

Topic: Observing skies

Exploring the weather and the sky

Lesson concepts



- 😵 🐝 Science involves asking questions and describing change
- People use science in their daily lives
- Observations can be collected and recorded
- Observations can be compared with others
- % 😘 Observations and ideas can be represented and communicated

Today students will:

- ▶ identify and describe features of the sky in different weather conditions
- ► identify weather patterns.

Resources

Digital

Video — Changes in the sky and weather (3:30)

Sheet 3 — Day and night weather

Key terms

weather

For definitions and explanations of terms, please see the <u>Glossary</u>.

Lesson 3



Learning alerts

Be aware of students making generalisations, for example: thinking that clouds only appear during the day or that if it is cloudy, it will rain.

Suggested next steps for learning

- Explain that clouds are a feature of the weather condition, so may appear in day and night.
- Explain to students that not all clouds produce rain; there are different types of clouds; the darker, heavier clouds have more water and are therefore more likely to produce rain.

Lesson

Represent the sky in different weather conditions

Say to students

6 Today you are going to learn about the **weather**.

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Focus question

- Q. What do you know about the weather?
- A. For example: When the sky is blue and there are no clouds, the weather is fine; when there are dark clouds in the sky, it might rain.
- 1. Ask students to record (words or pictures) features of the current day sky and weather in their Science journal. For example:





2. Using these focus questions, discuss with students what they can observe in the day and night skies in different weather conditions.

Focus questions

- Q. What do you think you would observe if you looked at the day sky and it was raining?
- A. For example: The sky would be grey, there would be lots of grey clouds, there would be rain falling, I would not be able to see the sun.
- Q. What do you think you would observe if you looked at the night sky and it was raining?
- A. For example: There would be clouds but they would be hard to see, I would observe rain, I would not be able to see the moon or the stars because of the clouds and rain.
- Q. What do you think you would observe if you looked at the day sky and it was a clear day?
- A. For example: I would be able to observe a blue sky, there might be some white clouds, I might see birds or a plane.
- Q. What do you think you would observe if you looked at the night sky and it was a clear night?
- A. For example: I would be able to see the stars and the moon, I might see some clouds, I might see a bat or a plane.
- 3. Ask students to record words or pictures in their Science journal, showing features of what they think the night sky will be like if the weather doesn't change.

Recognise changes in the sky and weather

Say to students

- When the weather changes, the things you can observe in the sky change too. Changes in the weather happen all the time but there are also patterns in how the weather changes. For example, in the hot months of the year, we have more storms and rain than we do in the colder part of the year. Scientists observe the sky and weather to see these patterns and changes.
- 4. View the Video Changes in the sky and weather.

In this video, students learn about changes that occur in weather patterns over time.



Focus questions

- Q. What patterns did you notice in the weather?
- A. For example: In the hot part of the year, we see rain and storms; in the dry season there is less rain; in the cold months we might get frost; in spring we get more wind.
- Q. How do scientists find out about these patterns?
- A. For example: They observe the sky and look at the changes in the weather.
- Q. What are some of the changes to the landscape that can be caused by storms?
- A. For example: storms can have rain that washes away the soil, or wind that blows trees over or hail that can cause damage.
- Q. What are some of the changes to the landscape that can be caused by no rain for a long time?
- A. For example: The grass can become brown, the plants might die.
- Q. What are some of the changes to the landscape that can be caused by snow?
- A. For example: snow can cover the ground, some plants might die because it is cold.
- 5. Use **Sheet 3** <u>Day and night weather</u> and ask students to write or draw some features of the day and night skies in different weather conditions. For example:

	Day sky	Night sky
Fine weather	×	
	Sun and white fluffy clouds	Stars, moon, clouds
Rainy weather		
	Clouds, rain, rainbow	Clouds and rain are harder to see
Stormy weather	b b b b b b b b b b b b b b b b b b b	b b b b b b b b b b b b b b b b b b b
	Black clouds, lightning, rain	Clouds are hard to see, lightning is easy to see
Windy weather	- Alexandre Alex	
	Sun, no clouds	Stars and moon, no clouds

Department of Education and Training C2C Independent Learning Materials

