Learning Enquiry Organiser | Year 6 Autumn 2

Big Idea: 6 STEAM: Mastering the 4 C's of 21st century learning will unlock opportunities throughout our lives.

We will use the skills of critical thinking, communication, collaboration and creativity to help us answer questions and solve problems. We will look at some of the big issues and use these skills to try to answer questions relating to space exploration.



Children will use their creativity to present their learning in an engaging way. These will be shared with peers and with members of the Torbay Astronomical Society.



Children will be working independently to present their scientific findings and to decide how to present their work.

Broadening our experiences:

Hook: We will have an afternoon to introduce and discuss our place in the universe – reflecting on what we already know and considering what we'd like to find out.

Showcase: On Thursday 10th December, we will have a stargazing evening at school. Members of the Torbay Astronomical Society are coming in to help us review our learning. Children will share their information texts with them.

How has scientific observation helped us learn about the Earth, Sun and Moon ?



During their Learning Enquiry, the children will be invited to immerse themselves in our universe and explore the wonders it holds. In science lessons, they will investigate the relationships between different celestial bodies and how these influence the seasons, as well as day and night on Earth.

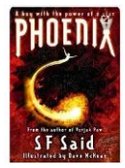
In computing, they will use coding to create a computer-generated, scale model of our solar system. The children will also explore the discoveries made by scientists and astronomers throughout history, using their own scientific observation skills to investigate and test ideas. We will consider some fascinating questions surrounding space exploration and develop our debating skills by discussing topics such as whether humans really did land on the Moon and what it takes to become an astronaut.

To bring their learning together, the children will create a non-chronological report showcasing what they have discovered. They will then have the opportunity to share their work with their peers and members of the Torbay Astronomical Society, who will be visiting us for a stargazing evening in December.

Our Key vocabulary

rotate	To move or cause to move in a circle round an axis or centre.
spherical	Shaped like a sphere.
astronomer	An expert or student of astrology: the study of space.
orbit	The curved path of a celestial object or spacecraft round a star, planet, or moon.
axis	An imaginary line about which a body rotates.
algorithm	Aa process or set of rules to be followed in calculations or other problem-solving operations, especially by a computer.
input	Input is data or information that a computer receives.
output	Output is data that a computer sends out
sequences	A particular order in which related things follow each other.
variables	Things that are able to be varied or to change.

Texts that we will be reading in school:



Phoenix: The Boy with a Power of a Star, by S F Said

Recommended texts to share at home:

Cosmic, Frank Cottrell Boyce and Steven Lenton

Dr Maggie's Grand Tour of the Solar System, Dr Maggie Aderin-Pocock

Curiosity: The Story of a Mars Rover, Markus Motum

The boy who made the world disappear, Ben Miller

Science Sticky Knowledge

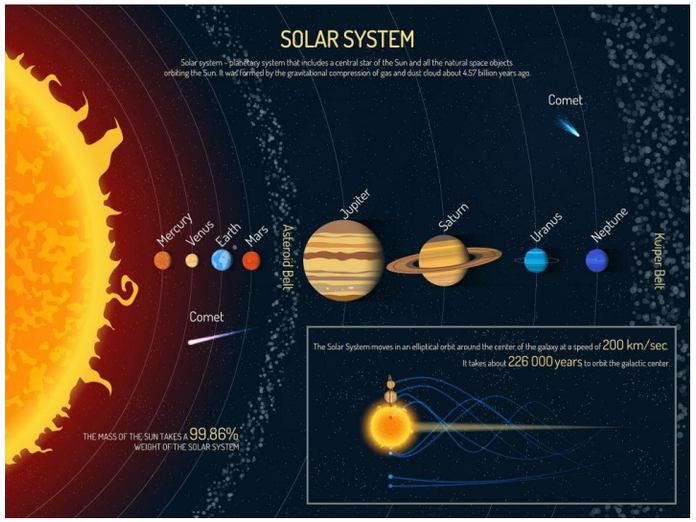
The Sun is a star at the centre of our solar system and that it has eight planets.

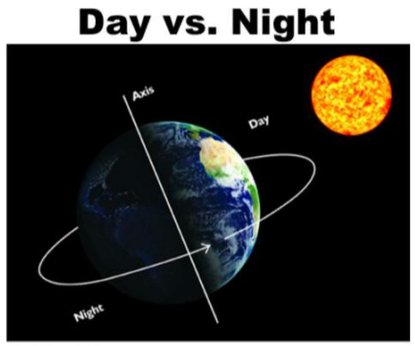
Day and night are caused by the rotation of the Earth on its own axis.

The Sun, Earth and Moon are spherical bodies in our solar system.

The seasons are caused by the Earth's orbit around the sun and the tilt of the Earth.

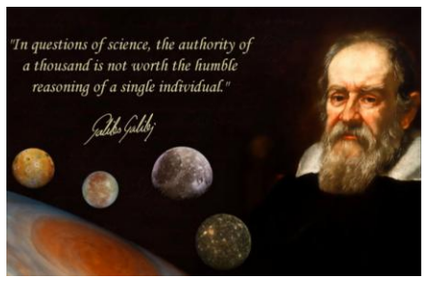
The moon orbits the Earth approximately every 28 days.











Computing Sticky Knowledge

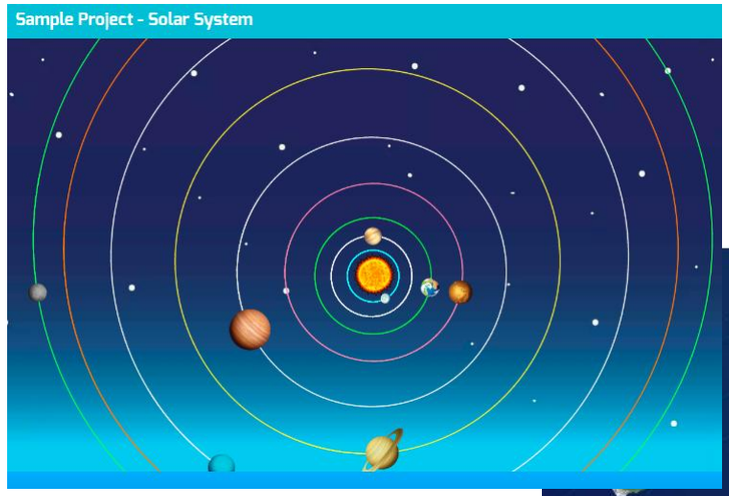
A simulation is an animated model that mimics the operation of an existing or proposed system.

Repetition or loops are a set of actions or events that are repeated either a number of times or forever.

The sequence of a program is extremely important as carrying out instructions in the wrong order leads to a program performing incorrectly.

Coding is a skill where you take instructions (the steps in a task) and translate it into a language the computer understands.

Programs are designed using common building blocks, known as programming constructs.







Big Ideas

1. Sustainability: It is everyone's responsibility to use the Earth and its resources in a way that is sustainable.

2. Global Citizens: Societies across the world are built on shared ideas and systems in which every citizen has their role to play.

3. Connecting to our locality: Our locality is a place of historical, cultural and geographical significance and this impacts our lives.

4. Talents and Interests: Each of us can develop a unique set of talents and interests to bring life-long contentment, joy and direction.

5. Active Citizenship: Everyone can use their voice, knowledge and skills for the good of others.

6. STEAM: Mastering the 4 C's of 21st century learning will unlock opportunities throughout our lives.

Our School Values -Respect

<u>At Cockington Primary School we have agreed that Respect is:</u>

Being kind, thoughtful and considerate of each other and of our surroundings; we understand and embrace the differences within our school community.



Our School Values -Aspirations

<u>At Cockington Primary School we have agreed that Aspiration is:</u>

Working hard to meet our full potential. Working hard and striving to be the best we can be; we constantly challenge ourselves to achieve more that we ever thought possible.



Our School Values – Perseverance

<u>At Cockington Primary School we have agreed that Perseverance is:</u>

The willingness to keep trying even when things are difficult; We never give up and we see mistakes as steps towards our goals.



Our School Values -Collaboration

<u>At Cockington Primary School we have agreed that Collaboration is:</u>

Working and learning together to achieve a common goal; recognising and celebrating individual strengths ands supporting each other.



Our School Values –Creativity

<u>At Cockington Primary School we have agreed that Creativity is:</u>

When we are being imaginative, solving problems and thinking of ideas and possibilities; We take risks and use fresh thinking to overcome obstacles.



Our School Values -Independence

<u>At Cockington Primary School we have agreed that Independence is:</u>

Having the confidence to make our own decisions; recognising our own abilities, having a go and seeking support when needed.

