher and may flood land near the coast.
Very powerful storms with strong winds.	Not enough rain leads to water shortages and makes it hard to grow food.	Temperatures across the world are getting higher.	The ice at the North and South Poles is melting because the Earth is getting warmer.

ink saving Eco



# Climate Change 4

# CAUSES AND EFFECTS

Grades 4–6



## LEARNING OBJECTIVES

At the end of the lesson students will...

- Describe 6 causes (natural and human) and effects of climate change

## LEARNING ASSESSMENT

- Discussions with students
- Short test at end of unit of study

## MATERIALS

- RACHELS or access to textbooks and reference books

## TIME

- 3–4 hours, may be over several days

## PROCEDURE

### 01 Introduction

#### Discussion

- What do you know about what causes climate change?
- What do you think causes climate change?
- What affect do these have on the plants, animals, and humans?

### 02 Learning

Watch a video or lesson on RACHEL explaining basic causes of climate change

### 03 Student Activity

#### Research or use the textbook

- Individually or in groups of 2–3 students, look on RACHEL or in textbooks or reference books to find 4 human causes and 2 natural causes of climate change
- Students create presentations or fill out the form with two natural causes and four human causes

### Talking with Family Members, Elders, and Forest Ranger

Each student talks with at least one family member, Elder or Forest Ranger, and about the causes and effects of climate change. Questions:

- What impact does forest clearing have on animals? On people? On water?
- What impact does a drought have?
- What impact does a hurricane have?

This information is added to their presentations.

### 04 Conclusion

#### Sharing Circle

- Students share their presentations with the class

Longer lessons can be done on topics like “greenhouse gases” within the science curriculum.

### SAMPLE WORKSHEET

## CLIMATE CHANGE CAUSES AND EFFECTS

