**Science:**

**Forces/Materials and their Properties** – Pupils should explore falling objects and raise questions about the effects of air resistance. They should explore the effects of air resistance by observing how different objects such as parachutes and sycamore seeds fall. They should experience forces that make things begin to move, get faster or slow down. Pupils should explore the effects of friction on movement and find out how it slows or stops moving objects, for example, by observing the effects of a brake on a bicycle wheel. Pupils should explore the effects of levers, pulleys and simple machines on movement.

Children to experiment with reversible and irreversible changes, such as burning, rusting, evaporating, filtering, sieving, melting and dissolving, recognising that melting and dissolving are different processes. Look at scientists who have used their knowledge of materials to adapt or create materials for common use.

**Attainment Targets:**

* I can explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. (y5)
* I can identify the effects of air resistance, water resistance and friction that act between moving surfaces. (y5)
* I can recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect. (y5)
* I can compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets
* I know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution
* I can use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating
* I can give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic
* I can demonstrate that dissolving, mixing and changes of state are reversible changes
* I can explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.

**Geography:**

Locate Central and South America and countries in them. Look at the effects of the banana trade on people, economics and land.

**Attainment Targets:**

* I can use maps to locate Central and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities.
* I can describe and understand key aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources, particularly food.

**The Hook:**

Show a travel video for Central and South America.

Each child is given a card with a place or object on. They then have to decide if their object would be seen in Central/South America.

**Literacy:**

\*Year 5 Autumn 2 Text?

Biography – Frieda Kahlo

Informal letter – letter of gratitude at Christmas

**Attainment Targets: add for text?**

* identifying the audience for and purpose of the writing, selecting the appropriate form and using other similar writing as models for their own
* noting and developing initial ideas, drawing on reading and research where necessary

**Central and South America**

**Design and Technology:**

Make a range of dishes, e.g. guacamole, salsa and tacos for the fiesta day.

Making Sugar Skull Masks and Mexican sombreros – making decorative items for celebrations.

**Attainment Targets:**

* I understand seasonality
* I know where and how a variety of ingredients are grown, reared, caught and processed. use research and exploration, such as the study of different cultures, to identify and understand user needs
* I can identify and solve design problems and understand how to reformulate problems given
* I can develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations
* I can develop and communicate design ideas using annotated sketches, detailed plans, oral and digital presentations

**Music:**

Taught by peripatetic professionals.

**Attainment Targets:**

* I can listen with attention to detail and recall sounds and instruments with increasing aural memory.
* I can improvise and compose music for a range of purposes.
* I can play and perform in solo and ensemble contexts.

**Art**

Painting the detail on the sugar skull masks – using symmetry for decoration, selecting colours to fit a celebration.

Painting a self-portrait in the style of Frieda Kahlo.

**Attainment Targets:**

* I can use a sketch book to record my observations and use them to review and revisit ideas
* I can improve my mastery of art and design techniques, including drawing and painting and with a range of materials [for example, pencil, paint]
* I can learn about and take inspiration from great artists in history.

**Physical Education:**

Dance – Children learn and refine their movements for the Mexican Hat Dance

They then evaluate and compare other performances and suggest ways for improving them.

**Attainment Targets:**

* develop flexibility, strength, technique, control and balance [for example, through athletics and gymnastics]
* perform dances using a range of movement patterns
* compare their performances with previous ones and demonstrate improvement to achieve their personal best.

**ICT:**

Stop animation of the life of a South American

**Attainment Targets:**

* I can evaluate and apply information technology, including new and unfamiliar technology.
* I understand and can apply the fundamentals principles and ideas of computer science.
* I can evaluate and apply new and unfamiliar technology