inquisitive

KINDERGARTEN · EARTH AND SPACE SCIENCES · FAST PATH

Unit: Weather and Climate

Lessons in unit: 5 · 18 teaching sessions · up to 30 min per session · 465 min total · ↳ Time-saving teaching move · ★ Checkpoint

1. What Is Weather?

PHENOMENON QUESTION
What's the weather like today?

OUTCOME
I can tell what the weather is today.

TIME
3 sessions · up to 30 min
80 min total

DAY 1 · 30 MIN

- 25 MIN — Activity 1
- 5 MIN — Activity 2
  ↳ Partners share ideas, then record a class weather chart instead of group drawings and a gallery walk.

DAY 2 · 25 MIN

- 10 MIN — Activity 3
- 15 MIN — Activity 4

DAY 3 · 25 MIN

- 20 MIN — Activity 5 ★
- 5 MIN — Activity 8

2. Watching the Weather

PHENOMENON QUESTION
How does the weather change?

OUTCOME
I can describe the weather patterns from this past week.

TIME
4 sessions · up to 30 min
95 min total

DAY 4 · 30 MIN

- 15 MIN — Activity 1
- 5 MIN — Activity 2
  ↳ Partners answer both pictures' questions, then hear one explanation for each picture.
- 10 MIN — Activity 3

DAY 5 · 30 MIN

PREP Prepare the blank temperature chart.

SCHEDULE Activity 4: use 5 min on each of three dates, split between morning and afternoon. Complete Activity 5 after the third date.

- 15 MIN — Activity 4
- 15 MIN — Activity 5

DAY 6 · 15 MIN

PREP Prepare the month's blank class weather chart and sticky notes.

SCHEDULE Allow one month for Activity 6. Use a brief class observation and one student's symbol each school day; all recording time is included.

- 15 MIN — Activity 6
  Use 5 min to launch, 5 min across the month's daily records, and 5 min to discuss patterns.

DAY 7 · 20 MIN

PREP Print a weather chart for each student.

SCHEDULE Teach after the month's observations and Activity 6 discussion.

- 15 MIN — Activity 7 ★
- 5 MIN — Activity 10

3. Weather Warning!

PHENOMENON QUESTION
What is severe weather?

OUTCOME
I can tell one example of severe weather and explain how to prepare for that weather.

TIME
3 sessions · up to 30 min
85 min total

DAY 8 · 30 MIN	DAY 9 · 30 MIN	DAY 10 · 25 MIN
10 MIN Activity 1 ↳ Partners share severe-weather experiences instead of taking individual class turns.	10 MIN Activity 5 ↳ Each pair asks a question; record shared questions once and discuss answers.	20 MIN Activity 8 ★
5 MIN Activity 2	10 MIN Activity 6	5 MIN Activity 11
10 MIN Activity 3	10 MIN Activity 7 ↳ Assign pairs one weather type, then collect a preparation idea for each of the four types.	
5 MIN Activity 4 ↳ Read the poster once, then partners answer both questions before a brief class check.		

4. Sunlight Warms Earth

PHENOMENON QUESTION
What happens when the sun shines?

OUTCOME
I can describe how the sun affects the playground's surfaces.

TIME
4 sessions · up to 30 min
105 min total

DAY 11 · 30 MIN	DAY 12 · 20 MIN	DAY 13 · 30 MIN	DAY 14 · 25 MIN
PREP Prepare a clipboard, paper and pencil for each pair.	**PREP** Fill and label two cups per pair; set out two rocks per pair.	**PREP** Prepare recording sheets and clipboards.	20 MIN Activity 6 ★
SCHEDULE Choose a sunny day for the outdoor work.	**SCHEDULE** After setup, leave the rocks and water for 30 min. Teach Day 13 later the same day.	**SCHEDULE** Begin after the 30-minute wait. SAFETY: Check heated materials before children touch them.	5 MIN Activity 9
10 MIN Activity 1	5 MIN Activity 3 ↳ Partners use their outdoor records to explain shade, then choose and justify the cat's spot.	25 MIN Activity 4 · Part 2 of 2	
20 MIN Activity 2	15 MIN Activity 4 · Part 1 of 2	5 MIN Activity 5	

5. Shelter from the Sun

PHENOMENON QUESTION
What can we do when it's too sunny?

OUTCOME
I can draw a structure that protects me from the sun's light and heat.

TIME
4 sessions · up to 30 min
100 min total

DAY 15 · 30 MIN

5 MIN Activity 1
↳ Children act out responses together, then partners explain one.

10 MIN Activity 2

5 MIN Activity 3
↳ Partners answer the three picture questions, then share one other source of shade.

10 MIN Activity 4

DAY 16 · 25 MIN

PREP Set out shared containers of the available building materials.

10 MIN Activity 5

15 MIN Activity 6
↳ Students draw their plans, then explain materials and shade to a partner instead of class presentations.

DAY 17 · 25 MIN

25 MIN Activity 7 ★
Build from the plans. Keep the structures for testing.

DAY 18 · 20 MIN

SCHEDULE Activity 7: about 5 min to place rocks, 5 min after 30 min to feel and cover them, then 5 min after another 30 min for results. SAFETY: Check rocks before children touch them.

15 MIN Activity 7 ★
Test in sunlight, then under the structures. Collect each child's result and explanation.

5 MIN Activity 10