| Topic   | The Solar System  | Key<br>Subject | DT  | Phase  | 1/2 | Cycle no. | 1     |
|---|---|----------------|---|--|-----|-----------|-------|
|   |   | focus          |   |  |     | Term      | Sum 2 |
| Previous learning: EYFS – split pin puppets  National Curriculum objectives |   |                | Future learning: The River Nile – Year 3/4 School KPI's |  |     |           |       |
| DT  | <ul> <li>To explore and use mechanisms [for example, levers, sliders, wheels and axles], in their models</li> <li>To design purposeful, functional model</li> <li>To select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</li> <li>To select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</li> </ul> |                |   | <ul> <li>To explore the use of levers, wheel and axles to make a model of the Earth and the moon, with orbiting space craft.</li> <li>To use maps and diagrams to identify the planets of the solar system as well their size, order and composition.</li> <li>To explore the use of levers, wheel and axles to make a model of the solar system.</li> </ul> |     |           |       |
| History   | To know about sign events (the space)   | -              | istorical   |  |     |           |       |

## **Statement of intent:**

During this topic pupils will learn:

- That the human race was able to build rockets that took them into space.
- That satellites, both man made and natural, orbit
- How to make a physical representation of different bodies orbiting in space
- About the physical composition of the solar system
- How to make a physical representation of the solar system

## **Activities:**

| Learning intentions  | Tasks   |
|--|---|
| Week 1 To order key events in the space race. To look at key people in the space race. To look at how to survive in space.               | <ul> <li>Arranging and describing key pictures that show events in the space race.</li> <li>Identify and draw key people in the space race (Yuri Gagarin, Valentina Tereshkova, Neil Armstrong, Buzz Aldrin, Jim Lovell, Tim Peake). Children to make commemorative coins/ stamps/ statues/ bank notes or portraits using a variety of materials.</li> <li>To plan ways to help people survive in space – food, drink, toileting. Children to match the solution to the problem e.g. sleeping – being tied down (Year 1). Children to design a way of packaging food or drink (Year 2)</li> </ul> |
| Week 2 To select from and use a wide range of materials and components, including construction materials to make a space vehicle/ rocket | <ul> <li>Look at a selection of space vehicles and rockets. Record/match their purpose.</li> <li>Draw a picture of their design for a space vehicle.</li> <li>Plan and source materials to make their vehicle.</li> <li>To look at ways of joining and fixing materials.</li> </ul>   |

| Week 3 To design a purposeful, functional model To use levers, wheels and axles to make a model of the Earth and the moon, with orbiting space craft using a range of tools and equipment | <ul> <li>Look at a diagram and stick in the orientation of the planet Earth, the moon and a rocket.</li> <li>To understand that split pins can be used to make objects move – children to make a planet with a plane which moves around inside the planet (teacher to model the making process).</li> <li>Draw a picture of their design for:  Year One to make a model of the earth and a rocket orbiting (children to be given the outlines)  Year Two to make a model of the earth, the moon and a rocket orbiting</li> <li>To make the model using split pins to join the moving parts of their planets and rockets.</li> </ul> |
|---|---|
| Week 4 To identify and name the planets of the solar system   | <ul> <li>Use a selection of diagrams, pictures and models to identify the planets in the solar system.         Year one to draw pictures of planets and to arrange them into the Solar System (could be used to make a large display)         Year Two to make 3d models of the planets, thinking about the size, colour and order.</li> </ul>  |
| Week 5 To look at the size and composition of certain planets (Mercury, Mars, Jupiter, Pluto).  | • Children to research different planets, looking at the composition and make up of each planet. Children to make fact files and posters about a chosen planet.   |
| Week 6 To make a model of the solar system. To design purposeful, functional model  | <ul> <li>Review how they made their model of the earth and moon and identify how split pins can be used to join moving parts.</li> <li>Draw a picture of their design for:  Year One to make a model of the sun and earth (and a selection of planets if possible). Children to be given circles to choose from.  Year Two to make a model of the solar system (start with the earth and key planets looked at in week 5)  Children to think about the sizes of the planets and the sun.</li> </ul>   |
| Week 7 To make a model of the solar system. To select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]       | <ul> <li>To make the model using split pins to join the moving parts of their solar system.</li> <li>Children to evaluate their design and peer review each other's work.</li> </ul>  |

| ter within other subjects) |
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