Preparing to teach this sequence • Year 3 • Scorching swings and slides

**Year 3**

# 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](/using-science-journal-throughout-inquiry) for more detailed information on the importance of science journals.

# Additional preparation

* Read through the teaching sequence.
* Note any adaptations you would like to make to suit your schools’ and students’ context.
* Source local examples of images and videos depicting outdoor playgrounds equipment that students are familiar with, and if possible a thermal image of the same playground taken on a hot day. Examples are provided in the sequence if you are unable to source local examples.
* Make a note of the ground coverings or surfaces that students might be able to measure the temperature of during the sequence.
* Decide if your students will be designing their playground, or if you would also like them to build a 3D prototype/model as well. If you decide to build prototypes/models, you might like to ask students to begin collecting materials that might be useful. Materials should be re-used and recyclable. Examples include boxes (tissue, cereal, shoe, etc.) and other cardboard products, foil and trays made out of foil, bottle tops and jar lids, skewers, paddle pop sticks, etc.

# 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 |
|  |  |  |  |  |  |  |  |
| 1 x candle + means of lighting it |  | x |  |  |  |  |  |
| 1 x hot water bottle (or heat packs/ wheat bags as a substitute) |  | x | x |  |  |  |  |
| Access to warm water |  | x | x |  | x |  |  |
| 1 x large metal spoon |  |  | x |  |  |  |  |
| 1 x large wooden spoon |  |  | x |  |  |  |  |
| 3 x standard metal spoons *per group* \* |  |  | x |  | x (1 only) ~ |  |  |
| 3 x standard wooden/bamboo spoons *per group* \* |  |  | x |  | x (1 only) ~ |  |  |
| \* You may use only 1 x spoon per group if you have difficulty sourcing this many metal/ wooden spoons. Simply allow the spoons to return to ambient temperature before placing near the next heat source. | | | | | | | |
| 1 x temperature measuring instrument *per group* (glass thermometers, radar/surface thermometers etc). |  |  |  | x |  |  |  |
| Access to different ground surface that are in direct sunlight (grass, concrete, asphalt, dirt etc. |  |  |  | X |  |  |  |
| 1 x plastic spoon *per group ~* |  |  |  |  | x |  |  |
| ~ Alternatively, you might use skewers or sticks made of metal, wood and plastic. Try to ensure that the object use is of similar thickness. | | | | | | | |
| 1 x timing device *per group* |  |  |  |  | x |  |  |
| Optional: device for taking photographs |  |  |  |  | x |  |  |
| Various objects for student planned investigations- can be sourced from readily available classroom resources |  |  |  |  |  | x |  |
| Sustainably sourced craft materials for students building a prototype of their playground/ playground equipment design. |  |  |  |  |  |  | x |
| Student resource sheets **Demonstration copies** for whole class discussion and representation, as well as **Individual copies for each student/group** are required for each resource sheet in this sequence.  Whilst students often work collaboratively in teams to plan and carry out investigations, you might prefer for each student to create their own record to assist in the assessment of their Science understanding and Science inquiry. Teachers are best placed to make this decision based on the needs of their students, as well as any decisions about any potential modifications a resource sheet may require. | | | | | | | |
| Thermal images Resource sheet (demonstration only) | X |  |  |  |  |  |  |
| What’s hot Resource sheet |  | x |  |  |  |  |  |
| Spoon temperature investigation Resource sheet |  |  | x |  |  |  |  |
| Ground surface temperature investigation Resource sheet |  |  |  | X |  |  |  |
| Hot water investigation planner Resource sheet |  |  |  |  | x |  |  |
| Variables grid Resource sheet (demonstration only) |  |  |  |  | x | x |  |
| Investigation planner Resource sheet |  |  |  |  |  | x |  |