ambitious, capable learners, ready to learn throughout their lives

ethical, informed citizens of Wales and the world

Healthy, confident individuals, ready to lead fulfilling lives as valued members of society

enterprising, creative contributors, ready to play a full part in life and work

Topic Map – Year 5 - Space

Pupil Voice:

aliens, galaxies, life cycle of a star, the sun, Area 51, Can plants live out in space? What happens to your body in space?

Learning Logs:

Phases of the Moon – log/diary. Link to Class Blog.
Model linked to space e.g. spacecraft, planets, solar system

Languages, Literacy and Communication:

- Discursive writing using 'Man on the Moon' conspiracy theory as a stimulus.
- Debate focusing on the conspiracy theory.
- Research, make notes about an aspect of space e.g the planets, stars, the moon. Use *Book Creator* –create non-fiction book.
- *Read, Write, Perform* – Lost in Space: A transmission of Hope. Write and record a transmission home from an astronaut stranded on Mars. Broadcast on radio station.
- Write a formal letter home – from an alien visiting Planet Earth. Welsh: Astronaut.
- Instructions for an astronaut's exercise programme. Commands/activities.
- Welsh poetry recitation – *I'r Lleuad*.

Mathematics and Numeracy:

- 3D shape / 2D shape – radius, diameter and circumference of circles – properties of spheres.
- Measure – weight / mass linked to space food/weightlessness.
- Distance of planets from the sun.
- Scale of the solar system.
- Line graphs linked to the changing temperature of the Earth – link to globabl warming.
- Data handling – mean, mode, median linked to temperatures of the Solar System's planets.
- Number – place value – 6 digit numbers+
- Time – how long it takes the planets to orbit the sun/ the moon to orbit the Earth.

Science and Technology:

- Phases of the moon – keep a diary.
- Life Cycle of a star – create a display.
- Sundials / shadows – track the sun throughout a school day. Photographic record. Research/information about the planets e.g. diameter, temperature, features. Database. Book Creator.
- Plants – conditions needed for growth/ investigation / characteristics of living things.
- Design a Rocket – emphasis on aerodynamics / forces / propulsion.
- *Galaxy Zoo* app - categorize galaxies.
- *Feed Spot* – space blogs of the day.

Outdoor Learning:

- Sundials /shadows.
- Distance simulation of distance between planets.
- Rocket demonstration.

Curriculum Cymreig:

- Welsh astronaut – John Anthony Llewellyn
- Techniquest /Cardiff Museum

Super Start (Engage)

Visit to Cardiff Museum – Tim Peake capsule

Techniquest - Planetarium

Literacy | **Numeracy** | **Digital Competency**

Critical Th. / Problem S. | Planning and organising

Creativity / innovation | Personal effectiveness

Fabulous Finish (Celebrate)

Outdoor Showcase – practical, interactive activities.
Rocket demo/Moon Shadows / Green Sc

Visitors:

- Local astronomical society / visit with telescope.
- Rhys Phillips - Airbus
- e-mail / Tweet astronauts

Visits:

- Techniquest - Planetarium.
- Cardiff Museum

Real life contexts:

- Real life astronauts.
- NASA – potential contact.
- *Galaxy Zoo* app -

Expressive Arts:

- Design and make own sundial / shadow puppets.
- Constellations – artwork linked to legends – punched holes in black card.

Humanities:

- Man on the Moon – Neil Armstrong – link to conspiracy theory unit of work.
- Climate Change – what factors affect it? What impact is it having on earth? Link to apocalypse films. Poster about the issue.
- Planet Earth – the equator, pollution, the ozone layer, global warming.

Health and Well-being:

- Design/create an exercise programme for an astronaut.
- Dance – choreograph dance sequences that reflect the journey of an astronaut from Earth to a different planet.
- Nutrition / Healthy eating – food diary of an astronaut.
- Diamond Ranking – What items would you take to space and why?
- What makes a good astronaut? What makes a good team?

Quality Texts:

- 'Space Stowaway'.
- *'George's Secret Key to the Universe'* by Stephen and Lucy Hawkins.
- Non-fiction / information books about space / planets.
- 'Planet Prison' multimedia text