

# Year 2 Animals Including Humans

## - Diet and Health



Find out about and describe the basic needs of animals, including humans, for survival (water, food and air)



Learn the importance of nutrition for humans



Know how to keep healthy through diet



Discuss the importance of exercise, a healthy diet, and hygiene



Describe how animals obtain their food from other animals



Know how to keep healthy through daily exercise

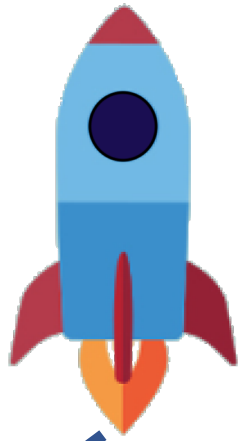


Appreciate the work of Edward Jenner; understand vaccination



Know how diseases are cured and learn about the work of Louis Pasteur

Scientific Enquiry Covered	Rocket Words Covered	Name of Task / Tasks	Resources Needed	National Curriculum Reference	Summative Quiz Questions
The Australian Curriculum - Identifying the needs of humans such as warmth, food and water, using students' own experiences	water, food, air, needs, survival	Exploring what your animal need versus what it wants?	Resources to model / draw / or write about a habitat which shows what their animals needs versus wants.	Find out about and describe the basic needs of animals, including humans, for survival (water, food and air)	Which of the items listed below does an animal need? An animal needs {{food}}, air, and water to survive. An animal would want {{warmth}}, toys to play with and cuddles to feel happy. Place the items below in their order of need by an animal starting with the most important at the top. Sort the objects into the right bucket. What does an animal want?
Use different types of scientific enquiry to gather and record data	nutrition, vitamins, balanced diet, protein, carbohydrate	Ask your peers what their favourite food groups are and create a bar graph.	Handout - Pages 1-4	Describe the importance of exercise, eating the right amount of different types of foods, and hygiene.	What does the word 'vitamin' mean? Which of these functions do vitamins perform? (choose all that apply) Complete the statement: Being healthy is very important, and one of the ways to stay healthy is to eat food from all {{five}} major food groups. It is {{vital}} to have good nutrition. One of the best healthy foods is {{fruit}}. Even if we can't get fruit fresh, we can get it in tins, it is still good for us. The most important thing is to have a {{balanced}} amount of all foods. True or false: Exercise is more important than a healthy diet. Sort these foods into good types of proteins and those which don't provide good proteins.
Identifying differences, similarities or changes related to simple scientific ideas and processes.	portion, food groups, balanced diet, vitamins, ingredients	Create a food diary	Food Diary Handout Pencils	Identify that animals, including humans, need the right types and amount of nutrient, and that they cannot make their own food; they get their nutrient from what they eat.	Brown wholewheat pasta, bread and rice are more healthy than white pasta, bread and rice. Fill out the blanks: When you eat healthily your body gets the {{nutrients}} it needs to live well. It is important to eat from all the food {{groups}}, but you should eat {{fruit and vegetables}} the most, as well as {{carbohydrates}}. You should avoid too many dairy products and {{fatty}}, sugary foods. Which of these are healthy foods and which are not healthy foods? What is it called when we eat the correct amount of a variety of foods? Name some good things about eating a healthy diet.
Observing closely, using simple equipment.	exercise, hygiene, healthy eating, allergy, vitamins	Performing simple tests. Fatty Crisps Test.	Fatty Crisps Fair Test Several bags of crisps (different brands and types) Pen Rolling pin graph paper kitchen roll	Describe the importance of exercise, eating the right amount of different types of foods, and hygiene.	Which of these foods is healthiest for you? Which of these does the human body need to survive? (choose all that apply) True or false: Only 20% of the human body is made from water. Complete the statement: Watch the expert film with Floss the dog! Which of the following does Floss need to stay healthy? Once you've answered, think how this is similar or different to humans? (choose all that apply) Which of these foods contain lots of fat and which contain less fat?
Sorting and classifying	farm, goat, nutrient, red meat, white meat	Make a collage which shows the foods which come from animals	Handout Pencils	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	What foods are made using milk? What animals are a great source of milk humans drink? Fill in the blanks. The meat of cow, goat, sheep, and pigs has a lot of fat and is called {{red meat}}. Fill in the blanks {{White meat}} contains less fat and is obtained from chicken and fish. White meat is {{healthier}} and can be easily digested as compared to the red meat. Steak, and beef both come from a _____.
Identifying differences, similarities or changes related to simple scientific ideas and processes	exercise, active, target, equivalent, pedometer	Create an exercise log	Exercise Log Handout Body Part Game Ball	Identify that animals, including humans, need the right types and amount of nutrient, and that they cannot make their own food; they get their nutrients from what they eat.	What is a pedometer used for? True or false: Children between 5 and 18 should do at least 60 minutes of exercise per week. Is that true or false? What benefits does exercise have? Name some ways that you can keep your body healthy. Complete the statement: This is my {{target}}. To eat {{healthy}} foods. To eat {{unhealthy}} foods every now and then as a treat. Drink lots of {{water}}.
Using observations and ideas to suggest answers to questions	vaccine, Edward Jenner, cowpox, infection, measles	Read the story and explain why each part is important to Edward Jenner's discovery.	Handout Pencils	Describe the importance for humans of exercise, eating the right amounts of different types of food and hygiene.	Fill out the blanks Edward Jenner was an {{Englishman}} who helped to save many lives with {{vaccinations}}. He first tested his idea on a boy called James Phipps and injected him with a tiny amount of {{cowpox}} and smallpox. James became a little unwell but soon recovered. It was then that Jenner realised the body could {{fight}} off small amounts of a disease. Jenner's injections became so popular that the King asked to be vaccinated by Jenner. Which of these diseases do you have a vaccination to prevent and which do you take medicine for when you have it? Which of these is the name of an injection given to prevent illness and disease? Which of these diseases can you only get once in a lifetime?
Carrying out simple comparative tests. Using observations and ideas to suggest answers to questions.	disease, fever, Louis Pasteur, germ, stethoscope	Performing simple tests. The Glitter Challenge!	Glitter Handout Pencils	Describe the importance for humans of exercise, eating the right amounts of different types of food and hygiene.	A doctor may listen to your heartbeat with a thermometer. If you are ill, a doctor might prescribe a {{medicine}} for you to have to kill off the {{germs}} in your body. Doctors can sometimes help prevent disease by giving you an {{injection}} or some tablets. Which of these pictures relates to something that Louis Pasteur helped discover and which don't? If you have a fever, what happens to your body temperature? Which of these is a way an illness can be passed from one person to another? (choose all that apply)



# Year 2 Everyday Materials



Explore the work of Charles Macintosh; understand how the properties of materials can be changed



Know about John McAdam's invention, recognise that new materials are constantly being invented



Explore the work of John Dunlop; identify and compare the usefulness of certain materials when forces are applied



Explain why we use certain materials

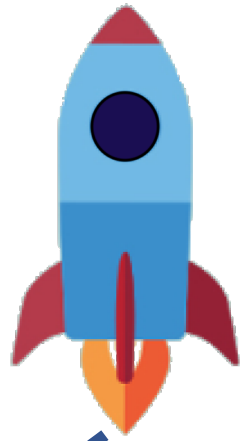


Investigate squashing, bending, twisting, and stretching



Compare the uses of everyday materials

Scientific Enquiry Covered	Rocket Words Covered	Name of Task / Tasks	Resources Needed	National Curriculum Reference	Summative Quiz Questions
To make link between materials and how they are used.	Charles Macintosh, penetrate, repel, absorbent, waterproof	Performing simple tests. Things Change. Test a range of materials to find how well they can be waterproofed.	<i>Orange: Sink or Swim?</i> Orange, Bowl, Water <i>Waterproofing Experiment</i> Wax, Hairdryer An old canvas shoe Bowl/jug, Water <i>Handout</i>	Identify and compare the suitability of a variety of everyday materials including wood, metal, plastic, glass, brick, rock, paper, and cardboard, for a particular use.	True or false: Charles Macintosh invented the first ever rainproof cloth. Which two inventors worked together to produce reliable rainproof sheets and coats. Complete the statement: Macintosh's invention has been very important because it means we can keep ourselves {{dry}}. This has meant we are able to go outside in a wider range of {{weather}} types and protect us from the elements. This, in turn, would stop us from getting too {{cold}}, so waterproofing has been an important invention for our {{health}}. Group these items into waterproof and non-waterproof.
To test different materials to find out how absorbent they are.	John McAdam, metal, tarmac, maintenance, rubber	Performing simple tests. Change the Properties of Material.	<i>Water Absorbency Test</i> Material Samples i.e. Kitchen towel, Paper, Greaseproof Paper, Tissue Paper, Cardboard Wax Bowls and water Pipette or teaspoon <i>Handout</i> Investigation Sheet	Identify and compare the suitability of a variety of everyday materials including wood, metal, plastic, glass, brick, rock, paper and cardboard, for a particular use	What can be a problem with a road without tarmac? (Tick all that apply) What did McAdam originally use for his roadbeds? Complete the statement: The best roads we use today are made of McAdam's invention, {{tarmac}}. This combines tar and {{bitumen}} together to create a {{smooth}} and flexible surface. This has made roads safer, cheaper and more {{durable}} which means they last longer. Rubber is a better material to use for knives and forks than metal. Group these pictures into good and bad surfaces for roads. What could be the problems and risks from a bad road surface?
To use, correctly scientific words related to changing shape.	force, pushing, properties, John Dunlop, material	What it's Made From?	<i>Exploring Materials / Materials Audit</i> Labels, lump of wood, clay paper, a piece of metal plastic (bit of plastic bag, bit of a drinks bottle, eraser, etc.), cork, card, glass fabric, ball of wool <i>Handout</i>	Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.	What did John Boyd Dunlop invent? What does friction do? (choose two options) If you stand on a grape and squash it, what force breaks the grape? Group these items by the type of material - stretchy or rigid? Which of these words could be a property of a material? (choose four answers)
To test whether what recycled materials are suitable to create musical sounds from.	suitable, unsuitable, transparent, strong, weak	Make music from recycled materials.	Recycled Musical Instruments Recycled materials such as: Greaseproof paper Elastic bands Dried beans Tin can <i>Handout</i>	Find out how shapes of solid objects made from some materials can be changed by squashing, bending, twisting, and stretching.	Which of these materials is most suitable to make a table from? Which of these items are best made of metal? True or false: Car tyres are best made from plastic. Complete the statement: Some materials are better for some jobs than others. For example, {{paper}} is really good for writing on or making a paper aeroplane, but it wouldn't be good to {{build}} an actual aeroplane. Rubber is {{stretchy}} and is good for clothing such as gloves and tights, but would be useless for building a {{chair}}. People who make objects are always very careful to {{test}} which material is the best one to use. Watch today's expert film with Ian Guest. Using it, decide which materials would be most suitable to use to build features at Fairhaven Gardens. For those which are unsuitable, can you think why?
To recognise that different objects can have different properties, and to sort objects according to how their shapes can be changed.	squash, bend, twist, stretch, force	Let's make some silly putty to twist, bend, squash and stretch!	Making Putty Per Putty: 45g cornflour 60ml washing-up liquid Food colouring (optional, if using colourless washing-up liquid)	Find out how shapes of solid objects made from some materials can be changed by squashing, bending, twisting, and stretching.	Which of these materials are the three strongest for making a model? If you wanted to pull or stretch something, which of these would be best to use? Watch today's expert film with Dr. Sam Rowe. Which words does Sam use to describe metals so they can change shape and form? True or false: All materials can change shape. Which of these objects are easier to stretch and which are easier to squash?
Performing simple tests. To compare balls to find out how bouncy they are.	brick, rubber, fabric, stone, paper	Material Properties.	Bouncing Balls Experiment tennis balls, plastic balls polystyrene balls, fabric balls dough balls, <i>Handout</i> Material, Source and Product <i>Handout</i>	Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, paper, and cardboard, for particular uses.	Which of these is the material and which is the object made from a material? How can you work out how old a tree is? True or false: Watch today's expert film with Ian Guest, who explains what we can learn from the 'rings' inside a tree. Use this to tick which of the following statements are true. True or false: A greenhouse is best made from transparent glass or clear plastic. Complete the statement: Plastic is a very {{popular}} material to use because it has a range of uses. We use {{twenty}} times the amount we did fifty years ago. However, if we throw away plastic it can {{harm}} wildlife. Therefore, we need to remember to re-use, reduce, {{recycle}}.



# Year 2 Animals Including Humans

## - Growth



Learn the life cycle of birth, growth, reproduction, and death



Learn about reproduction and growth in animals



Learn how humans grow by looking at how babies grow into adults



Describe the stages of life from adulthood to old age



Know the life cycle of a frog

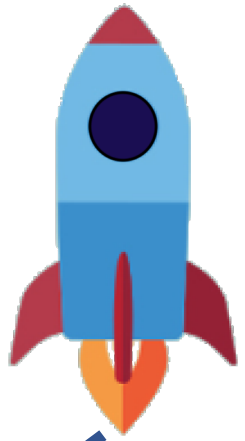


Describe the life cycle of a butterfly



Compare generations of families to help understand how characteristics are inherited

Scientific Enquiry Covered	Rocket Words Covered	Name of Task / Tasks	Resources Needed	National Curriculum Reference	Summative Quiz Questions
Asking relevant questions and using different types of scientific enquiries to answer them.	birth, growth, reproduction, death, life cycle	Asking simple questions and recognising that they can be answered in different ways. Explain and write about the life cycle of a chicken.	The Life Cycle of a Chicken - Craft Activity. Googly eyes, Paper, Scissors, Yellow, cream, red paper, Glue, Paint, Fluffy chicks, Pencils, Colouring pencils, Handout	Discovering how seeds are formed by observing the different stages of plant life cycles over a period of time. (The National Curriculum only covers the life cycle of plants and not animals.)	What do we mean by a cycle in nature? Put these in order. True or false: The chicken is the closest living relative to Tyrannosaurus rex. Complete the statement: The chicken's skeleton is {{light}}, like many birds', so that they are able to {{fly}} - even if it is only a little way! The {{skull}} of the chicken protects its brain and the chicken's {{muscles}} help it move, just like in human beings. Choose which of these male, female and offspring names are correct for the particular animal.
Noticing patterns.	reproduction, live birth, hatched, growth, pregnancy	Observing closely, using simple equipment. Measuring Height.	Measuring Height, Graph paper, Self-stick notes, Tape measure, Handout	Notice that animals, including humans, have offspring that grow into adults.	What is a male chicken called? True or false: All hen's eggs have baby chicks inside. Which of these might a farmer raise a lamb or sheep for? (choose two answers) Sort these mammals from those that live longest to those that live for the shortest amount of time (on average). Which of these animals are grown and born in an egg and which are not?
Gathering and recording data to help in answering questions.	growth spurt, child, teenager, adult, elderly	Gathering and recording data to help in answering questions. Do you have Longer Arms if you're Taller?	Life Cycle and Growth Collage, Paper, Glue, Scissors, Magazines / newspapers, Colouring pencils / pens, Do you have Longer Arms if you're Taller? Arm length investigation sheet, Handout	Notice that animals, including humans, have offspring that grow into adults.	During adolescence, there are lots of changes to boys' and girls' {{bodies}}. This includes them growing taller, growing {{hair}} on their bodies and changes in their feelings. Boys and girls grow at different {{rates}}. Although girls tend to start growing earlier, boys are usually {{taller}} as adults. Which of these things change as children grow into adults? What is the period of growth called between a child and teenager? Which of these can happen to humans as they become older? (choose all that apply) At what age, on average, is a human being fully grown?
Describe what happens to us as we grow older	adulthood, appearance, fragile, middle age, old age	Design a programme for older people which will help them learn about technology	Handout, Pencils	Notice that animals, including humans, have offspring that grow into adults.	It is harder to learn new things as we get older. When we reach adulthood, we won't grow any {{taller}} but we can become more muscular. It is important that we look after our bodies as we age, so we are {{less}} likely to become {{ill}} when we are old. Which activity is best for keeping you alert? Sort the stages of life, from youngest to oldest. How can older people keep their brains active.
Asking relevant questions and using different types of scientific enquiries to answer them.	amphibian, frog, frogspawn, tadpole, absorb	Create a display about the life cycle of a frog.	Handout Page 1, Scissors, Glue	Discovering how seeds are formed by observing the different stages of plant life cycles over a period of time. (The National Curriculum only covers the life cycle of plants and not animals we combine a review of both animals and plants.)	A frog can live as long as 20 years. Put these stages of a frog's life in order of growth. Which of these facts about frogs are correct? (choose all that apply) In which season of the year does frogspawn appear? What type of animal is a frog?
Asking relevant questions and using different types of scientific enquiries to answer them.	metamorphosis, caterpillar, chrysalis, larva, butterfly	Make a butterfly for a display and answer the questions on the handout.	Butterfly Craft, Black, pink and red sugar paper, Pipe cleaners, Googly eyes, Scissors, Glue, Colourful shape stickers, Pompoms	Discovering how seeds are formed by observing the different stages of plant life cycles over a period of time. (The National Curriculum only covers the life cycle of plants and not animals we combine a review of both animals and plants.)	Metamorphosis is the process of a caterpillar changing into a butterfly. When it emerges from the chrysalis, a butterfly releases blood into its wings so it can fly away. Which of these are a stage in a butterfly's life cycle. A female butterfly lays...? What is it called when a caterpillar sheds its skin?
Identifying and classifying	characteristics, generation, Gregor Mendel, resemblance, similarities	What activity can you create which will help the older generation learn how to use the internet?	The internet, Handout, Pencils	Notice that animals, including humans, have offspring which grow into adults	To understand what we inherit, many scientists have conducted {{experiments}} on plants, animals and other organisms. One such scientist was a monk called {{Gregor Mendel}} who investigated inheritance based on {{peas}}. We can inherit such things as our looks, life cycles and diseases from our {{parents}}. True or False - if two crocodiles bred together, they could make an alligator. Identify what is classed as a parent or a baby. What does 'inherit' mean in biology? Which of these could you inherit from one of your parents?



# Year 2 Living Things and Their Habitats

## Habitats Around the World



Know that living things live in environments to which they are suited



Appreciate that environments are constantly changing



Describe life in the ocean



Appreciate the dangers to ocean life



Explore the Arctic and Antarctic habitat

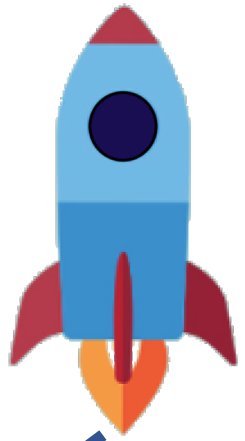


Explore the rainforest and its problems



Understand desert, underground and ocean habitats

Scientific Enquiry Covered	Rocket Words Covered	Name of Task / Tasks	Resources Needed	National Curriculum Reference	Summative Quiz Questions
Performing simple tests	polar bear, habitat, grub, woodland, woodpecker	Woodlice Investigation.	<i>Woodlice Investigation - Choice Chamber</i> Some woodlice (!) Dish/container Filter Paper Cover for container	To identify that most living things live in habitats to which they are suited and describe how different habitats provide for basic needs of the of different kinds of animals and plants and how they depend on each other. To explore and compare the differences between the habitats.	Which of these is the best definition of the word 'habitat'? Which of these are true about how a polar bear is adapted to its environment? Which of these animals may have it's natural habitat in a woodland? Order these items in a food chain, from the top of the food chain (predator) to bottom of food chain (producer). Sort these animals in to those who live in the desert and those who live in the rainforest. It helps to look at the pictures and think whether they would best be suited to the desert or rainforest!
Gather and record data to help in answering questions	rainforest, moisture, extinct, climate, endangered	Cleaning Your Environment.	<i>Cleaning Your Environment</i> Litter pickers Fluorescent bibs Gloves  Handout	To identify that most living things in the habitats to which they are suited and describe how different kinds of habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other.	In which of these environments would an oak tree thrive best? Which of these definitions of a habitat is correct? Complete the statement: One of the most important {{habitats}} in the world are rainforests. They are tall, dense and {{green}} forests which grow in the areas around the {{equator}}. Rainforests are home to many wonderful animals and {{plants}}. Which of these is a way that humans can badly affect a habitat in the countryside? (choose all that apply) Before and after - which of these environments are unspoilt and which have been changed due to human activity?
Gathering and recording data to help in answering questions	plankton, ocean, ecosystem, coral reef, trench	Ocean Life Collage.	Handout Scissors Glue Paper	To identify living things in the habitats to which they are suited and describe how different kinds of habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other.	Order the ocean food chain from producer to consumer. Which of these forms of ocean life is a plant and which is an animal? How deep is the biggest ocean trench? Which of these live in the ocean? Which of these forms of ocean life can be dangerous to humans?
Gathering and recording data to help in answering questions.	marine, continent, litter, oil tanker, overfish	Create a poster that signposts how to dispose of your rubbish responsibly.	<i>Ocean Life Danger!</i> Resources to make a poster i.e. paper paint glue magazine Handout	To identify that most living things in the habitats to which they are suited and describe how different kinds of habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other.	The ocean is home to a large amount of beautiful and {{colourful}} plants and animals. Humans have had a {{damaging}} effect on life in the sea due to {{pollution}}. There are several ways we can help prevent this pollution, such as not throwing away {{plastics}} and be avoiding {{oil}} spills. You have drunk a bottle of water. How could that empty bottle end up polluting the water? Which of these plastic items could you avoid by using a paper version instead, which is much better for our environment? Which of these animals which humans eat are caught in the sea? (choose all that apply) Which of these statements is true? (choose all that you think are true)
Identifying and classifying	Arctic, Antarctic, tundra, narwhal, caribou	Create a Venn diagram to identify those animals which live in both polar regions.	Handout	To 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.	The polar regions are called the Arctic and Antarctic. The northern polar region is called the {{Arctic}}, and in the south the polar region is the continent of {{Antarctica}}. Tundra ecosystems are _____. Animals who live in polar regions have {{adapted}} by having {{thick fur}} or feathers, and {{hunting fish or each other}} rather than relying on plants for food. What is this animal called? What is the animal called?
Asking relevant questions and using primary and secondary research sources to answer them.	rainforest, biodiversity, deforestation, poaching, pollution	Save the rainforest campaign	Optional: books/internet research presentation / film-making software	To 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	The rainforest faces problems, but these can be stopped if people help. Which of the following are made from things in the rainforest? (choose three) What is a rainforest? Which of these are problems that the rainforest faces? (choose three) The rainforest makes 20% of the world's...
Observing closely and gathering and recording data in help in answering questions	earthworm, desert, lizard, cactus, pond	Soil Audit Challenge.	<i>Model Habitats</i> , Underground: Card, scissors, pens, Desert: sand, stones, small plants, leaves Underwater: glass container, gravel, water, seaweed, other water-based plants. <i>Soil Audit Challenge</i> Spade, Square foot grid <i>Handout</i>	To identify that most living things live in habitats to which they are suit and describe how different habitats provide for basic needs of the of different kinds of animals and plants and how they depend on each other. To explore and compare the differences between the habitats.	Which of these creatures lives underground? (choose all that apply) Which of these words may describe a desert habitat? Complete the statement: There are many types of water-based habitats, such as ponds, lakes, rivers and {{oceans}}. Oceans have many different {{species}} of sea-life, such as fish and coral. Fish can not {{survive}} outside water, and some animals live under water their whole lives. Others, such as {{amphibians}} like frogs and salamanders, live on land and in the water. Look at these habitat pictures - sort them in to habitats it is most and least easy for humans to survive in. Can you explain your choices? True or false - the camel is best adapted for life living on the beach in a seaside resort.



# Year 2 Living Things and Their Habitats



Explore the differences between things that are living, dead and things that have never been alive



Identify and name a variety of plants and animals in a microhabitat



Describe how animals obtain their food from plants



Know about different sources of food grown by farmers



Understand the journey food makes from the farm to the supermarket



Learn about the food chain

Scientific Enquiry Covered	Rocket Words Covered	Name of Task / Tasks	Resources Needed	National Curriculum Reference	Summative Quiz Questions
Identifying and classifying	living, dead, excrete, smartphone, robot	Create a poster to sort living and non-living things.	Poster paper Pens/pencils/paints Pictures of living and non-living things	Explore the differences between things that are living, dead and things that have never been alive.	Select the items which are alive. Sort the items into the correct bucket. What are the processes of something which is living? What is the difference between dead and something which has never been alive? What has never been alive?
Identifying ways that science knowledge is used in the care of the local environment such as animal habitats, and suggesting changes to parks and gardens to better meet the needs of native animals	abiotic, biotic, habitat, microhabitat, species	Create your own microhabitat	Crafting equipment	Identify and name a variety of plants and animals in their habitats, including microhabitats	A {{habitat}} is an environment where {{organisms}} live throughout the year or for shorter periods of time to find a {{mate}}. A {{microhabitat}} is a {{small}} area which differs somehow from the {{surrounding habitat}}. A microhabitat's conditions may be home to _____. Sort the animals into the correct habitat or microhabitat. Sort the images into the right bucket.
Sorting and classifying.	oil, cereal, root vegetable, fruit, sugarcane	Sort the stages of production for a range of foods, and then into the correct order.	Handout Scissors Glue Ruler Pencil	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	{{All}} food comes from plants, even the {{animals}} depend on plants. We obtain food from plants {{directly or indirectly}}. Plants provide us with vegetables, coffee, cereals, _____, fruits, sugar, spices, and oil. What foods do plants provide? Sort the vegetables. Sort the foods. Sugar comes from _____.
Performing Simple Tests	potato, crop rotation, sugar beet, barley, arable	Growing Grass from Seed in variable conditions	<i>Growing Grass from Seed</i> Two containers per pair (shallow plastic or plastic cups) Grass seed Soil / compost Plant food Water KS1 Investigation Sheet	Identify and describe the basic structure of common wild and garden plants	{{Cereals}} are used to feed both humans and animals. {{Pigs}} mostly eat cereal crops. So do {{poultry}}. Sort these into order. How many ways can you cook potatoes? Which of these are poultry? Which of these are farm machinery?
Where do you keep different types of food? Keep some fruit in different places and see what happens to it.	Crate, frozen food, forklift truck, refrigerated lorry, canned fruit	Sort the stages of production for a range of foods, and then into the correct order.	Handout Ruler Pencil	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	Put these in order: carrots are grown in the ground, carrots are harvested, carrots are put into crates Some fruit and vegetables are {{cooked}} in factories, then {{canned or frozen}}, before being transported to {{supermarkets}}. Refrigeration means keeping things cold so they don't last longer. What do you call a vehicle with bars that stick out at the front to help it lift crates and other heavy objects? Are tin cans recyclable?
Gather and recording data to help in answering questions	food chain, caterpillar, producer, consumer, life cycle	Food Chain Challenge.	<i>Handout</i> - print single sided if you are doing the second task, <i>Card/paper</i> scissors, sticky tape coloured pens/pencils glue stick. You may prefer to provide the children with animal pictures to cut out instead	To describe how animals obtain their food from plants and other animals, using the ideas of a sample food chain, and identify and name different sources of food.	What are the organisms called which are in the first stage of the food chain? What is the process called from producer to consumer, with organisms eating each other along the way? Complete the statement: A food chain is started by a {{producer}}, which is something which gets its energy from water, light, soil and {{heat}} from the sun. This organism will typically be eaten by a small creature, such as an {{insect}} before the food chain moves up to the consumers. Order these organisms in a food chain from producer to consumer. Sort these organisms into producers and consumers.



# Year 2 Plants - Growth and Care



**Understand what plants need in order to thrive**



**Understand that plants need water, light, and a suitable temperature in order to grow well**



**Understand the difference between a bulb and a seed**



**Understand that plants make their own food**



**Know how plants grow from a seed to a plant**



**Recognise the importance of flowers and seeds**

Scientific Enquiry Covered	Rocket Words Covered	Name of Task / Tasks	Resources Needed	National Curriculum Reference	Summative Quiz Questions
Using observations and ideas to suggest answers.	temperature, insulate, artificial, natural, absorb	A Recipe for Growth.	Handout	Observe and describe how seeds and bulbs grow into mature plants.	Which of these are the best conditions for plants to thrive? Why are greenhouses not always the ideal place to grow plants? Find 3 answers. True or false: In the UK most vegetables grow best between April and September. Complete the statement: For plants to grow best, they should be in their {{natural}} surroundings. This means they will receive {{rainwater}} and natural {{sunlight}} which means they grow properly and healthily. Are these plants healthy or unhealthy?
To ask questions that help us to find out about growing plants from seeds.	nutrient, temperature, roots, fertiliser, produce	Peas Please!	Resources: Plastic Cups Soil Watering jug with water Peas (beans) to plant Handout	Observe and describe how seeds and bulbs grow into mature plants, and find out and describe how plants need water, light and suitable temperature to grow and to stay healthy.	True or false: Grass and trees are both types of plant. What is transferred between the roots and leaves in a plant? Which of these are contained in fertiliser for plants? Find 3 answers. Complete the statement: As well as light, air, water and nutrients, plants also need plenty of {{space}} in order to grow well. If not, they can get crowded and their {{roots}} won't have room to grow. Plants also like the {{temperature}} to be just right. In some countries it is too hot or too cold for plants to grow well. Which of these pictures show good and bad conditions for most plants to grow in.
Gathering and recording data to help answer questions.	bulb, dormant, onion, daffodil, tulip	Comparing seeds and bulbs	<i>Seeds and Bulbs</i> , A selection of seeds and bulbs, bulbs - garlic, onion, daffodil, tulips, lillies, fennel. seeds - apple, pumpkin, pepper, stone fruit, dried peas, peanuts., Sharp knife (adult supervision), magnifying glass (optional), <i>Handout</i>	Observe and describe how seeds and bulbs grow into mature plants, and find out and describe how plants need water, light and suitable temperature to grow and to stay healthy.	True or false: An onion is a seed. What is the thin layer around a bulb called? What does 'dormant' mean? Which of these are seeds and which are bulbs? Complete the statement: When watching today's expert film with Mike, I learnt that {{poppy}} seeds are found inside the head or flower of the plant. Also, fir cone seeds fall out when it is {{hot}} and sunny. Seeds usually have a tough {{coat}} surrounding them, which protects the plant growing inside.
Performing simple tests.	glucose, carbon dioxide, oxygen, conditions, photosynthesis	Testing the effect of sunlight on leaves.	Healthy green leaf plant i.e. geranium Paper / Construction paper Masking tape <i>Handout</i>	Observe and describe how seeds and bulbs grow into mature plants.	True or false: Plants are able to grow because they eat other plants.. What do plants need in order to grow healthily? Find 4 answers. What is the first period of growth called for a plant? Order these for the process of growing a healthy plant Place these into groups - what plants need and what humans need. Can you notice any similarities?
Using observations and ideas to suggest answers.	pollen, ovule, fertilised, stigma, anther	Complete a diorama to show the growth stages of a plant.	<i>Diorama (suggested resources)</i> Cardboard box Coloured Card Pipe Cleaners Pom Poms Pens/paints/craft materials <i>Handout</i>	Observe and describe how seeds and bulbs grow into mature plants.	What can you remember about plants so far? What conditions does a seed need to grow into a healthy plant? Select 5 answers. Which part of the flower makes male pollen? Complete the statement: Pollen can be carried between plants by {{wind}} or by {{insects}} such as bees. It can also be carried in other ways, like getting caught up in the {{fur}} of an animal. When the pollen reaches the {{ovule}}, a seed is grown. True or false: There is a part of a flower called a stigma. Put these statements in order for how a flower is pollinated.
To ask questions that help us to find out about growing plants from seeds.	blossom, fruit, vegetable, seed, flower	Observing closely, using simple equipment, cut up and describe the seeds in various produce.	Seed Sorting, A range of seeds, stones and pips from a range of fruits and vegetables Coloured pens and pencils for drawing, Modelling and Sorting Activity, Modelling clay <i>Handout</i>	Observe and describe how seeds and bulbs grow into mature plants, and find out and describe how plants need water, light and suitable temperature to grow and to stay healthy.	True or false: Apples contain a seed. If you are eating a green bean, what part of the plant are you eating? Which of these foods are the root of the plant? Complete the statement: Sometimes, when we eat fruit and vegetables like cauliflower, we are actually eating the {{flower}} of the plant. For example, {{broccoli}} is a flower. Which of these are seeds and which are flowers?

