

### **Topic: Observing skies**

# Exploring the day sky

#### Lesson concepts

- 🍢 Observable changes occur in the sky and landscape
- Science involves asking questions and describing changes
- People use science in their daily lives
- Questions can be responded to and predictions can be made
- Investigations can explore and answer questions
- Observations can be collected and recorded
- Information can be sorted
- Observations can be compared with predictions
- Observations can be compared with others
- % Observations and ideas can be represented and communicated

Today students will:

▶ identify and describe features of the day sky.

### Resources

### Digital

Slideshow — Observing day

### Sheets

Sheet 1 — Word cards (cut out; save for future lesson) Sheet 2 — Day and night observations (save for future lesson)

# Key terms

feature, field work, observable, sun

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

Keep the **Glossary** for reference throughout this unit.

# Lesson Share prior knowledge about features of the day sky Say to students • In these lessons, you will be learning about the sky and the landscape. The landscape is everything you can see as you look out across the land. Today, we will be looking at the day sky and its observable features. 9 This means everything you can see or observe in the sky. 1. Cut out all the words on Sheet 1 - Word cards. Display and read the words 'sky', 'observable', 'features', and 'day'. Focus question Q. What do you know about the sky? A. For example: It is blue; it has clouds and a sun; there is a moon and stars at night. Sau to students • You are going to view some pictures of the sky and some landscapes to identify the features you can see. Features are things you can see 9 like moon, stars, clouds, birds. 2. View the Slideshow - Observing day and ask students to describe their observations for each slide. The focus questions below guide your questioning while Observing viewing the slideshow. Please use these questions for each day slide and adjust answers accordingly. Slideshow a. Discuss the slideshow with students. Focus questions Q. What can you tell me about this sky? A. For example: It is daytime, there is a big storm. Q. What features can you observe in the sky? A. For example: clouds, rain, lightning Q. What features can you observe in the landscape (the whole picture)?



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b. Discuss the day sky with students.

Focus questions

- Q. What features do you normally see in the day sky?
- A. For example: sun, clouds, planes, birds
- Q. Can you always see the sun during the day? If not, why not?
- A. For example: No, sometimes it is behind a building or tree, or behind the clouds if it is cloudy.
- Q. Is the sky the same every day? If not, what changes?
- A. For example: No, sometimes it is rainy and there are grey clouds so the sky isn't blue.

# Say to students

Scientists observe the sky to learn more about it. We are going to do the same.



### Investigate and record features of the day sky

3. a. Tell students that they are going outside to observe the sky.

### Focus questions

- Q. What do you think you will see in the sky when you go outside today?
- A. For example: The sky will be blue and there will be some clouds.
- Q. How could we record our observations of the sky?
- A. For example: Draw pictures; write it down; take a photo.
- b. Tell students that scientists also do field work to conduct investigations.





- 4. Explain safety rules for the field trip outside:
  - · wear a hat and sunscreen
  - wear sensible shoes
  - wear sunglasses (if possible)
  - stay with an adult
  - never look directly at the sun as it can damage your eyes.
  - 5. a. Take students outside to observe the sky.

### Focus questions

- Q. Look at the sky. What can you see?
- A. For example: It is blue; the sun is shining; there are some clouds.
- Q. What can you tell me about the clouds (if there are any)?
- A. For example: They are little and fluffy; they are big and white; they are big and grey.
- Q. Does the sky look like you thought it would? If not, what is different?
- A. For example: No, there are more clouds than I thought; some clouds are moving very fast; some clouds are very small and fluffy; some are big.
- b. Share your observations of the sky with students. Discussions may vary, for example:

Say to students		
I noticed	just like you; I also noticed	·
Did you see	?	•

c. Return inside.

#### Establish ongoing record of day sky observations

- 6. Display Sheet 2 Day and night observations.
  - a. Ask students to draw the features they observed in the sky today into the relevant 'day' box. Discuss how they can represent the features, for example: how could you show the sun shining through the clouds?

### Note

Ensure students draw what they actually observed (saw), rather than their idea of what the daytime sky should look like.

b. Explain to students that they will be observing the sky every day this week and recording their observations on **Sheet 2**.



c. Ask students to predict what they think they will observe in the sky each day and how this might change over short and long time periods.

### Focus questions

- Q. What do you predict you might see in the sky today?
- A. For example: sun, clouds, birds, the sky will be blue.
- Q. Do you think the sky will be the same all day?
- A. For example: No, the clouds will move, the birds will fly away.
- Q. Do you think the sky will look the same tomorrow or later this week?
- A. For example: No, it might rain tomorrow and the sky will be grey instead of blue, the clouds might not be white, they will be grey.
- Q. Do you think the sky will look the same next month or even next year?
- A. For example: No, the sky looks different all the time, there are different clouds and birds, sometimes there are planes. Sometimes the sky is bright blue and sometimes it is grey. The sky looks different in summer and winter.

## Note

Arrange for students to observe the sky for five to ten minutes each day for five days. Try to go out at different times each day to observe some changes in positions of the sun and changes to the colours of the landscape. Closely supervise the students and warn them to never look directly at the sun.

It is important that children be encouraged to take time to scientifically observe the world around them. We encourage you (or another adult) to join in the day sky watch and assist students in describing their observations, including:

- things they can see in the day sky (sun, clouds, birds, planes)
- animals, plants, structures and landscapes they observe
- the effects of different weather conditions.

Ask students to record observations onto **Sheet 2**. In Lesson 2, students will be making observations of the night sky to complete **Sheet 2**.

