










Topic: Examining changes over time

Investigating changes to the sky and landscape

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, posed and predictions made
-  Investigations can explore and answer questions
-  Observations can be collected and recorded
-  Information can be sorted
-  Observations can be compared with others
-  Observations and ideas can be represented and communicated

Today students will:

- ▶ investigate changes to objects and events in the local environment
- ▶ understand that changes in the sky and landscapes may affect everyday lives.

Resources

Digital

Slideshow — The changing sky

Slideshow — Changed landscapes

Sheet 2 — Day and night observations (saved copy from Lesson 2)

Sheet 5 — Sky and landscapes object and activity sort

Sheet 6 — Dress-up game cards (optional activity; cut out)

Find and prepare

Dress-up clothes for a variety of conditions (optional)

Key terms

For definitions and explanations of terms, please see the [Glossary](#).

Learning alerts

Be aware of students:

- thinking that weather stays the same all day and night
- thinking that sky and landscapes are constant and unchanging.

Suggested next steps for learning

- Explain to students that weather conditions may change at any time.
- Explain to students that landscapes and the sky can change, either through nature or human actions.

Lesson

Observe changes in the sky

1. Think about how the weather has changed over the week. Use **Sheet 2** — [Day and night observations](#) and share and discuss your observations.

Say to students

“ The sky changes all the time, over the days and weeks, and months and years. The changes affect what people do. People can identify these changes by observing the sky. You are going to look at a slideshow and think about how changes in the sky might affect what you would be doing. ”

2. View the **Slideshow — The changing sky** and respond to the questions about what activities might be done under various skies.

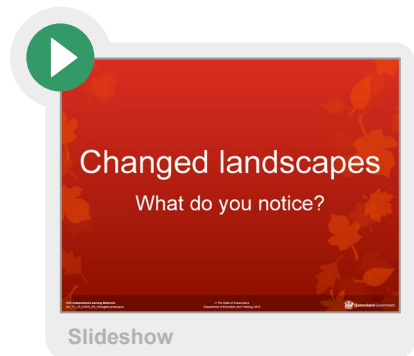


Observe changes to landscapes

Say to students

“ The landscape changes as well. Some changes can happen quickly, like when floodwaters change the landscape after heavy rain. Some changes can happen over a few weeks, such as leaves changing colour on the trees, and some changes happen very slowly, such as a tree growing from a seed. People use their science knowledge of changes in their everyday lives. For example: scientists know how to replace the earth and take care of the natural environment after a flood or rockslide and farmers know that it is time to harvest a crop when the crop is fully grown. You are going to watch a slideshow that shows some changes to landscapes. ”

3. View the **Slideshow — Changed landscapes** and discuss how the landscape has changed in each pair of images. Discuss how these changes affect people in their everyday lives and predict what changes might happen in the future.



Focus questions

- Q. *What change has happened here?*
 A. For example: a field has been made into a garden.
- Q. *Do you think this change was made by people or is it a natural change?*
 A. For example: by people
- Q. *How might this affect people in their everyday lives?*
 A. For example: people can enjoy the garden, they might need to mow the grass or weed the garden, there would be fewer animals here.
- Q. *What other changes might happen in the future?*
 A. For example: people might decide to build a swimming pool and they would dig up the garden.

Consider effects of changes on everyday life

Say to students

Scientists ask questions about changes to the sky and landscape so people can learn more about them and make predictions about what might happen in the future.

We are going to ask each other some questions about how changes to the sky or landscape might affect us. For example:












Q. *What could happen if it was a calm day and then the wind started to blow?*



Q. *What could happen if the forest was cleared so houses could be built?*

- Take turns with the student posing and answering questions. For example:
Student: What could happen if it was a sunny day and we were playing outside and it started to rain?
Adult: We would have to go inside.
Adult: What could happen if the forest was cleared and houses were built?
Student: People would have a new home but the animals couldn't live there anymore.

5. Open **Sheet 5** — [Sky and landscapes object and activity sort](#).

- Cut out the images on the second and third page and ask students to choose four.
- Glue the four images into the first column of the sky and landscape table under the heading 'object or activity'.
- Tick the 'conditions' boxes that the objects or activities would be suitable for. For example:

Object or activity	 raining	 windy	 hot	 cold	 city	 farm	 beach	 bush/ rainforest	 desert
 raincoat	✓				✓			✓	
			✓				✓		

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6. a. Show the student the cards cut from **Sheet 6** — [Dress-up game cards](#). Provide a selection of dress-up clothes and tell students they are going to play a dress-up game, or ask the students what clothes they have that they would wear for each card they choose.

Say to students

“ We are going to play a game. You need to choose a card and clothes to suit the sky or landscape on the card. ”

- b. Place the cards (cut from **Sheet 6**) face-down.
- c. Ask students to choose a card and then choose clothes.
- d. Ask students to explain why they chose the clothes (for example: a coat, a beanie and a scarf because it is cold).