Science MTP: Sequence of lessons	Human Senses	Year 1	Focus Scientist: Louis Braille

Reference to the Programme of Study 2014	Key vocabulary
Pupils should be taught to: Identify, name draw and label the basic parts of the human body and say which parts of the body is associated with each sense.	abdomen ankle arm calf chest chin ear elbow eye finger foot forearm hair hand head human knee leg limb mammal nose sense shoulder thigh toe tongue touch unique Sight smell taste hear touch

Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5
To be able to identify, name draw and label the basic parts of the human body. To observe closely and identify parts of the human body.	To record data in a simple pictorial table (with support) To spot patterns in results. To sort and group things based on features. To gather and record data in a simple pictorial table (with support).	To know which part of the body is associated with each sense. To be able to observe closely, using simple equipment.	To know which part of the body is associated with each sense. To sort and group things based on features.	To learn about a significant scientist. To be able to perform simple tests.
Parts of the body What are the names of the different parts of our bodies?	**Counting body parts** What is the most common number of body parts?	**Senses** What can our different senses do?	**Senses – Hearing** What sounds are dangerous?	**Senses – Sensory Tools and Assistance** Investigation linking to famous person – Louis Braille How do you cope if you can't see?

Science MTP: Sequence of lessons	Animals including Humans (Animal Parts)	Year 1	Focus Scientist: Bill Oddie (TV Presenter on wildlife)

Reference to the Programme of Study 2014

Pupils should be taught to:
Identify and name a variety of common animals that are birds, fish, amphibians, reptiles and mammals
Identify and name a variety of common animals that are carnivores, herbivores and omnivores.
Describe and compare the structure of a variety of common animals (birds, fish, amphibians, reptiles and mammals, and including pets).

Key vocabulary

Mammals People are mammals. So are dogs, cats, bats, hedgehogs, dolphins and whales. If an animal drinks milk when it is a baby and has hair on its body, it belongs to the mammal class.

Birds are animals that have feathers and that are born out of hard-shelled eggs.

Fish are vertebrates that live in water and have gills, scales and fins on their body.

Reptiles are a class of animal with scaly skin. They are cold blooded and are born on land.

Snakes, lizards, crocodiles, alligators and turtles all belong to the reptile class.

Amphibians are born in the water. When they are born, they breathe with gills like a fish. But when they grow up, they develop lungs and can live on land.

Carnivores Herbivores Omnivores

Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6
To be able to identify and name a variety of common animals that are birds, fish, amphibians, reptiles, mammals and invertebrates. To sort and group animals in simple ways based on observable features.	To be able to describe and compare the structure of a variety of common animals (birds). To observe animals closely and describe their structure.	To be able to describe and compare the structure of a variety of common animals (invertebrates). To be able to sort and group animals in simple ways (sorting circles).	To be able identify and name a variety of common animals that are carnivores, herbivores and omnivores. To record data using simple sorting circles or pictorial charts.	To be able to describe and compare the structure of a variety of common animals To describe animals using careful observation.	To be able to describe and compare the structure of a variety of common animals To be able to record data in a simple pictorial chart (with support)
Classifying Animals How are different animal classes similar and different?	**Bird Watching** What do all birds have in common?	**Sorting Invertebrates** Do all invertebrates have wings and legs?	**Herbivores Carnivores Omnivores** Which animals are herbivores, carnivores and omnivores?	**Structure of Animals** How would you describe the structure of a stag beetle?	**Pets** How our pets similar and different?

Science MTP: Sequence of lessons	Plants (Plant Parts)	Year 1	Focus Scientist: George Forest (biologist)

Reference to the Programme of Study 2014	Key vocabulary
Pupils should be taught to: Identify and name a variety of common plants, including garden plants, wild plants and trees, and those classified as deciduous and evergreen Identify and describe the basic structure of a variety of common plants including roots, stem/trunk, leaves and flowers.	**Trees -** deciduous, evergreen, ash, birch, beech, rowan, common lime, oak, sweet chestnut, horse chestnut, apple, willow, sycamore, fir, pine , holly, etc **Wild flowering plants -** cleavers, coltsfoot, daisy, dandelion, garlic mustard, mallow, mugwort, plantain, red clover, self heal, shepherd's purse, sorrel, spear thistle, white campion, white deadnettle and yarrow. **Garden plants –** crocus, daffodil, bluebells, etc **Parts of plants** – roots, branch, trunk, stalk, leaf, flower, petal, seeds, bulbs and twigs

Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6
To be able to identify and name a variety of common plants, including garden plants, wild plants and trees. To observe plants closely and identify similarities and differences.	To be able to identify and describe roots. To be able to observe carefully using simple equipment.	To be able to identify and describe flowers. To identify and classify plants using observable features.	To be able to identify and describe tree trunks. To sort and group plants based on simple features.	To be able to describe and identify trees by looking observing their leaves. To observe leaves closely and compare them.	To identify changes through the seasons. To observe changes over time.
Naming Plants What do all plants have in common?	**Shoots and Roots** How many different roots can be found?	**Flowers** How many different types of flowers can be found?	**Tree Trunks** How are the trunks of trees similar and different from each other?	**Leaves – This lesson should be taught in Autumn*** What are the leaves like on the different trees?	**Plants Seasons** Do plants stay the same or change with the seasons?

Science MTP: Sequence of lessons	Everyday Materials	Year 1	Focus Scientist: Chester Greenwood (engineer/inventor)

Reference to the Programme of Study 2014

Pupils should be taught to:
Distinguish between an object and the material from which it is made.
Identify and name a variety of everyday materials, including wood, plastic, glass, 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 physical properties.

Key vocabulary

Types of materials: wood, plastic, glass, metal, water, rock, brick, fabric, sand, paper, flour, butter, milk, soil

Properties of materials: hard/soft, stretchy/not stretchy, shiny/dull, rough/smooth, bendy/not bendy, transparent/not transparent, sticky/not sticky

Verbs associated with materials: crumble, squash, bend, stretch, twist

Senses: touch, see, hear, smell and taste

Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6	Lesson 7	Lesson 8
To be able to distinguish between an object and the material from which it is made. To be able to identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock. To identify and classify objects based on the material they are made from.	To be able to describe the simple physical properties of a variety of everyday materials. To observe and describe materials using the senses.	To be able to describe the simple physical properties of a variety of everyday materials. To be able to compare and group together a variety of everyday materials on the basis of their physical properties. To ask simple questions and group materials based on properties.	To be able to distinguish between an object and the material from which it is made. To be able to identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock. To perform simple tests and observe changes.	To be able to ask simple questions and recognise that they can be answered in different ways.	To able to describe the simple physical properties of a variety of everyday materials. To be able to compare and group together a variety of everyday materials on the basis of their physical properties. To be able to record simple data using pictorial tables or practical block diagrams (with support)	To be able to compare and group together a variety of everyday materials on the basis of their physical properties. To be able to record simple data using pictorial tables or practical block diagrams (with support) To compare results and identify which material works best.	To learn about a significant scientist.
Objects and Materials What are different objects made from?	**Material Properties** What are the properties of the different materials?	**Material Properties** What are the properties of different materials?	**Heating and Cooling Materials** What happens to materials when they are heated and cooled?	**Testing Absorbency** How well do different kitchen paper towels absorb water?	**Testing Strength** Which fabric will be best for a jacket for a child?	**Testing Material Properties** Which materials make the best crash mat for Humpty Dumpty?	**Inventing Earmuffs** Why were earmuffs invented?

Science MTP: Sequence of lessons	Seasonal Changes	Year 1	Focus Scientist: Jim Cantore (Meteorologist)

Reference to the Programme of Study 2014	Key vocabulary
Pupils should be taught to: Observe changes across the four seasons Observe and describe weather associated with the seasons and how day length varies. **NB – This unit of study cannot be covered in just one term. Throughout the year, the children will need to experience the different seasons and record the changes.**	Seasons; spring, summer, autumn, winter Year, months, days Hot, warm, mild, cold sunny cloudy rain, sleet, snow, hail, thunder, lightning, rainbow wet, damp, dry windy, breezy, gust Temperature degrees celsius thermometer weather Spring - March to May Summer - June to August Autumn - September to November Winter - December to February

Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6
To be able to observe and describe weather associated with the seasons. To observe and describe weather and seasonal changes.	To be able to observe and describe weather associated with the seasons. To identify and classify clouds through observation.	To be able to observe and describe weather associated with the seasons. To perform simple tests to explore wind strength.	To be able to observe and describe weather associated with the seasons. To observe closely using simple measuring equipment.	To be able to observe and describe weather associated with the seasons. To be able to observe closely, using simple equipment. To measure temperature using thermometers.	To be able to observe and describe weather associated with the seasons. To be able to gather data to answer a question. To gather and record data over time to answer a question.
Introduction to Seasons What do we mean by seasons and weather?	**Measuring and observing the weather - Clouds** What types of clouds are there in the different seasons?	**Wind** How much wind is there in different seasons?	**Rain** How can you measure the amount of rain in the different seasons?	**Testing Temperature** How do we find out how warm the water is?	**Temperatures throughout the year** What is the temperature outside in the shade in the different seasons?