Year 3 autumn 1

Climate

I know the relationship between the strength of the sun and the temperature.

Sustainability

I know how light can be useful in our modern world.

Good Health

I know that the sun can be dangerous and that there are ways to protect our eyes. Ecology

I know some patterns in the way light forms shadows.

Topic: Light and shadow

Composite Question: Is light useful – why and how?

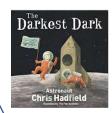
Processes and Change

I know shadows happen when objects block light.

I know that dark is the absence of light.

I know that light is reflected from surfaces.

Pioneers/ Capital



Vocabulary

Light, light source, dark, absence of light, surface, shadow, reflect, mirror, Sun, sunlight, dangerous

Science Golden Threads covered in KS1 and KS2:

Climate Processes and change

Ecology Good Health

Sustainability Pioneers/Capital

Year 3 autumn 2

Good Health

How can magnetic force be used to help us to keep healthy.

Processes and Change

I know that forces need contact between two objects.

I know that magnetic forces can act at a distance.

Processes and Change

I know how to compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet and identify some magnetic materials.

Sustainability

Discuss: Which forces do you think can be used to fuel our future.

Topic: Forces

Composite

Question: How do different forces work?

Pioneers

Sir Isaac Newton.



Science Golden Threads covered in KS1 and KS2:

Processes and change Climate

Ecology Good Health

Sustainability Pioneers/Capital

Processes and Change

I know that magnets attract and repel.

I know magnets have two poles.

I know how to predict attraction or repulsion.

Vocabulary

force, push, pull, twist, contact force, non-contact force, magnetic force, magnet, strength, bar magnet, ring magnet, button magnet, horseshoe magnet, attract, repel, magnetic material, metal, iron, steel, poles, north pole, south pole

Year 3 spring 1

Good Health

I know that humans and animals have a skeletal system for support, protection, movement.

I know that some animals do not have skeletal systems.

Good Health

I know that humans and animals have a muscular system for support protection and movement.

Good Health

I know that animals and humans need the right type and amount of nutrition.

I know about different food groups and how to be healthy.

Topic: Animals Including Humans

What do animals and humans need food for?

Ecology

I know that animals and humans cannot make their own food; they get nutrition from what they eat.

Sustainability

I know why it is important to create sustainability in our food production industry.

Pioneers/ Capital

Wilhelm Rontgen:

Invented the x-ray



Vocabulary

Nutrition, nutrients, carbohydrates, sugars, protein, vitamins, minerals, fibre, fat, water, skeleton, bones, muscles, joints, support, protect, move, skull, ribs, spine

Science Golden Threads covered in KS1 and KS2:

Climate Processes and change

Ecology Good Health

Sustainability Pioneers/Capital

Year 3 spring 2

Processes and Change

I know how to describe the life cycle of a plant.

Processes and Change

I know how to investigate the way in which water is transported within plants.

Ecology

I know how to explore what a plant needs in order to grow (air, light. Water, nutrients from the soil and room to grow) and how they vary from plant to plant.

TOPIC: Plants

COMPOSITE QUESTION:

How do we make sure that our plants grow successfully?

Ecology

I know how to describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers. **Ecology**

I know how to explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.

Pioneer/Capital

Polymath and genius.

Father of environment and ecology.

Vocabulary

Photosynthesis, pollen, insect/wind pollination, male, female, seed formation, seed dispersal (wind dispersal, animal dispersal, water dispersal), air, nutrients, minerals, soil, absorb, transport

Year 3 summer 1

Processes and Change

I know how to explore rocks and soil.

Processes and Change

I know how to group rocks.

Processes and Change

I know how to group and compare different kinds of rocks based on their appearance and simple physical properties. Ecology

I know that soils are made from rocks and organic matter.

Topic: Rocks

Composite Question: What makes rocks special?

Processes and Change

I know how to describe in simple terms how fossils are formed when things that have lived are trapped within rock. **Pioneers**

Mary Anning

Geologist (studies the Earth and what it is made of).



rock, stone, pebble, boulder, grain, crystals, layers, hard, soft, texture, absorbs water, fossil, bone, flesh, minerals, marble, chalk, granite, sandstone, slate, types of soil (e.g. peaty, sandy, chalky, clay)

Science Golden Threads covered in KS1 and KS2:

Climate Processes and change

Ecology Good Health

Sustainability Pioneers/Capital

