Earth and Space

Science Year 5 Lesson 4 of 6

Learning Objective	<u>Resources</u>
To learn about the phases of the Moon.	Slides
	Teacher Notes
	Worksheet 4A/4B
	Split pins
	Template 4A
	Moon Cards 4A
	Moon Cards 4B (FSD? activity only)

Teaching Input

- When was the last time the children saw the Moon? Can they describe what they saw?
- Show the children some pictures of the Moon in its different phases. Does the Moon actually change shape?
- Use the slides to discuss how, although the Moon is always a roughly spherical shape, we see the part that is lit up by the Sun. Depending on the Moon's position in its orbit of Earth, we see a different amount of the lit-up part.
- Show the diagram on the board which shows Earth, the Sun and the Moon. Optional: Using the model described in Teacher Notes, ask a volunteer to come and stand in the model.
- If we were on Earth, looking at the Moon in this position, how much of the lit-up part would we see? (new moon)
- Agree that, in this position, we wouldn't be able to see any of the lit-up side of the Moon. When the Moon is in this position, we call it a new moon.
- Show the Moon in the next position (waxing crescent) (if using the model, place the Moon in the next position anticlockwise). If we looked at the Moon in this position, what would we see?
- Repeat this with each of the eight positions of the Moon, naming each as they discover them.

Main Activity

Lower ability:

Children create a spinning model of the Moon phases using Worksheet 4A and Template 4A. They need to number the correct phase according to the key and stick the correctly shaped Moon Card 4A in the correct position.

Middle ability:

Children create a spinning model of the Moon phases using Worksheet 4B and Template 4A. They need to label the correct phase according to the key and stick the correctly shaped Moon Card 4A in the correct position.

Higher ability:

Children create a spinning model of the Moon phases using Worksheet 4B and Template 4A. They must shade the phases of the Moon correctly, and label the phases according to the key.

Fancy something different...?

- Give children Moon Cards 4A (the order of these are pre-muddled so children can cut out the cards themselves, without being given the answers).
- Children match the names, descriptions and diagrams of each Moon phase and attempt to put them in order in a cycle starting with the new moon.
- Children can work in pairs or small groups to match and order the cards correctly.

Plenary

Assessment Questions

Show the children a diagram of the Moon's orbit, stating that the orbit isn't flat, it's slightly tilted. Most of the time, this tilt means that when the moon is positioned between the Sun and Earth, we see a new moon. However, sometimes, depending on where we are on the planet, the Moon can block out the light from the Sun as it passes between it and Earth. Look at some pictures of some solar eclipses and watch a video: https://www.nationalgeographic.com/news/2016/03/160307-watch-total-solar-eclipse-space/

- Can children name the different phases of the Moon?
- Are children able to order the phases of the Moon?
- Can children describe how the phases of the Moon are created?