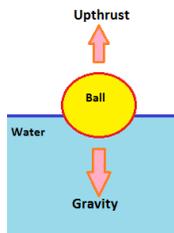




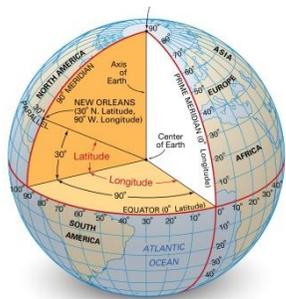
**Science** - Forces (rolled over from the autumn term)



In this unit we will learn about balanced and unbalanced forces, gravity and friction. The children will identify forces and complete force diagrams, learning about Isaac Newton and his discoveries about gravity. They will look for patterns and links between the mass and weight of objects, using newton metres to measure the force of gravity. There will be a focus on air and water resistance and an investigation to establish the best design for a parachute. We will:

- Identify forces as pushes and pulls.
- Explain gravity as a force that pulls objects down and identify Isaac Newton's discoveries.
- Explain the effects of friction, including air and water resistance on moving objects.
- Recognise that there are different variables in an investigation
- Predict what will happen in an investigation and make observations

**Geography** - Locational and place knowledge



During the course of this geography unit, we will develop our use of geographical knowledge, understanding and skills to enhance our locational and place knowledge. We will identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night), establishing:

- How it is possible to find the exact location of a place on Earth
- How we use this information to locate a specified place
- How time zones work

Next, we will focus on geographical similarities and differences through the study of human and physical geography of our local area and of Rio De Janeiro, establishing:

- Relative sizes/population of the two areas
- Physical and human features of both locations

**Art - collage**



To link with our geographical study, the art project will involve a study of Beatriz Milhazes; a Brazilian artist known for her colourful abstract **paintings** and prints. Swirling with geometric and arabesque shapes, **Milhazes** works are kaleidoscopic, inspired by both Brazilian and Modernist European design elements. Although many of her pieces are paintings, Milhazes extends her work and includes different media such as textiles, wrappers and collages - a technique we shall study in more depth.

**Computing - Internet safety**



We will learn how to use technology safely, respectfully and responsibly, recognising acceptable and unacceptable behaviour. We will identify a range of ways to report concerns about content and contact.

We will address the following questions:

When do you meet people online? When do you give your real name? Would you create a whole new online persona? Why would people not keep their real name online?

Why do some websites have age restrictions? Is it wrong to break the rules to be a member?

What does it mean to lie about your age for sites such as Facebook or Snapchat?

How do you respond to blog posts? What happens if someone leaves a comment that makes you feel unhappy? What should you do?