Messing Primary School Curriculum Map Outdoor Learning: Science

Year A

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Yr 1/2	Animals including Humans Wild and Wonderful Creatures	Living things and their habitats food chains	Everyday Materials Brilliant Builders	Plants – Art and Nature	Seasonal Changes Weather Art	Animals including Humans Amazing me
Outdoor Learning Opportunities	Identify different types of animals (mammals,fish, birds,etc) found in our immediate surroundings and create a survey of the number found.	Pupils will identify different types of habitats in and around the school grounds naming animals that live in them.	Pupils can go outside in search of different materials. They can then build houses outside based on the Three Little Pigs.	Collect natural materials from the grounds and use them to produce art inspired by nature.	Design and make a windsock. Position them outside and observe their activity on different days/ part of the day.	Pupils venture into the playground to identify what they can hear with their ears.
Year 3/4	Forces Magnets fun and games	Rocks and fossils This Planet roacks!	Living things in their habitats A world of Living things	Plants A feast of Fruit, flowers and Seeds	Animals including Humans Fit for Success	Animals including Humans Circle of life
Outdoor Learning Opportunities	Use the outdoor environment to find magnetic and non - magnetic materials. Think about the things they have in common.	Use the outside to find rocks, sort and classify. Spend time outside drawing rocks looking at shape and texture. Test durability etc on the surface of the playground.	Walk around the grounds identifying as many living things as possible. Which trees/ plants can they identify and how might they be sorted into groups?	Children investigate school grounds and local woods to find seeds and then sort into categories.	Use the playground and equipment to perform tests of fitness.	Investigate animal life in and around Essex – which are predators and which are prey.

Year 5/6	Living things and their habitats Illustrating Life cycles	Materials and their properties Materials Consultants	Earth and Space	Light Theatre Lighting Techniques	Animals including Humans The Human Species	Revision
Outdoor Learning Opportunities	Spend time outside in the school grounds/ woods to determine which species live locally. Choose two species local to the area and research their lifecycles. Investigate asexual reproduction by growing plants from parent plants.	Investigate thermal conductors by keeping pots of porridge hot outside.	Use sports equipment (balls of different sizes to show the movement of the sun and moon around earth. Extend to using other planets using correct scales. Perform to classmates outside in an open space. Use telescopes to explore the night sky one evening.	Investigate the effect of light by building an obstacle course. Which objects can be seen from which angles. Can mirrors be used to help?	Use the perimeter fence and chalk to draw a human timeline with volunteers from reception through to year 6 and teachers. Include heights and ages, find the difference in growth rate per year group.	

<u>Outdoor Learning Overview in Science</u>

Year B

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1/2	Animals including humans People and their pets	Seasonal changes Wild Weather	Everyday Materials Brilliant Builders	Living things in their habitats and homes	Plants – Growing things	Everyday Materials Exploring changes
Outdoor Learning Opportunities	Explore the grounds in search for minibeasts. Where do they live? What do they need to survive? How do they behave differently? At the end of the unit, open the school grounds to pupils and their pets	Pupils use the outdoors to measure shadows, rainfall and wind direction with hand-made science equipment.	Walk around the school and look for objects that are waterproof. How does this help them perform their function? Test absorbency on a rainy day.	Pupils design and build bug hotels to position outside and observe.	Pupils can use the outdoor environment to grow seeds and bulbs – investigating their rate of growth.	On a sunny day investigate the rate at which puddles evaporate in different situations.
Year 3/4	Sound Spectacular Sounds	Light Shining the light	States of Matter What's the Matter?	Electricity Electric Personalities	Plants Greatly Green Growers	Living things in their habitats Habitat Helpers
Outdoor Learning Opportunities	Predict and Measure the distance that sound travels outside and again inside and compare.	Measure and compare the size and shape of shadows during stages of the day. Use water on a sunny afternoon to make rainbows and discuss how these are formed in nature.	Using the playground act out or create a dance to show the processes of the Water Cycle and perform to others. Make ice cream using and then sell them after school in the playground.	Test natural materials from outside to see if they are electrical insulators or conductors.	Look at the growth of plants outside. Which grow where and why? Spend time outside drawing healthy plants and those that have not thrived in their environment. Draw parts of a plant and label functions.	Perform a wildlife survey around the school, identifying numbers of birds, insects that are seen in one area at different times of the day. Repeat at different time of year and compare.

Year 5/6	Materials and their Properties Special Effects Materials	Electricity – Electric Art	Forces Welcome to Force Land	Living things and their habitats The classification Code	Evolution and Inheritance -Survival of the Fittest	SRE
Outdoor Learning Opportunities	Find ways to separate natural materials from the environment.		Use the outdoors to investigate friction on surfaces and air resistance with parachutes.	Find and classify insects species from the school grounds.	Take photographs of plants and wildlife around the school/ wood and learn how these living things are adapted to thriving in the environment.	