

Dothill Progression Mapping



Science

Respect Happiness Responsibility Creativity HONESTY Enthusiasm Confidence Kindness Cooperation fairness

	EYFS	Year One	Year Two
Substantive knowledge (Scientific knowledge and conceptual understanding)	<p>All About Me</p> <ul style="list-style-type: none"> ✓ To identify and name basic body parts. ✓ To know that we have five senses. ✓ To know which body part links to which sense. <p>Plants</p> <ul style="list-style-type: none"> ✓ To identify the basic parts of a plant. Roots, stem, leaf, flower. ✓ To know that a plant is living thing. ✓ To identify the basic needs of a plant to help it grow. <p>Freezing & Melting</p> <ul style="list-style-type: none"> ✓ To understand that ice melts into water. ✓ To identify that cold temperatures can freeze water. ✓ To know that ice can cool down water. <p>Animals (our local environment and mini-beasts)</p> <ul style="list-style-type: none"> ✓ To identify some plants and animals. ✓ To understand that animals live in different environments. ✓ To identify some characteristics of animals e.g fur, feathers, beak etc. <p>Healthy Food</p> <ul style="list-style-type: none"> ✓ To name some sources of food. E.g. fruit, vegetables etc. ✓ To know that fruit and vegetables are healthy food. ✓ To understand that we need healthy food to be healthy. <p>Changing States - chocolate experiment</p> <ul style="list-style-type: none"> ✓ To conduct a basic scientific experiment. ✓ To understand that chocolate melts in higher temperatures. ✓ To identify what happens when chocolate increases in temperature. 	<p>Seasonal Changes</p> <ul style="list-style-type: none"> ✓ observe changes across the four seasons ✓ observe and describe weather associated with the seasons and how day length varies. <p>Everyday Materials</p> <ul style="list-style-type: none"> ✓ 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. <p>Animals Including Humans</p> <ul style="list-style-type: none"> ✓ identify and name a variety of common animals including fish, amphibians, reptiles, birds 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 (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. <p>Plants</p> <ul style="list-style-type: none"> ✓ 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. 	<p>Use of Everyday Materials</p> <ul style="list-style-type: none"> ✓ 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. <p>Animals, Including Humans</p> <ul style="list-style-type: none"> ✓ notice that animals, 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. <p>Plants</p> <ul style="list-style-type: none"> ✓ 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. <p>Living Things & Their Habitats</p> <ul style="list-style-type: none"> ✓ 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 micro-habitats ✓ 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.

<p style="text-align: center;">Disciplinary Knowledge</p> <p style="text-align: center;">(Working scientifically - links to national curriculum)</p>	<p>*Taken from the EYFS statutory framework</p> <p>All About Me</p> <ul style="list-style-type: none"> ✓ Give focused attention to what the teacher says, responding appropriately even when engaged in activity, and show an ability to follow instructions involving several ideas or actions. ✓ Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary. <p>Plants</p> <ul style="list-style-type: none"> ✓ Give focused attention to what the teacher says, responding appropriately even when engaged in activity, and show an ability to follow instructions involving several ideas or actions. ✓ Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class; ✓ Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary. <p>Freezing & Melting</p> <ul style="list-style-type: none"> ✓ Give focused attention to what the teacher says, responding appropriately even when engaged in activity, and show an ability to follow instructions involving several ideas or actions. ✓ Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. ✓ Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary. <p>Animals (our local environment and mini-beasts)</p> <ul style="list-style-type: none"> ✓ Give focused attention to what the teacher says, responding appropriately even when engaged in activity, and show an ability to follow instructions involving several ideas or actions. ✓ Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary. <p>Healthy Food</p> <ul style="list-style-type: none"> ✓ Give focused attention to what the teacher says, responding appropriately even when engaged in activity, and show an ability to follow instructions involving several ideas or actions. ✓ Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary; <p>Changing States - chocolate experiment</p> <ul style="list-style-type: none"> ✓ Give focused attention to what the teacher says, responding appropriately even when engaged in activity, 	<p>Seasonal Changes</p> <ul style="list-style-type: none"> ✓ asking simple questions and recognising that they can be answered in different ways ✓ using their observations and ideas to suggest answers to questions ✓ gathering and recording data to help in answering questions. <p>Everyday Materials</p> <ul style="list-style-type: none"> ✓ asking simple questions and recognising that they can be answered in different ways ✓ identifying and classifying ✓ using their observations and ideas to suggest answers to questions <p>Animals Including Humans</p> <ul style="list-style-type: none"> ✓ asking simple questions and recognising that they can be answered in different ways ✓ identifying and classifying ✓ using their observations and ideas to suggest answers to questions <p>Plants</p> <ul style="list-style-type: none"> ✓ asking simple questions and recognising that they can be answered in different ways ✓ observing closely, using simple equipment ✓ performing simple tests ✓ using their observations and ideas to suggest answers to questions ✓ gathering and recording data to help in answering questions 	<p>Use of Everyday Materials</p> <ul style="list-style-type: none"> ✓ Asking simple questions and recognising that they can be answered in different ways. ✓ Performing simple tests. ✓ Using their observations and ideas to suggest answers to questions <p>Animals, including Humans</p> <ul style="list-style-type: none"> ✓ Identifying and classifying. ✓ Using their observations and ideas to suggest answers to questions. ✓ Asking simple questions and recognising that they can be answered in different ways. <p>Plants</p> <ul style="list-style-type: none"> ✓ Observing closely, using simple equipment. ✓ Performing simple tests. ✓ Using their observations and ideas to suggest answers to questions. ✓ Gathering and recording data to help in answering questions. <p>Living Things & Their Habitats</p> <ul style="list-style-type: none"> ✓ Identifying and classifying. ✓ Observing closely, using simple equipment. ✓ Using their observations and ideas to suggest answers to questions.

	<p>and show an ability to follow instructions involving several ideas or actions.</p> <p>✓ Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary;</p>		
<p>Vocabulary</p>	<p><u>All About Me</u> Face, hair, knee, arm, elbow, back, head, toes, ear, hands, eye, fingers, mouth, nose</p> <p><u>Plants</u> Tree, petals, trunk, fruit, branch, roots, leaves flowers, seed, stem, water, light, temperature, sun.</p> <p><u>Freezing & Melting</u> Water, ice, melt, cold, light, heat, temperature</p> <p><u>Animals (our local environment and mini-beasts)</u> Animals, alive, fur, feathers, beak, animal, insect, wings,</p> <p><u>Healthy Food</u> Fruit, vegetables, water, healthy, growing, exercise,</p> <p><u>Changing States - chocolate experiment</u> melt, chocolate, hard, soft, stretchy,</p>	<p><u>Animals including humans</u> Head, body, ears, eyes, mouth, teeth, leg, tail, wing, claw, fin, scales, feathers, fur, beak, paws, hooves. Names of animals featured first hand from each vertebrate group, Senses - touch, smell, see, taste, hear, fingers (skin), eyes, nose, ear and tongue</p> <p><u>Everyday materials</u> Object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, rubber, card/cardboard, wool, clay, hard, soft, stretchy, stiff, bendy, floppy, waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull, see-through, not see-through</p> <p><u>Plants</u> Leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud, Names of trees in the local area Names of garden and wild flowering plants in the local area.</p> <p><u>Seasonal changes</u> Weather (sunny, rainy, windy, snowy etc.) Seasons (winter, summer, spring, autumn) Sun, sunrise, sunset, day length</p>	<p><u>Animals including humans</u> Offspring, reproduction, growth, child, young/old stages (examples - chick/hen, baby/child/adult, caterpillar/butterfly), exercise, heartbeat, breathing, hygiene, germs, disease, food types (Examples - meat, fish, vegetables, bread, rice, pasta)</p> <p><u>Living things and their habitats</u> Living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed Names of local habitats e.g., pond, woodland etc. Names of micro-habitats e.g., under logs, in bushes etc.</p> <p><u>Plants</u> Plant_ leaf_ stem_ root_ flower_ bud_ water Warmth, tree, bean, nut, grow light, shade, sun, warm, cool, water, grow, healthy</p> <p><u>Uses of everyday materials</u> Names of materials - wood, metal, plastic, glass, brick, rock, paper, cardboard Properties of materials - as for Year 1 plus opaque, transparent and translucent, reflective, non-reflective, flexible, rigid Shape, push/pushing, pull/pulling, twist/twisting, squash/squashing, bend/bending, stretch/stretching</p>