Key lesson outcomes

Students will be able to:

- work in collaborative learning teams to follow a procedural text to generate observations to test different claims

- record their observations in a table and compare them to 'real life' observations from Lesson 2

- contribute to discussion about their results and whether the evidence can support different claims

- identify the features and purpose of a role-play, as well as its advantages and disadvantages as a model to explain the movement of the Sun, Earth and Moon.

<table>
<thead>
<tr>
<th>Science*</th>
<th>English</th>
<th>Maths</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACSHE091</td>
<td>ACLEA1504</td>
<td>ACMSP118</td>
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*SU—Science Understanding, SHE—Science as a Human Endeavour, SIS—Science Inquiry Skills

This lesson also provides opportunities to monitor the development of students' general capabilities (highlighted through icons, see page 5).

Teacher background information

Using models to test theories

In this lesson, students are using role-play as a physical model. It is not being used as a device to explain an idea; it is being used to explore the implications of different models. This is a technique used by scientists, for example, when they are studying systems they cannot directly manipulate. By modelling what observations different models might generate, students can gather evidence as to whether certain models can explain observations. Students might not be familiar with this use of models, and the importance of this method of generating scientific knowledge might need to be highlighted.

Equipment

FOR THE CLASS

- class science journal
- word wall
- TWLH chart
- team roles chart
- team skills chart
- 1 enlarged copy of ‘Revolution role-plays’ (Resource sheet 4)
- 1 enlarged copy of ‘Role-play observations’ (Resource sheet 5)

FOR EACH TEAM

- role wristbands or badges for Director, Manager and Speaker
- each team member’s science journal
- 1 copy of ‘Revolution role-plays’ (Resource sheet 4)
- 1 copy of ‘Role-play observations’ (Resource sheet 5)
- 1 clipboard with pen
- 1 torch or lamp
- 1 softball or baseball
- 1 world globe or soccer ball with a map of Australia attached (see ‘Preparation’)

Lesson 3 Going in circles