

## Science - Year 3

### Autumn 1

#### Rocks

- There are 3 different types of naturally occurring rocks – igneous, sedimentary, metamorphic.
- Igneous – rock that has been formed from magma or lava.
- Sedimentary – rock that has been formed by layers of sediment pressing down on top of each other.
- Metamorphic – rock that starts as igneous or sedimentary but changes as a result of extreme heat or pressure.
- A fossil is the preserved remains or traces of a dead organism.

### Autumn 2

#### Forces & Magnets

- A force is a push or pull.
- A push moves an object away
- A pull moves an object towards
- How different things move on different surfaces is called friction.
- The more friction there is, the slower an object will move.
- Magnets have 2 poles – a North pole and a South pole.
- Some materials are attracted to the poles and are called magnetic materials.
- Magnetic materials include iron, nickel and steel.
- Magnets do not attract materials such as copper, rubber, plastic
- With poles, opposites attract so North Pole / South Pole.
- The same magnet poles repel (North / North or South / South)

### Spring 1

#### Plants

- The roots have 4 functions - 1) absorbing water and nutrients 2) anchoring the plant to the ground 3) store food and nutrients, 4) move water and minerals to the stem.
- The 3 functions of the stem/trunk are to 1) Support and hold up the leaves, flowers and fruits. 2)Transport water and nutrients between the roots and the shoots/leaves 3) Stores nutrients.
- The function of the leaves is to collect sunlight and make food by photosynthesis.
- The function of the flowers is to produce seeds to produce more of the same plant.

### Spring 2

#### Animals Including Humans – skeletons & muscles

- Humans and some animals have skeletons and muscles to support them.
- Skeletons - support the body, protect the organs in the body; allow us to move.
- Vertebrates (animals with a backbone) have an endoskeleton.
- Invertebrates (animals without a backbone) have either an exoskeleton or a hydrostatic skeleton.
- Joints are where 2 or more bones are fitted together.
- Muscles are soft tissue that contract and relax to cause movement, they work in pairs to move the bones they are attached to.

### Summer 1

#### Light

- Dark – when there is no light.
- Reflection - light bounces off an object – if it hits our eyes, we can see the object.
- Transparent - you can see clearly through something e.g. a glass window.
- Opaque - you can't see through it, does not let any light through.
- Translucent – you can see through something but not clearly.
- Shadow – when an opaque object blocks the light it forms a shadow.

### Summer 2

#### Animals Including Humans -Diet

- Animals and humans need food, water and air to survive.
- Diet is what you eat.
- Plants create their own food but humans cannot – they have to eat.
- They get their nutrition from what they eat.
- The food groups are - Fruit & Vegetables, Starchy Carbohydrates, Dairy, Fats, Protein.
- It is important to get the right amounts of each of these in order to develop and grow properly.