

Hemingbrough Community Primary School
Long Term Plan
Science



	Term 1	Term 2	Term 3
EYFS	Uses of everyday materials/ Seasonal Changes	Plants/ Seasonal Changes	Animals, including humans/ Seasonal Changes
Year 1	Uses of everyday materials/ Seasonal Changes	Plants/ Seasonal Changes	Animals, including humans/ Pre-Learning: Evolution
Year 2	Use of everyday materials/ Living Things and Their Habitats	Plants/ Pre-Learning: Forces	Animals, including humans/ Pre-Learning: Evolution
Year 3	Revision: Living Things / Forces and Magnets	Light/ Plants	Materials: Rocks/ Pre-Learning: Evolution
Year 4	Sound/ Materials: States of Matter	Living Things and Their Habitats/ Revision: Plants	Electricity / Animals, including humans
Year 5	Properties and Changes of Materials/ Revision: Plants	Animals, including humans/ Earth and Space	Living Things and their habitats/ Forces
Year 6	Animals, including humans/ Electricity	Light/ Living Things and Their Habitats/ Plants (Classification)	Evolution and Inheritance/ Revision (All)

GLOSSARY:

WORKING SCIENTIFICALLY: Observing over time, Identifying and Classifying, Fair Tests, Pattern Seeking, Research (All these must be covered over one year and assessed. KS1 does not have to do a fair test).

Pre-Learning: This is where you spend one or two lessons introducing a topic that will be covered in later years (No assessment is needed)

Revision: This is an opportunity to go back over topics that should have already been covered. (No assessment is needed)

TAPS: Assessment: This is a link to a website that will give you ideas for independent tasks that you can use to assess the children.

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Working Scientifically	Develop close observation skills	Develop close observation skills	Develop close observation skills	Develop systematic approach	Develop systematic approach	Develop Independence	Develop Independence
Term 1:1	Materials: to know what things are made from.	Materials: Properties of different materials.	Materials: Compare different materials	REVISION Simple food chains and micro-habitats. Revise classification of animals and healthy lifestyles.	Sound including the ear.	Materials: States of Matter.	Electricity
Possible Big Question	What can a table be made from? (Research)	We need to choose a material to make an umbrella. Which materials are waterproof? (Identifying and Classifying)	How have the materials we use changed over time? (Research)	Are you more likely to have bad eye sight and to wear glasses if you are older? (Pattern Seeking)	Is there a link between how loud it is in school and the time of day? Is there a pattern? (Pattern Seeking)	Can you group these materials into whether they are transparent or not? (Identifying and Classifying)	How does the voltage of batteries in a circuit affect the brightness of a lamp? (Fair Test)
Term 1:2	Pre-Learning: Seasons	REVISION: Seasonal Changes	Living Things and their habitats	Forces and Magnets	Materials: States of Matter	REVISION: Plants	Animals including humans: Heart and Circulation.
Possible Big Question	How are Autumn and Winter different and the same? (Observation)	Are the plants that are in flower in every season? What are they? (Research)	Which habitats do worms prefer? Where would we find the most worms? (Pattern Seeking)	How does the mass of an object affect how much force is needed to move it? (Fair Tests)	How does the level of water in a glass change when left on a windowsill? (Observing over time)	How does a bean change as it germinates? (Observing over time)	Which organs of the body make up the circulation system and where can they be found? (Identifying and Classifying)

<p>Assessment Opportunity (TAPS)</p> <p>TAPS is a website with assessment ideas.</p> <p>https://pstt.org.uk/resources/curriculum-materials/assessment</p>	N/A	<p>Materials: Reflection Tests</p> <p>Materials: Floating and Sinking.</p>	<p>Materials: Boat Materials or Materials hunt</p> <p>Living Things: Woodlice Habitat</p>	<p>Forces: Shoe Grip</p> <p>Forces: Strongest Magnet</p>	<p>Sound: Investigating Pitch</p> <p>Materials: Drying Materials</p>	<p>Materials: Dissolving.</p> <p>Materials: Nappy absorbency.</p> <p>Materials: Insulation Layers</p>	<p>Electricity: Bulb brightness</p> <p>Animals: Heartrate</p>
Term 2:1	Plants: Flowering Plants	Plants: Flowering Plants	Plants	Light	Living Things and Their Habitats: Simple classification	Animals, including humans: Skeletons/ Growth/ Age/ Healthy Lifestyle	Light
Possible BIG Question	What does a bean need to grow? (Fair Test and Observation)	What happens to my bean after I have planted it? (Observation over time)	What happens to a bean once I have planted it? (Observation over time)	How could you organise these light sources into natural and artificial sources? (Identifying and Classifying)	Does the amount of light affect how many woodlice move around? (Fair Tests)	How does age affect a human's reaction time? (Fair Test)	How do astronomers know what stars are made of? (Research)

Term 2:2	Seasonal Changes	Seasonal Changes	Pre – Learning: Forces: How do things move?	Plants	REVISION: Plants	Earth and Space	Living Things and Their Habitats
Possible BIG Question	How will I know it is Spring? (Observation)	Does the wind always blow the same way? (Pattern Seeking)	What animal moves the fastest? (Research) Which can move faster: A bicycle or a cheetah? (Research)	What happens to celery when it is left in a glass of coloured water? (Observing over time)	What are the different ways that seeds disperse? (Research)	Is there a pattern between the size of a planet and the time it takes to travel around the sun? (Pattern Seeking)	What happens to a piece of bread if you leave it on a windowsill for two weeks? (Observing over time.)
Assessment Opportunity (TAPS) TAPS is a website with assessment ideas. https://psth.org.uk/resources/curriculum-materials/assessment	N/A	Plants: Structure Seasons: Seasonal Change	Plants: Plant Growth	Plants: Measuring Plants Light: Making Shadows	Living Things: Local Survey	Animals: Growth Survey Space: Craters	Light: Investigating Shadows Living Things: Outdoor Keys

Term 3:1	Animals, including humans	Animals, including humans: Habitats and Classification	Animals, including humans: Offspring and basic needs	Materials: Rocks	Electricity	Living Things and Habitats: Life Cycles	Evolution and Inheritance
Possible BIG Question	What animals live on school grounds? (Observations)	Which habitat do worms prefer? Where can we find the most worms? (Pattern Seeking)	Which offspring belongs to an animal? (Identifying and Classifying)	Is there a pattern in where we find volcanoes on Earth? (Pattern Seeking)	How has electricity changed the way we live? (Research)	What are the difference between the life cycle of an insect and a mammal? (Research)	Is there a pattern between the size and shape of a bird's beak and the food it will eat? (Pattern Seeking)
Term 3:2	Living Things: habitats of local animals.	PRE-Learning: Evolution and Inheritance: How children resemble their parents. Forces: How do things move? Very basic lessons on this.	PRE- Learning: Evolution and Inheritance: How animals adapt to their environments.	Pre-Learning: Evolution and Inheritance: How children and plants resemble their parents.	Animals, including humans: Food chains	Forces	REVISION: Any Topic
Possible BIG Question	Where would you find a worm, woodlouse, bird or fish? (Identifying and Classifying)	Why do children resemble their parents? (Research)	Can you sort these animals into their habitats? How do they survive in these extreme environments? (Identify and Classification)	Why do children resemble their parents? (Research)	How can we organise teeth into groups? (Identifying and Classifying)	Can you label and name all the forces acting on these objects in each of these situations? (Identifying and Classifying)	Compare the skeletons of apes, humans and Neanderthals – how are they similar, and how are they different?

							(Identifying and Classifying)
<p>Assessment Opportunity (TAPS)</p> <p>TAPS is a website with assessment ideas.</p> <p>https://pstt.org.uk/resources/curriculum-materials/assessment</p>	N/A	<p>Animals: Animal Classification</p> <p>Animals: Body Parts</p>	Animals: Handspans	Rocks: Rock Report	<p>Electricity: Conductors</p> <p>Animals: Teeth (eggs) in liquids</p>	<p>Living Things: Life Cycle Research</p> <p>Forces: Aquadynamic</p>	<p>Living Things: Invertebrates Research</p> <p>Evolution: Fossils/ Egg Strength</p>