

Hook:

Try astronaut food— freeze dries strawberries, blueberries, raspberries and an ice cream sandwich



Stargazers

Focus: Science/computing



Knowledge:

- What are the planets in the solar system?
- Which planets are terrestrial?
- Which are Jovian?
- What are the phases of the moon?
- How does night and day happen?
- How long does it take for the earth to orbit around the sun?
- How long does it take for the moon to orbit the earth?
- What is zero gravity?
- How are craters formed?
- What was the space race?
- Who was the first person in space? · What year?
- Who was the first person on the moon? What year?
- Do people go into space now? Where?

What is a stop motion animation?
 What is meant by animation?
 How do they work?
 What happens when you speed it up/slow it down?
 What makes an effective stop motion animation?
 How can we edit and refine images?
 What is an onion skin? How is it helpful?
 How do we add voices to the animation?

Learning Journey: Welcome to the planets!

Name the 8 planets in the solar system— use ICT to research the planets and sort them depending on what has been found out (working scientifically).

Explore the sizes of the planets of the solar system using different materials—work in groups to sort the sizes of object—rotation makes them spherical.

Learning Journey: The Moon

Explain night and day—use models to show night and day—write explanation in science books.

Phases of the moon—use model to show orbit of the moon around the earth—show moon phases on oreos and sketch onto books.

Learning Journey: Gravity

Science investigation on craters— explore what happens when objects of different sizes and weights are dropped onto surface. Record scientifically.

Investigate zero gravity

Learning Journey: Rocket Man

The Space Race

Who has been to the moon—create a time line of people who have been to the moon

International Space Station—what life is like in space today

Vocabulary:

Animation	Axis	waning
Stop motion	Rotation	gibbous
Evaluate	Gravity	orbit
Timer	Solar system	spherical
Onion skin	Crescent	celestial
Refine	Waxing	
Sequence	Jovian	
Frames	Terrestrial	

Characteristic foci:

Respect/articulacy

Skills:

Create a series of linked frames by adjusting an image slightly

Evaluate the good and bad points of an animation

Create own images for the animation

Make changes to the image using the onion skinning

- scientific research
- draw diagrams
- create scale models to show night/day and phases of the moon etc.
- taking measurements
- recording information
- making predictions

Curriculum Coverage:

Sc5/4.1a describe the movement of the Earth, and other planets, relative to the Sun in the solar system

Sc5/4.1b describe the movement of the Moon relative to the Earth

Sc5/4.1c describe the Sun, Earth and Moon as approximately spherical bodies

Sc5/4.1d use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky
select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs

Learning Journey: Stop Motion Animations

Watch a range of stop motion animations

Lee (ICT) to teach a session on stop motion animations

Outcome:

Stop motion animations of either solar system/moon phases/ how night and day happen .

Trip / Visitor:

Space Centre

Display Plan:

Children's light and day explanations, photographs of investigations



Stargazers

Focus: Science



What do they already know?

Pupils should be taught to:

- observe changes across the four seasons
- observe and describe weather associated with the seasons and how day length varies
- Pupils should observe and talk about changes in the weather and the seasons.
- Pupils should be warned that it is not safe to look directly at the Sun, even when wearing dark glasses.
- Pupils work scientifically by: making tables and charts about the weather; and making displays of what happens in the world around them, including day length, as the seasons change.

How will they remember it?

Mini Quizzes

Add to Kaboom pot

Reading texts around the subject (links to English / GR)

Pre learning and end of unit assessment

Visit to the Space Centre

Which resources will I need?

iPads

Stop motion studio

Flour

Rocks

Meter sticks

Fruit

What do I need to know to be able to teach this?

Planets in the solar system and the order of these—key facts about them

Key events in the space race

Key people involved in space discoveries