

Stephenson Memorial Primary School - Project Medium Term Planning

Term : Autumn (Precision - Science)		Project Question: Where is the world and what makes it go round?		Year group: 5	
Summary of the project: Exploring our solar system and how the universe was created. Looking at what makes up our solar system and how people can travel and survive in Space.					
What do we want children to know by the end of this project?					
Science How the universe was created, what the universe contains, definitions. The names and orders of the planets Comparing heliocentric and geocentric models I know about and can explain the movement of the earth and other planets relative to the sun I know about and explain the movement of the moon relative to the earth Phases of the moon - keeping a moon diary I can describe the sun, earth and moon using the term spherical I know and can demonstrate how night and day are created International space station - how astronauts survive in space. Famous Scientist - Ptolemy, copernicus, Tim Peake, Helen Sharman, current astronauts			Art Produce increasingly accurate freehand drawings and paintings Effect of light on objects and people from different directions Concept of perspective Understanding of pencil grades Understanding of positive and negative shapes Artist - Paul Cadden - perspective drawing and portraits using a variety of drawing techniques. Peter Thorpe (Space)		DT Use research and develop design criteria to inform the design of products that are fit for purpose Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
Music Sing a group piece with changes in tempo and dynamic. Sing a broad range of songs from an extended repertoire with a sense of ensemble and performance. Observe phrasing, accurate pitching and appropriate style. Sing three-part rounds, partner songs, and songs with a verse and a chorus.	Computing To be able to collaborate using a variety of systems Be aware that not everything online is true. Be aware of the pros and cons of using the internet. Know cyberbullying is wrong Know how to use social media responsibly	French Know basic greetings and phrases. Know numbers to 60.	RE Key beliefs of the Jewish religion. Moses and why he is important to Jewish people. Place of worship and why Jewish people go to a synagogue.	PE HIIT training Netball I can identify and complete the different passes - chest, bounce and shoulder I can understand the rules of footwork I can understand the rules of contact I can understand marking I can complete the different types of dodge I can shoot in a range of ways I can identify the different positions To know the difference between defence and attack. I can play a game of netball.	

Which words and phrases do we want children to recall and define by the end of this project?					
Science Planet, Solar system, star, Orbit, Axis, Spherical, waxing, waning, full moon, half moon, new moon, crescent, gibbous, asteroid, comet, galaxy, leap year, meteorite, revolve, time zones, universe	Art Shading - To be able to collaborate using a variety of systems. Pencil grades, positive/negative shapes perspective	Music tempo, dynamic, phrasing, pitching, rounds, verse, chorus	D&T design mechanical systems: pulleys, levers, gears, cams	Computing cyber-bullying	RE Synagogue Moses

In order to ensure all children can achieve - what pre teaching/learning will need to occur? What prior knowledge will they need?				
Science The Big Bang - how was the universe created? What is the universe? What is a planet? Names and orders of the planets Heliocentric and Geocentric models of the solar system		Art Observational drawing.		DT Knowing the four steps of the design process Know how to make structures stronger and more stable.
Music Pitch and tone Styles of songs. Know what a verse and chorus are Know different notes Have sung a round before.	Computing Use of ipad day to day and apps, including pages, numbers and keynote. Knowing how to stay safe online.	French As above - using recap and basics.	RE Knowing what a religion is Knowing that there are other religions Knowing the importance of respecting the beliefs of others	PE Throwing and catching Agility, balance and coordination HIIT covered in Y4.

<p>Which visits,visitors and special experiences will we organise to secure children’s knowledge ?</p> <p>Planetarium trip Astronomer visit Synagogue visit</p>	<p>Which books will help the children secure and think more deeply about the knowledge in this project?</p>								
	<p>Reading Spine</p> <table><tr><td>Autumn 1</td><td colspan="2">Autumn 2</td></tr><tr><td>Bill’s New Frock</td><td colspan="2">Skychasers</td></tr></table>			Autumn 1	Autumn 2		Bill’s New Frock	Skychasers	
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<p>Driving Texts</p> <table><tr><td>Fiction</td><td>Non Fiction</td><td>Poetry</td></tr><tr><td>George and the Big Bang</td><td>Astrophysics for young people in a hurry The skies above my eyes</td><td>Please Mrs Butler Heard it in the playground</td></tr></table>			Fiction	Non Fiction	Poetry	George and the Big Bang	Astrophysics for young people in a hurry The skies above my eyes	Please Mrs Butler Heard it in the playground	
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How will we exhibit our learning? How will we present our learning from each subject?

Children will make a model to show their learning about space and DT. Children will run their own science fair to present their models to the school community.
Project books will show the children’s learning journey across foundation subjects
Music knowledge will be exhibited through performance.