



EYFS and KSI Science Curriculum Overview - Scientific Knowledge and Conceptual Understanding

| YEAR A | EYFS | | |
|--|--|------------------------|---|
| EYFS FRAMEWORK | <p>Understanding the World Understanding the world involves guiding children to make sense of their physical world and their community. The frequency and range of children's personal experiences increases their knowledge and sense of the world around them – from visiting parks, libraries and museums to meeting important members of society such as police officers, nurses and firefighters. In addition, listening to a broad selection of stories, non-fiction, rhymes and poems will foster their understanding of our culturally, socially, technologically and ecologically diverse world. As well as building important knowledge, this extends their familiarity with words that support understanding across domains. Enriching and widening children's vocabulary will support later reading comprehension.</p> <p>3-4YEARS</p> <ul style="list-style-type: none"> • Use all their senses in hands-on exploration of natural materials. • Explore collections of materials with similar and/or different properties. • Talk about what they see, using a wide vocabulary. • Explore how things work. • Plant seeds and care for growing plants. • Understand the key features of the life cycle of a plant and an animal. • Begin to understand the need to respect and care for the natural environment and all living things. • Explore and talk about different forces they can feel. • Talk about the differences between materials and changes they notice. <p>RECEPTION</p> <ul style="list-style-type: none"> • Explore the natural world around them. • Describe what they see, hear and feel whilst outside <p>ELG: The Natural World Children at the expected level of development will: - Explore the natural world around them, making observations and drawing pictures of animals and plants; - 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;- Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.</p> | | |
| | Home Sweet Home | Exploration & Survival | Animals (Previous Going for Gold) |
| Animals including humans Yr 1 | <ul style="list-style-type: none"> ▶ Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. ▶ Recognise that humans are animals. ▶ Compare and describe differences in their own features (eye, hair, skin colour, etc.). ▶ Recognise that humans have many similarities. | | <ul style="list-style-type: none"> ▶ |
| Animals - Animal survival and growth Yr 2 | <p>Yr 1</p> <ul style="list-style-type: none"> ▶ Identify and name a variety of common animals including some fish, some amphibians, some reptiles, some birds and some mammals. ▶ Identify and name a variety of common animals that are carnivores, herbivores and omnivores (i.e. according to what they eat). ▶ Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, and including pets). | | |



EYFS and KSI Science Curriculum Overview - Scientific Knowledge and Conceptual Understanding

| | | | |
|---|---|--|---|
| | <p>Yr 2</p> <ul style="list-style-type: none"> ▶ Find out and describe how animals look different to one another. ▶ Group together animals according to their different features. ▶ Recognise similarities between animals: ▶ Structure: head, body, way of moving, senses, body covering, tails. ▶ Notice that animals have offspring which grow into adults. ▶ Find out about and describe the basic needs of animals for survival (water, food and air). | | |
| <p>Health – How we grow and stay healthy Yr 2</p> | | <ul style="list-style-type: none"> ▶ Notice that humans have offspring which grow into adults. ▶ Find out about and describe the basic needs of 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. ▶ Medicines can be useful when we are ill. Medicines can be harmful if not used properly. | |
| <p>Plants Yr 1 & 2</p> | | <p>Year 1</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 (at least: flower, leaf, root, stem, trunk, seed, branch and petal). <p>Year 2</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 (and how changing these affects the plant). ▶ Plants are living and eventually die. | |
| <p>Environment - Living things and their habitats Yr 2</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 |



EYFS and KSI Science Curriculum Overview - Scientific Knowledge and Conceptual Understanding

| | | | |
|--|--|--|--|
| | | | <p>kinds of animals and plants, and how they depend on each other.</p> <ul style="list-style-type: none"> ▶ 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. ▶ Different kinds of plants and animals live in different kinds of places. ▶ There are different kinds of habitat near school which need to be cared for ▶ Habitats provide the preferred conditions for the animals/plants that live there (compare local habitats and less familiar examples). <p>Observe living things in their habitats during different seasonal changes.</p> |
| <p>Materials & their properties</p> | | | <p>Year 1</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, rock, brick, paper and cardboard. ▶ 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>Year 2</p> <ul style="list-style-type: none"> ▶ Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, water, 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 (applying a force). <p>Some materials can be found naturally; others have to be made.</p> |

Seasonal Change – Yr I Taught over the Year

- Observe and describe changes across the four seasons.
- Observe and describe weather associated with the seasons and how day length and temperature varies.

Nature and field journals - observations over time of seasonal changes, plants, weather and length of day

Working Scientifically Skills will be intertwined over the whole year.

| Year B | EYFS | | |
|--------------------------------------|---|---|--|
| EYFS FRAMEWORK | <p>Understanding the World Understanding the world involves guiding children to make sense of their physical world and their community. The frequency and range of children’s personal experiences increases their knowledge and sense of the world around them – from visiting parks, libraries and museums to meeting important members of society such as police officers, nurses and firefighters. In addition, listening to a broad selection of stories, non-fiction, rhymes and poems will foster their understanding of our culturally, socially, technologically and ecologically diverse world. As well as building important knowledge, this extends their familiarity with words that support understanding across domains. Enriching and widening children’s vocabulary will support later reading comprehension.</p> <p>3-4YEARS</p> <ul style="list-style-type: none"> • Use all their senses in hands-on exploration of natural materials. • Explore collections of materials with similar and/or different properties. • Talk about what they see, using a wide vocabulary. • Explore how things work. • Plant seeds and care for growing plants. • Understand the key features of the life cycle of a plant and an animal. • Begin to understand the need to respect and care for the natural environment and all living things. • Explore and talk about different forces they can feel. • Talk about the differences between materials and changes they notice. <p>RECEPTION</p> <ul style="list-style-type: none"> • Explore the natural world around them. • Describe what they see, hear and feel whilst outside <p>ELG: The Natural World Children at the expected level of development will: - Explore the natural world around them, making observations and drawing pictures of animals and plants; - 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 Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.</p> | | |
| | <p style="text-align: center;">History of Britain</p> | <p style="text-align: center;">The World and Me</p> | <p style="text-align: center;">Oh We Do Like to be Beside the Seaside</p> |
| Animals including humans Yr I | <ul style="list-style-type: none"> ▶ Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. ▶ Recognise that humans are animals. ▶ Compare and describe differences in their own features (eye, hair, skin colour, etc.). ▶ Recognise that humans have many similarities. | | <ul style="list-style-type: none"> ▶ |
| Animals - Animal survival | | Yr I <ul style="list-style-type: none"> ▶ Identify and name a variety of common animals | |

| | | | |
|--|--|---|--|
| <p>and growth Yr 1 & 2</p> | | <p>including some fish, some amphibians, some reptiles, some birds and some mammals.</p> <ul style="list-style-type: none"> ▶ Identify and name a variety of common animals that are carnivores, herbivores and omnivores (i.e. according to what they eat). ▶ Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, and including pets). ▶ Find out and describe how animals look different to one another. ▶ Group together animals according to their different features. ▶ Recognise similarities between animals: ▶ Structure: head, body, way of moving, senses, body covering, tails. <p>Yr 2</p> <ul style="list-style-type: none"> ▶ Notice that animals have offspring which grow into adults. ▶ Find out about and describe the basic needs of animals for survival (water, food and air). | |
| <p>Health – How we grow and stay healthy Yr 2</p> | <ul style="list-style-type: none"> ▶ Notice that humans have offspring which grow into adults. ▶ Find out about and describe the basic needs of 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. ▶ Medicines can be useful when we are ill. ▶ Medicines can be harmful if not used properly. | | |
| <p>Plants Yr 1 & 2</p> | | <p>Year 1</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 (at least: flower, leaf, root, stem, trunk, seed, branch and petal). <p>Year 2</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 (and how | |



EYFS and KSI Science Curriculum Overview - Scientific Knowledge and Conceptual Understanding

| | | | |
|---|--|---|--|
| | | <p>changing these affects the plant).</p> <ul style="list-style-type: none"> ▶ Plants are living and eventually die. | |
| <p>Environment - Living things and their habitats Yr 2</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. ▶ Different kinds of plants and animals live in different kinds of places. ▶ There are different kinds of habitat near school which need to be cared for ▶ Habitats provide the preferred conditions for the animals/plants that live there (compare local habitats and less familiar examples). ▶ Observe living things in their habitats during different seasonal changes. |
| <p>Materials & their properties Yr 1 & 2</p> | | | <p>Year 1</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, rock, brick, paper and cardboard. ▶ 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>Year 2</p> <ul style="list-style-type: none"> ▶ Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, |



EYFS and KSI Science Curriculum Overview - Scientific Knowledge and Conceptual Understanding

| | | | |
|--|--|------------------------|--|
| | | | <p>glass, brick, water, rock, paper and cardboard for particular uses.</p> <ul style="list-style-type: none"> ▶ Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching (applying a force). ▶ Some materials can be found naturally; others have to be made. |
| <p>Seasonal Change Yr I – Taught over the Year</p> <ul style="list-style-type: none"> • Observe and describe changes across the four seasons. • Observe and describe weather associated with the seasons and how day length and temperature varies. <p>Nature and field journals - observations over time of seasonal changes, plants, weather and length of day</p> <p>Working Scientifically Skills will be intertwined over the whole year.</p> | | | |
| <p>Year C</p> | | <p>EYFS</p> | |
| <p>EYFS FRAMEWORK</p> | <p>Understanding the World Understanding the world involves guiding children to make sense of their physical world and their community. The frequency and range of children’s personal experiences increases their knowledge and sense of the world around them – from visiting parks, libraries and museums to meeting important members of society such as police officers, nurses and firefighters. In addition, listening to a broad selection of stories, non-fiction, rhymes and poems will foster their understanding of our culturally, socially, technologically and ecologically diverse world. As well as building important knowledge, this extends their familiarity with words that support understanding across domains. Enriching and widening children’s vocabulary will support later reading comprehension.</p> <p>3-4YEARS</p> <ul style="list-style-type: none"> • Use all their senses in hands-on exploration of natural materials. • Explore collections of materials with similar and/or different properties. • Talk about what they see, using a wide vocabulary. • Explore how things work. • Plant seeds and care for growing plants. • Understand the key features of the life cycle of a plant and an animal. • Begin to understand the need to respect and care for the natural environment and all living things. • Explore and talk about different forces they can feel. • Talk about the differences between materials and changes they notice. <p>RECEPTION</p> <ul style="list-style-type: none"> • Explore the natural world around them. • Describe what they see, hear and feel whilst outside <p>ELG: The Natural World Children at the expected level of development will:</p> <ul style="list-style-type: none"> - Explore the natural world around them, making observations and drawing pictures of animals and plants; - 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; - Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. | | |
| <p>All Roads lead to Home</p> | | <p>Survival</p> | <p>Out of this World</p> |

| | | | |
|---|--|---|--|
| <p>Animals including humans Yr 1</p> | <ul style="list-style-type: none"> ▶ Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. ▶ Recognise that humans are animals. ▶ Compare and describe differences in their own features (eye, hair, skin colour, etc.). ▶ Recognise that humans have many similarities. | | |
| <p>Animals - Animal survival and growth Yr 1 & 2</p> | | <p>Yr 1</p> <ul style="list-style-type: none"> ▶ Identify and name a variety of common animals including some fish, some amphibians, some reptiles, some birds and some mammals. ▶ Identify and name a variety of common animals that are carnivores, herbivores and omnivores (i.e. according to what they eat). ▶ Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, and including pets). ▶ Find out and describe how animals look different to one another. ▶ Group together animals according to their different features. ▶ Recognise similarities between animals: ▶ Structure: head, body, way of moving, senses, body covering, tails. <p>Yr 2</p> <ul style="list-style-type: none"> ▶ Notice that animals have offspring which grow into adults. ▶ Find out about and describe the basic needs of animals for survival (water, food and air). | |
| <p>Health – How we grow and stay healthy Yr 2</p> | <ul style="list-style-type: none"> ▶ Notice that humans have offspring which grow into adults. ▶ Find out about and describe the basic needs of 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. ▶ Medicines can be useful when we are ill. ▶ Medicines can be harmful if not used properly. | | |

| | | | |
|--|--|--|--|
| <p>Plants Yr 1 & 2</p> | | <p>Year 1</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 (at least: flower, leaf, root, stem, trunk, seed, branch and petal). <p>Year 2</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 (and how changing these affects the plant). ▶ Plants are living and eventually die. | |
| <p>Environment - Living things and their habitats Yr 2</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. ▶ Different kinds of plants and animals live in different kinds of places. ▶ There are different kinds of habitat near school which need to be cared for ▶ Habitats provide the preferred conditions for the animals/plants that live there (compare local habitats and less familiar examples). ▶ Observe living things in their habitats during different seasonal changes. |
| <p>Materials & their properties Yr 1 & 2</p> | | | <p>Year 1</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 |

| | | | |
|--|--|--|---|
| | | | <p>materials, including wood, plastic, glass, metal, water, rock, brick, paper and cardboard.</p> <ul style="list-style-type: none"> ▶ 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>Year 2</p> <ul style="list-style-type: none"> ▶ Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, water, 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 (applying a force). ▶ Some materials can be found naturally; others have to be made. |
| <p>Seasonal Change Yr 1 – Taught over the Year</p> <ul style="list-style-type: none"> • Observe and describe changes across the four seasons. • Observe and describe weather associated with the seasons and how day length and temperature varies. <p>Nature and field journals - observations over time of seasonal changes, plants, weather and length of day</p> <p>Working Scientifically Skills will be intertwined over the whole year.</p> | | | |
| Year D | EYFS | | |
| EYFS FRAMEWORK | <p>Understanding the World Understanding the world involves guiding children to make sense of their physical world and their community. The frequency and range of children’s personal experiences increases their knowledge and sense of the world around them – from visiting parks, libraries and museums to meeting important members of society such as police officers, nurses and firefighters. In addition, listening to a broad selection of stories, non-fiction, rhymes and poems will foster their understanding of our culturally, socially, technologically and ecologically diverse world. As well as building important knowledge, this extends their familiarity with words that support understanding across domains. Enriching and widening children’s vocabulary will support later reading comprehension.</p> <p>3-4YEARS</p> <ul style="list-style-type: none"> • Use all their senses in hands-on exploration of natural materials. • Explore collections of materials with similar and/or different properties. • Talk about what they see, using a wide vocabulary. • Explore how things work. • Plant seeds and care for growing plants. • Understand the key features of the life cycle of a plant and an animal. • Begin to understand the need to respect and care for the natural environment and all living things. • Explore and talk about different forces they can feel. • Talk about the differences between materials and changes they notice. <p>RECEPTION</p> <ul style="list-style-type: none"> • Explore the natural world around them. • Describe what they see, hear and feel whilst outside | | |

| | | | |
|--|---|---|--|
| | <p>ELG: The Natural World Children at the expected level of development will: - Explore the natural world around them, making observations and drawing pictures of animals and plants; - 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; Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.</p> | | |
| Animals including humans Yr 1 | <p style="text-align: center;">No Place Like Home</p> <ul style="list-style-type: none"> ▶ Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. ▶ Recognise that humans are animals. ▶ Compare and describe differences in their own features (eye, hair, skin colour, etc.). ▶ Recognise that humans have many similarities. | <p style="text-align: center;">The Art of Food</p> | <p style="text-align: center;">Changes & More Changes</p> |
| Animals - Animal survival and growth Yr 1 & 2 | | <p>Yr 1</p> <ul style="list-style-type: none"> ▶ Identify and name a variety of common animals including some fish, some amphibians, some reptiles, some birds and some mammals. ▶ Identify and name a variety of common animals that are carnivores, herbivores and omnivores (i.e. according to what they eat). ▶ Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, and including pets). ▶ Find out and describe how animals look different to one another. ▶ Group together animals according to their different features. ▶ Recognise similarities between animals: ▶ Structure: head, body, way of moving, senses, body covering, tails. <p>Yr 2</p> <ul style="list-style-type: none"> ▶ Notice that animals have offspring which grow into adults. ▶ Find out about and describe the basic needs of animals for survival (water, food and air). | |
| Health – How we grow and | <ul style="list-style-type: none"> ▶ Notice that humans have offspring which grow into adults. ▶ Find out about and describe the basic needs of | | |

| | | | |
|--|--|--|---|
| stay healthy Yr 2 | <p>humans, for survival (water, food and air).</p> <ul style="list-style-type: none"> ▶ Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. ▶ Medicines can be useful when we are ill. ▶ Medicines can be harmful if not used properly. | | |
| Plants Yr 1 & 2 | | <p>Year 1</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 (at least: flower, leaf, root, stem, trunk, seed, branch and petal). <p>Year 2</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 (and how changing these affects the plant). ▶ Plants are living and eventually die. | |
| Environment - Living things and their habitats Yr 2 | | | <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. ▶ Different kinds of plants and animals live in different kinds of places. ▶ There are different kinds of habitat near school which need to be cared for ▶ Habitats provide the preferred conditions for the animals/plants that live there |

| | | | |
|---|--|--|--|
| | | | <p>(compare local habitats and less familiar examples).</p> <ul style="list-style-type: none"> ▶ Observe living things in their habitats during different seasonal changes. |
| <p>Materials & their properties Yr 1 & 2</p> | | | <p>Year 1</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, rock, brick, paper and cardboard. ▶ 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>Year 2</p> <ul style="list-style-type: none"> ▶ Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, water, 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 (applying a force). ▶ Some materials can be found naturally; others have to be made. |
| <p>Seasonal Change Yr 1 – Taught over the Year in each term.</p> <ul style="list-style-type: none"> • Observe and describe changes across the four seasons. • Observe and describe weather associated with the seasons and how day length and temperature varies <p>Nature and field journals - observations over time of seasonal changes, plants, weather and length of day</p> <p>Working Scientifically Skills will be intertwined over the whole year.</p> | | | |