

Weather Patterns

Standard K.1.1 Obtain, evaluate, and communicate information about local, observable weather conditions to describe patterns over time. Emphasize the learners' collection and sharing of data. Examples of data could include sunny, cloudy, windy, rainy, cold, or warm.

Core Question

What weather patterns can we observe when we go outside?

Vocabulary

Patterns | Predict | Weather | Sunny | Cloudy | Windy | Rainy | Cold | Warm

1. Chapter 1

a. Video #1 – Seasonal Weather

Core Question: What weather patterns can we observe over time?

During this video, you will have four opportunities to have discussions with your class. They will be marked by a “Pause and Discuss” graphic in the upper left corner at the following times.

Pause and Discuss:

- 1:03 – What kind of weather do you usually see in the springtime?
- 1:32 – What kind of weather do you usually see in the summertime?
- 1:50 – What kind of weather do you usually see in autumn?
- 2:14 – What kind of weather do we get in the winter?

After the video, you can discuss weather further using the following prompts.

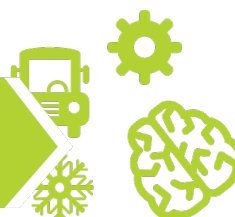
Discussion Prompts:

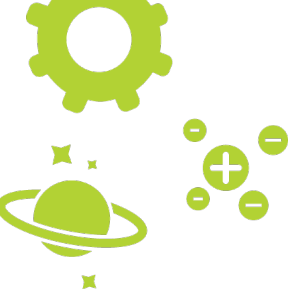
- Have you ever noticed how the weather changes throughout the year?
- What kind of weather happens during your favorite season?

b. Activity #1 – Current Weather

Objective: Observe the local weather.

Instructions: Have learners look outside or go outside. Have them observe the weather. Use the discussion prompts below to help facilitate observation.





Discussion prompts: Is it hot or cold? Is it windy or calm? Are there clouds? What season are you in right now? Is it wet or dry?

2. Chapter 2

a. Video #2 – Foundation – Intro to Weather

Core Question: What is weather?

During this video, you will have two opportunities to have discussions with your class. They will be marked by a “Pause and Discuss” graphic in the upper left corner at the following times.

Pause and Discuss:

- 0:33 – What is weather? Where does it happen, and where does it not happen? Is it something you can touch, or see? Can you taste, hear, or smell it?
- 1:16 -What would happen if you stood outside in a rainstorm without an umbrella?

After the video, you can continue the discussion on weather using the following prompts.

Discussion Prompts:

- What are senses?
- How do you use your senses?
- Can you taste, hear, or smell weather?

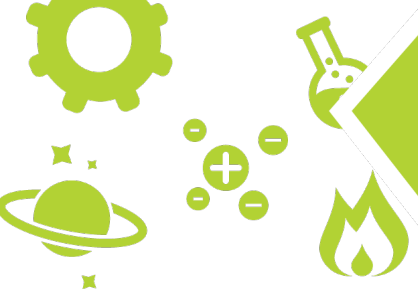
b. Activity #2 – Sensing Weather

Objective: Use senses to observe weather.

Instructions: Use items to recreate weather simulations of rain, snow, wind, hail, sun. Have learners use their senses of touch, sight, hearing and smell to explore the weather using the following items:

- Spray bottles – rain
- Crushed ice – snow
- Fan – wind
- Ice cubes – hail
- Heat lamp – sun.





Discussion prompts:

- What weather can you feel?
- What weather can you hear?
- What weather can you smell?
- What weather can you see?

3. Chapter 3

a. Video #3 – Exploration – Weather Experiments

Core Question: What effects does weather have?

During this video, there will be four opportunities to have discussions with your class. They will be marked by a “Pause and Discuss” graphic in the upper left corner at the following times.

Pause and Discuss:

- 0:45 – If I point the fan at the dirt, what do you think is going to happen?
- 1:48 – What do you think will happen to my dirt if I put some ice or snow on it?
- 2:24 – What do you think will happen if I put the dirt under the sun?
- 3:03 – What do you think will happen to the dirt when it rains?

After the video, you can discuss weather further using the following prompts.

Discussion Prompts:

- What did the rain do to the dirt?
- What did the wind do?
- What do you think would happen if you did both at the same time?

b. Activity #3 – Create Weather

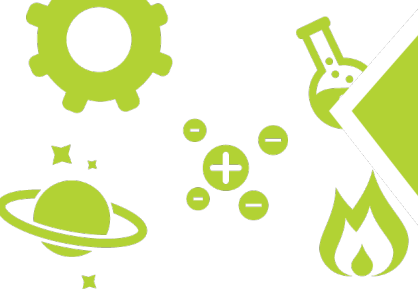
Objective: Learners will practice using their senses in a hands-on experiment.

Instructions: Simulate weather like the video does: use simple tools to show rain, wind, sun, and snow, and allow learners to use their own senses.

Discussion prompts:

- How does the weather affect the dirt?
- How can we observe this weather?





4. Chapter 4

a. Video #4 – Exploration – Observing Clouds

Core Question: What do you notice about clouds shapes, patterns and color?

During this video, there will be two opportunities to have discussions with your class. They will be marked by a “Pause and Discuss” graphic in the upper left corner at the following times.

Pause and Discuss:

- 1:24 – What do you notice about these clouds’ shapes, patterns and color?
- 1:48 – How do clouds look when it’s sunny outside, or how about when it’s windy? What do the clouds look like when it rains or snows?

After the video, you can discuss weather further using the following prompts.

Discussion Prompts:

- What do clouds look like when it rains?
- How do they look when it snows?
- What do you notice about clouds when it’s windy?
- How do clouds look when it’s sunny outside?

b. Activity #4 – Making Cloud Shapes

Objective: Learners will create a model of their observations.

Instructions: Give learners supplies to craft a picture of the sky and clouds on paper based on their observations.

Discussion Prompts:

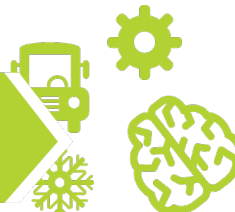
- What do the clouds look like?
- How can we create a picture of what we’re seeing outside?

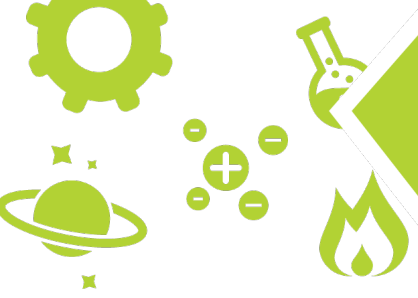
5. Chapter 5

a. Video #5 – Making Sense of Findings/Wrap Up

Core Question: What kinds of weather patterns can we observe when we go outside?

This video is a summary of what was learned and discussed in the previous videos.





WEATHER PATTERNS



After the video, you can discuss weather further using the following prompts.

Discussion Prompts:

- How did you observe the weather?
- How does different weather affect you?

b. Activity #5 – Weather in the Seasons

Objective: Recognize the different weather in each season.

Instructions: Color a template of a tree in each of the four seasons.

Graphic Organizer: Paper divided into 4 squares with a bare tree on each

Discussion prompt: What type of weather can you expect in a particular season?

