Science at home: *a lesson sequence*

Parent guide

Weather watchers

Foundation, Year 1 - Earth and space sciences

Who and what is Primary Connections?

- A primary school science education program of the Australian Academy of Science funded by Australian Government.
- Recognised by 94% of primary teachers (1) and used by more than 75% of Australian primary science teachers since beginning in 2004 (2).
- An inquiry approach to primary science education.

What is inquiry learning?

- An approach that promotes curiosity and supports knowledge construction by engaging students in practical and hands-on activities.
- Students demonstrate learning by drawing, making models, videos and in many other ways called representations.

What is the Primary Connections inquiry approach?

A five phase model called the 5E inquiry model.

Phase	From the student's perspective
Engage	What do I think? What do I know about this topic? What am I curious about? What questions do I have about this topic?
Explore	I'll do some activities to investigate.
Explain	What have I learnt so far? How do I know?
Elaborate	I know a bit more now so I'm ready to do more investigating. What have I learnt? How do I know?
Evaluate	How has my thinking changed?

Watch this video for more information about the Primary Connections approach.

(1) Primary Science Teaching Survey, Australian Science Teachers Association, 2014 asta.edu.au/programs/assist/primary_science_teaching_survey
(1) Primary Connections: linking science with literacy Stage 6 Research Evaluation, University of Technology Sydney, 2018
(2) primaryconnections.org.au/sites/default/files/files/primary-connections-stage6-evaluation-report-uts.pdf

At a glance: Weather watchers

Foundation, Year 1 - Earth and space sciences

Lesson	Phase of learning	What students will do	What you will need	What students will produce
1	The ENGAGE phase of learning: Stimulate students' interest and thinking about the topic.	• Observe and identify characteristics of weather. • Describe personal experiences of weather. • Draw what they know about weather.	• Paper, • Pens or pencils • frame (e.g., cut from ice-cream container lid, cardboard) Optional: a device for taking photos	A labelled drawing showing what they think they know about the weather. A table of questions they have about the weather.
2	The EXPLORE phase of learning: Students explore the topic in a hands-on way.	• Explore the neighbourhood looking for different symbols. • Think about how symbols are used to communicate information. • Find and create symbols to represent weather.	• Paper and pencils • Scissors • Weather reports e.g. a newspaper, news website, and/or TV weather report. Optional: a device for taking photos	Symbols for different types of weather. A list of words used to describe the weather, sorted by season or other category.
3	The EXPLORE phase of learning: Students explore the topic in a hands-on way.	• Create a weather record. • Observe and the record the weather every day for 5-7 days. • Find out about seasons.	• Large piece of paper (or 2-3 A4 sheets taped together) • Pencils Optional: a device for taking photos	A data table of weather observations.
4	The EXPLORE phase of learning: Students explore the topic in a hands-on way.	• Learn that temperature is a distinctive characteristic of the weather. • Make and use a simple temperature scale to describe temperature.	• Paper and pencils Optional: a device for taking photos	A 'temperature tool' for recording temperature throughout the day.
5	The EXPLAIN phase of learning: Opportunity for students to explain what they think, based on previous activities.	• Summarise what they have learned about weather so far. • Create something to show what they have learned about weather so far.	• Paper and pencils Optional: device for taking photos, or for making videos.	A book, video, or other literacy product to show what they know about the weather and the seasons.

Check with your child's teacher for guidance about the Elaborate and Evaluate phases of learning.