Preparing to teach this sequence • Year 1• Any day outdoors

**Year 1**

# Science journals

Create a class science journal, either in hard-copy or digitally. You might:

* use/create a large scrap book or flip chart.
* use poster/butchers’ paper so learning can be displayed in sequence on the wall.
* create a digital journal using your platform/ technology of choice.
* any combination of the above.

Plan for students’ creation of an individual science journal, either in hard-copy or digitally. They might:

* use an exercise book, scrap book or flip chart to record their thinking and gather resource sheets together.
* use a folder to store and collate resource sheets, diagrams, photographs etc.
* use a digital folder to store work samples, images and videos.
* any combination of the above.

See [Using a science journal throughout inquiry](https://primaryconnections.org.au/pedagogical-tools/learning-through-inquiry-tools/using-science-journal) for more detailed information on the importance of science journals.

# Additional preparation

* Read through the teaching sequence.
* Prepare enlarged copies of Resource sheets as appropriate.
* Prepare and cut out the students' cards in the Natural Changes Resource sheet.
* Note any adaptations you would like to make to suit your school’s and students’ context.
* As this teaching sequence is designed around a picnic, some planning may be required, including:
	+ the location of the picnic.
		- Depending on the location, excursion forms may need to be completed.
	+ the timing of the picnic.
		- 30 minutes before the rest of the school start lunch is recommended.
	+ depending on your school, you may choose to organise an alternative event/sports day/excursion.
* Images and videos depicting the school at different times of the year would be useful when discussing seasonal changes.

# Gather the resources for the sequence

|  |  |
| --- | --- |
| Resource | Lesson in which this resource is required |
|  | **Lesson 1** | **Lesson 2** | **Lesson 3** | **Lesson 4** | **Lesson 5** | **Lesson 6** | **Lesson 7** |
| Class science journal (digital or hard-copy) | X | X | X | X | X | X | X |
| Optional: Individual science journal (digital or hard-copy) *per student* | X | X | X | X | X | X | X |
| Materials to create a word wall | X | X | X | X | X | X | X |
| Optional: Frames cut from sturdy materials such as ice-cream container lids, cardboard etc. *per student* | X |  | X |  | X |  |  |
| Equipment to enable the viewing of online resources including images, videos and websites |  | X |  |  |  | X |  |
| Optional: A video of a local weather report |  | X |  |  |  |  |  |
| Optional: Photographs of symbols used in everyday life or around the school |  | X |  |  |  |  |  |
| Optional: Clips of different weather sounds (rain, wind, thunder etc.) |  | X |  |  |  |  |  |
| Optional: Computer and appropriate software for students to draw symbols |  | X |  |  |  |  |  |
| Optional: The Peppa Pig episode ‘Weather Station’ |  | X |  |  |  |  |  |
| 4 x small pieces of paper, approximately 8 cm x 8 cm *per student* |  | X |  |  |  |  |  |
| Device that connects to the internet (may be shared between students) |  | X |  |  |  |  |  |
| Pre-prepared ‘weather watch class table’See lesson steps in lesson 2 for sample |  | X | X | X | X | X | X |
| Factual texts about the weather |  |  | X |  |  |  |  |
| Optional: photographs of the sky |  |  | X |  |  |  |  |
| Optional: digital camera or iPad (may be shared between students) |  |  | X |  |  |  |  |
| Source of warm or hot air |  |  |  | X |  |  |  |
| Source of cold air |  |  |  | X |  |  |  |
| Self-adhesive notes OR cards/strips of paper |  |  |  | X |  |  |  |
| Selection of thermometers (colour-band, alcohol and digital thermometers etc) |  |  |  | X |  |  |  |
| Optional: bucket of ice cubes |  |  |  | X |  |  |  |
| Optional: images taken with a thermal camera |  |  |  | X |  |  |  |
| String or chalk to mark physical temperature scale  |  |  |  | X |  |  |  |
| A paper fan of piece of card *per student* |  |  |  | X |  |  |  |
| Coloured pencils, including red and blue *per student* |  |  |  | X |  |  |  |
| Scissors *per student* |  |  |  | X |  |  |  |
| Peg or large paper clip *per student* |  |  |  | X |  |  |  |
| Optional: digital device to record daily weather report (may be shared between students) |  |  |  | X |  |  |  |
| Range of differently weighted materials cut to the same size (e.g. 8 x 15 cm), including:* lightweight materials that do not tear easily (thin card, calico, plastic from plastic bags)
* heavyweight materials (heavy card, balsa wood, linoleum)
 |  |  |  |  | X |  |  |
| Handheld fan (made from thin pleated cardboard or similar) *per group* |  |  |  |  | X |  |  |
| 2 x pegs *per group* |  |  |  |  | X |  |  |
| 1 x coat hanger *per group* |  |  |  |  | X |  |  |
| 1 x each A4 “Yes”, “No” and “I don’t know” cards |  |  |  |  |  | X |  |
| Optional: two photographs of different features around the school at the potential locations for the picnic that you think will have seasonal change. |  |  |  |  |  | X |  |
| Time-lapse videos of natural and constructed changes. These could include:* the sky changing from night to day, e.g. [March 12 Farm Sunset Timelapse](https://www.youtube.com/watch?v=UxYJkxx3NuU).
* a construction site, e.g. [Construction Time-Lapse: Single Family Home Built in 5 Months](https://www.youtube.com/watch?v=CMrpeNaNh84).
* tree changing with the seasons, e.g. [One year in 2 minutes](https://www.youtube.com/watch?v=KkY3JGDqMT8).
* ants building a nest, e.g. [Busy Ants Timelapse](https://www.youtube.com/watch?v=gYq8a3dXw80).
* a spider building a web, e.g. [Spider Net Building Timelapse.](https://www.youtube.com/watch?v=L284iD585rQ&t=23s)
* a flower unfurling, e.g. [Time lapse Dandelion flower to seed head.](https://www.youtube.com/watch?v=UQ_QqtXoyQw)
 |  |  |  |  |  | X |  |
| [How do you know when rain is coming? video](https://www.abc.net.au/education/for-the-juniors-how-do-you-know-when-rain-is-coming/13605556) by the ABC |  |  |  |  |  | X |  |
| Calendar wheel created in lesson 6 |  |  |  |  |  |  | X |
| Student resource sheets**Demonstration copies** for whole class discussion and representation are required for each resource sheet in this sequence. **Individual copies for each student/group** are also often required and indicated when marked with an \*.Teachers are best placed to make decisions about any modifications resource sheet may require to best suit the needs of their students. |
|  | **Lesson 1** | **Lesson 2** | **Lesson 3** | **Lesson 4** | **Lesson 5** | **Lesson 6** | **Lesson 7** |
| Symbols in my world Resource sheet  |  | X |  |  |  |  |  |
| Weather symbols in forecasts Resource sheet |  | X |  |  |  |  |  |
| Eye to the sky Resource sheet |  |  | X |  |  |  |  |
| Our temperature tool Resource sheet\*Printed on thin card for each student to support re-use |  |  |  | X |  |  |  |
| Moving materials Resource sheet\* |  |  |  |  | X |  |  |
| Natural changes Resource sheet\* cut into individual cards |  |  |  |  |  | X |  |
| Calendar wheel Resource sheet\* |  |  |  |  |  | X |  |
| Picnic planner Resource sheet\*  |  |  |  |  |  |  | X |