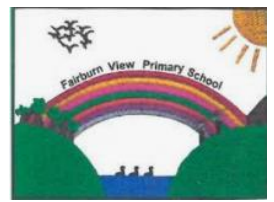


# Spiral Recall Plan



The knowledge which is expected to be recalled within each year group throughout the year is as follows:

<p><u>Year 1</u></p>	<p><b>Recall to include:</b></p> <p><b>Plants</b> The names of plants, flowers and food produce. The names of the parts of a plant such as flower, stem, leaf and root.</p> <p><b>Animals including humans:</b> How they have grown and changed The names of simple body parts Senses Life cycle of a chicken, frog and butterfly. Animal names and their habitats.</p> <p><b>Living things and their habitats:</b> The weather Seasonal change</p> <p><b>Electricity:</b> Electrical items How to safely use electrical items</p> <p><b>Light:</b> Light and dark Natural and man made objects that create light Nocturnal animals</p>
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**Year 1 also to recall subject knowledge from their own areas of teaching.**

Year 2

**Plants- Year 1**

Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.

Identify and describe the basic structure of a variety of common flowering plants, including trees.

Children will be given the opportunity to grow their own plants and watch them grow. Children will be able to compare how plants grow in different scenarios.

Vocabulary- deciduous, evergreen, flower, stem, leaves, roots.

**Animals including humans- Year 1**

Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)

Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.

Vocabulary- fish, amphibians, reptiles, birds, mammals, senses (taste, touch, sight, smell, hearing), carnivore, omnivore, herbivore.

**Seasonal Change- Year 1**

Observe changes across the four seasons

Observe and describe weather associated with the seasons and how day length varies

Vocabulary: Spring, Summer, Autumn, Winter, weather, day length, temperature

**Materials and states of matter- Year 1**

Distinguish between an object and the material from which it is made.

Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.

Describe the simple physical properties of a variety of everyday materials. Compare and group together a variety of everyday materials on the basis of their simple physical properties

Vocabulary: wood, plastic, glass, metal, water, rock, rough, smooth, opaque, waterproof, transparent, bendy, stretchy, dull

Year 3

**Seasonal Change- Year 1**

Observe changes across the four seasons

Observe and describe weather associated with the seasons and how day length varies

Vocabulary: Spring, Summer, Autumn, Winter, weather, day length, temperature

**Plants- Year 2**

Observe and describe how seeds and bulbs grow into mature plants.

Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.

Vocabulary- seeds, bulbs, water, light, temperature, growth

**Animals including humans- Year 2**

Compare how animals from different classifications, including humans, have offspring which grow into adults

Find out about and describe the basic needs of animals, including humans, for survival (water, food and air)

Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.

Vocabulary- fish, amphibians, reptiles, birds, mammals, offspring, hygiene, exercise, water, food, air.

**Living things and their habitats- Year 2**

Explore and compare the differences between things that are living, dead, and things that have never been alive.

Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other

Identify and name a variety of plants and animals in their habitats, including microhabitats

Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.

Vocabulary- living, dead, never been alive, habitat, microhabitat, food chain, predator, prey, producer.

### **Materials and states of matter- Year 2**

Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses

Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching

Vocabulary: squashing, bending, twisting, stretching, material, use, solid, change, shape, reduce, reuse, recycle, properties, identify, groups

### Year 4

### **Seasonal Change- Year 1**

Observe changes across the four seasons

Observe and describe weather associated with the seasons and how day length varies

Vocabulary: Spring, Summer, Autumn, Winter, weather, day length, temperature

### **Forces and Sound- Year 3**

Compare how things move on different surfaces.

Notice that some forces need contact between two objects, but magnetic forces can act at a distance.

Observe how magnets attract or repel each other and attract some materials and not others.

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.

Describe magnets as having two poles

Predict whether two magnets will attract or repel each other, depending on which poles are facing.

Vocabulary: friction, gravity, poles, repel, attract, metal, magnetic, non-magnetic, surfaces, rough, smooth, push, pull

### **Light- Year 3**

Recognise that they need light in order to see things and that dark is the absence of light.

Notice that light is reflected from surfaces.

Recognise that light from the sun can be dangerous and that there are ways to protect their eyes.

Recognise that shadows are formed when the light from a light source is blocked by an opaque object.

Find patterns in the way that the size of shadows changes.

Vocabulary: light, dark, pupil, source, UV light, natural light, manmade light, dangers, protection, shadow, opaque, transparent, translucent, reflection

### **Rocks- Year 3**

Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.

Describe in simple terms how fossils are formed when things that have lived are trapped within rock.

Recognise that soils are made from rocks and organic matter.

Vocabulary: mesomorphic, igneous, sedimentary, fossils, soils, organic matter, sedimentation, magma, lava, permeable, impermeable, fossilisation, erosion, palaeontology

### **Plants- Year 3**

Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers.

Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant Investigate the way in which water is transported within plants.

Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.

Vocabulary- roots, stem/trunk, leaves, flowers, nutrients, air, light, pollination, seed formation, seed dispersal, stamen, sepal, petal, fertilisation

### **Animals including humans- Year 3**

Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat

Identify that humans and some other animals have skeletons and muscles for support, protection and movement.

Vocabulary- joints, tendons, muscles, invertebrates, vertebrates, organs, healthy, alive, protein, carbohydrates, saturated fats, unsaturated fats, energy, vitamins, minerals, fibre, water.

### Year 5

### **Light- Year 3**

Recognise that they need light in order to see things and that dark is the absence of light.

Notice that light is reflected from surfaces.

Recognise that light from the sun can be dangerous and that there are ways to protect their eyes.

Recognise that shadows are formed when the light from a light source is blocked by an opaque object.

Find patterns in the way that the size of shadows changes.

Vocabulary: light, dark, pupil, source, UV light, natural light, manmade light, dangers, protection, shadow, opaque, transparent, translucent, reflection.

### **Rocks- Year 3**

Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.

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### **Sound- Year 4**

Identify how sounds are made, associating some of them with something vibrating

Recognise that vibrations from sounds travel through a medium to the ear.

Find patterns between the pitch of a sound and features of the object that produced it

Find patterns between the volume of a sound and the strength of the vibrations that produced it

Recognise that sounds get fainter as the distance from the sound source increases.

Vocabulary: vibrations, pitch, volume, higher, lower, travel, loud, quiet, soundwave, ear canal, inner ear, amplitude, vacuum, eardrum, particles

### **Electricity- Year 4**

Identify common appliances that run on electricity.

Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers.

Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery

Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit.

Recognise some common conductors and insulators, and associate metals with being good conductors

Vocabulary: appliances, conductors, insulators, mains, battery, circuit, complete, incomplete, cell, wires, bulb, switch, buzzers, simple circuit, renewable

#### **Living things and their habitats- Year 4**

Recognise that living things can be grouped in a variety of ways.

Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.

Recognise that environments can change and that this can sometimes pose dangers to living things.

Vocabulary- organisms, life processes, respiration, sensitivity, reproduction, excretion, nutrition, habitat, environment, endangered species, classification, vertebrates, invertebrates, characteristics.

#### **Animals including humans- Year 4**

Describe the simple functions of the basic parts of the digestive system in humans

Identify the different types of teeth in humans and their simple functions

Construct and interpret a variety of food chains, identifying producers, predators and prey.

Vocabulary- digest, oesophagus, stomach, small intestine, large intestine, rectum, herbivore, carnivore, omnivore, producer, predator, prey

#### Year 6

#### **Materials and States of Matter- Year 4**

Compare and group materials together, according to whether they are solids, liquids or gases.

Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)

Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.

Vocabulary: solid, liquid, gas, particles, boiling, melting, condensation, evaporation, water cycle, shape  
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.

### **Materials and States of Matter- Year 5**

Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution.

Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.

Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.

Demonstrate that dissolving, mixing and changes of state are reversible changes.

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.

Vocabulary: materials, solids, liquids, gases, melting, freezing, evaporating, condensing, conductor, insulator, transparency

### **Forces and Sound- Year 5**

Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. Identify the effects 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 a greater effect.

Vocabulary: forces, gravity, gravitational pull, weight, mass, friction, air resistance, water resistance, buoyancy, streamlined, mechanism, upthrust

### **Earth and Space- Year 5**

Describe the movement of the Earth, and other planets, relative to the Sun in the solar system.

Describe the movement of the Moon relative to the Earth.

Describe the Sun, Earth and Moon as approximately spherical bodies.

Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.

Vocabulary: moon, Sun, star, planet, sphere, spherical bodies, satellite, orbit, rotate, axis, astronomer

### **Animals including humans- Year 5**

Describe the changes as humans develop to old age.

Vocabulary- fertilisation, prenatal, gestation, reproduce, asexual reproduction, sexual reproduction, life cycle, adolescence, puberty, menstruation, adulthood

### **Living things and their habitats- Year 5**

Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.

Describe the life process of reproduction in some plants and animals

Vocabulary- fertilise, gestation, life cycle, metamorphosis, pollination, reproduction