Year Group: Year 5 Term: Spring 2 & Summer 1

Curriculum focus: Science

Learning Challenge Title: Is there a galaxy far, far away?

Science:

• describe the movement of the Earth, and other planets, relative to the Sun in the solar system

- describe the movement of the Moon relative to the Earth
- describe the Sun, Earth and Moon as approximately spherical bodies
- use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.
- explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the fall ing object
- identify the effects of air resistance, water resistance and friction, that act between moving surfaces
- recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.

Design and Technology:

- design purposeful, functional, appealing products for themselves and other users based on design criteria
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to
- their characteristics
- build structures, exploring how they can be made stronger, stiffer and more stable
- explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

Wow Starter:	WOW: Bring in a mobile planetarium. OR Watch pictures and videos of space.
LC Questions: 1	Could we describe the Earth, Sun and Moon as Space family?
2	What is gravity and why is Isaac Newton linked to it?
3	How do the Earth Sun and Moon move through space?
4	How does the moon change shape in the sky?
5	What can we learn about the solar system and the other planets in it?
6	What would sunrise look like on Alderaan?

7	How can we land on Alderaan?
8	Who was the first person in space and how would you get there?
9	Can you build a spaceship and lander?
Writing O	portunities: Biography, Narrative,

Year Group: Year 5 Term: Summer 1

Learning Challenge Title: What's so special about the USA? Curriculum focus: Geography

Geography

- locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities
- understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America
- human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water

Wow Starter:	Look at a series of photographs of workers building the skyscrapers of New York.
LC Questions: 1	Who were the original Americans?
2	What can you find out about the sports Americans play?
3	Can you carry out your own research on one of the American states?
4	What do you know about the climate of the USA?
5	What would you ask the President of the USA?
6	How can you create your own silent movie?
Presentation	Create Silent movies and display them to classes and parents.
Writing Opportu	 nities: Instructional Writing, No-Chron Reports, Letters,

Year Group: Year 5 Term: Summer 2

Learning Challenge Title: How can we re-discover the wonders of Ancient Egypt? Curriculum focus: Humanities

History:

• the achievements of the earliest civilizations – an overview of where and when the first civilizations appeared and a depth study of one of the following: Ancient Sumer; The Indus Valley; Ancient Egypt; The Shang Dynasty of Ancient China

Art:

• to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay]

Design and Technology:

• build structures, exploring how they can be made stronger, stiffer and more stable

Music:

• improvise and compose music for a range of purposes using the inter-related dimensions of music

Wow Starter:	WOW: Pupils research 10 facts that they believe to be true about Ancient Egypt
LC Questions: 1	Where is Egypt and why do so many people enjoy going on holiday there?
2	What is an archaeologist and how have they helped us find out about the past?
3	How can you find out how Widnes has changed?
4	How can you recreate the wonder of the Pyramids?
5	What have we learnt from the Ancient Egyptians writing – (create time capsule)?
6	Who were the Pharaohs, and why were they very important?
7	What would you ask an Ancient Egyptian?
8	How can we all go Strictly Come Egyptian dancing?

Reflection	Were the Egyptians more advanced than we are?
Writing Opportunities: Instructional Writing, No-Chron Reports, Diaries,	

Year Group: Year 5 Term: Summer 2

Learning Challenge Title:

How different will you be when you are as old as your grandparents are?

Curriculum focus: Science

Science:

• Describe the changes as humans develop to old age.

Art

• to create sketch books to record their observations and use them to review and revisit ideas

Wow Starter:	Use the photographic app that shows what they will look like in 20 years' time and talk about what their feelings are, etc.
LC Questions: 1	What can you now do that you could not do when you were a baby?
2	How long does it take a baby to be born?
3	What is the life expectancy of different animals?
4	How will our bodies change as we grow up?
5	What would you ask the President of the USA?
6	What are the differences in animal's stages of growth?
Presentation	Through drawing and painting, can you accurately sketch yourself and your grandparent?
Writing Opportur	nities: Leaflet, Explanation, Non-chron report.