

As Scientists we can:

Explain that unsupported objects fall to Earth because of the force of gravity acting between Earth and the falling object.

Identify the effect 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 greater effect.

Key Knowledge:

- Know what gravity is and its impact on our lives
- Identify and know the effect of air and water resistance
- Identify and know the effect of friction
- Explain how levers, pulleys and gears allow a smaller force to have a greater effect

As Design technologists:

Research bridges and identify features of designs which ensure they are able to support a load.

Key Knowledge

- Understand stronger and weaker shapes.
- Identify beam, arch and truss bridges and discuss their differences.
- Build and test bridge structures using triangular shapes to support.
- Evaluate a design.

Learning Challenge –

Why has Brazil got one of the fastest growing economies?

Our half term work has a Geography Focus

As Geographers we will be answering these questions:

- LC 1 – Where is Brazil and what are its key geographical features?
- LC 2 – What can we find out about the famous people of Brazil?
- LC 3 – What fruits and other natural resources is Brazil famous for?
- LC 4 – What can we find out about the street children of Brazil?
- LC 5 – Which countries neighbour Brazil?
- LC 6 – What are the strengths and challenges faced by Brazil and its people?

As Mathematicians we can:

- Read, interpret and draw line graphs.
- Read and interpret tables, including two-way tables.
- Read and interpret timetables.
- Understand and use degrees to classify and estimate angles.
- Measure angles up to 180 degrees.
- Draw lines and angles accurately.
- Calculate angles on a straight line and around a point.
- Distinguish between regular and irregular polygons by reasoning about equal sides and angles. Identify 3D shapes.
- Read and plot coordinates and solve problems involving coordinates.
- Translate shapes.
- Identify lines of symmetry and reflect in horizontal and vertical lines.

As Theologians we can:

- Understand that many religions have spiritual leaders who help to guide others.
- **Key Knowledge:**
- Recognise how religious beliefs vary and understand the importance of religious freedom.
- Assess the challenges that some religious figures have encountered in the past and recognise that people have been persecuted for their beliefs.
- Understand the role of spiritual leaders.

As Athletes:

- We will develop our understanding of health-related fitness.
- **Key Knowledge:**
- Play competitive cricket and apply basic principles for batting and fielding.
- Be taught to swim confidently and proficiently over a distance of 25metres.

As Computer Programmers:

We can create a topic database

Key Knowledge:

- Learn how to search for information in a database.
- Contribute ideas to a class database.
- Understand what a database field is and correctly add field information.
- Create a database of your own for a chosen topic.

As Language Specialists we can:

Use language to do with space.

Key Knowledge:

- Ask and answer questions about someone's identity.
- Read and understand simple information about planets.
- Recall and use familiar vocabulary.

As Musicians we will:

The Fresh Prince of Bel Air

Key Knowledge:

- Listen and appraise Hip Hop tunes.
- Copy back using clapping or instruments.
- Improvise rhythms using parts of the body.
- Use instruments to create an ensemble.

As Citizens:

Understand how systems in the body work, people responsible for keeping others safe and how to perform some basic first aid.

Key Knowledge:

- Understand the meaning of responsibilities and identify responsibilities that they have.
- Understand what a community is and identify some benefits of belonging to a community.
- Understand what is meant by 'the media' and how it doesn't always reflect real life.