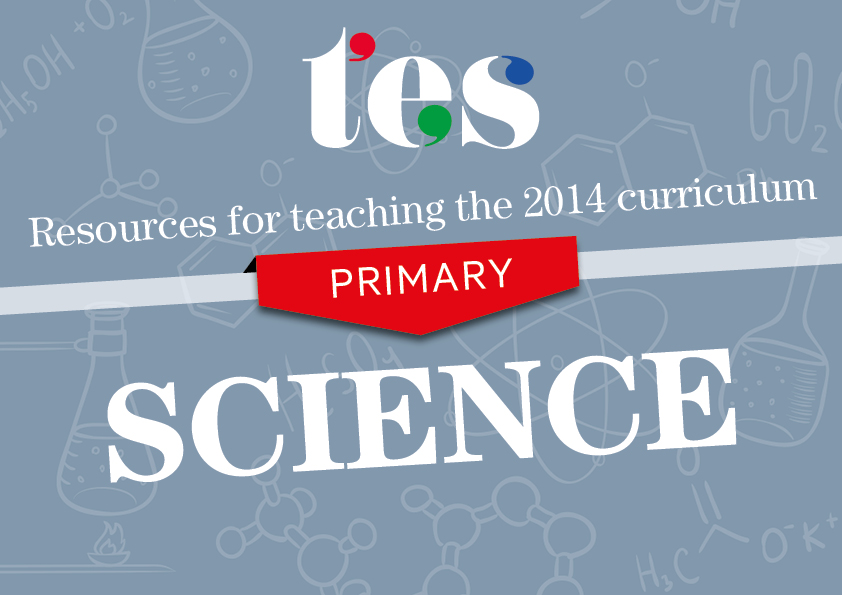
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**Science**

**Key Stages 1 and 2**

Resources to help you teach the 2014 curriculum for science

**Year 1 programme of study**

**Year 1 - Plants**

Pupils should be taught to:

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| **Statutory requirements** | |
| * identify and name a variety of common wild and garden plants, including deciduous and evergreen trees | * [**Wildlife spotter worksheets**](http://www.tes.co.uk/teaching-resource/Wildlife-spotter-pack-6072742/)   A collection of wildlife spotter sheets to help students identify wildlife.   * [**Great plant hunt**](http://www.tes.co.uk/teaching-resource/Teachers-booklet-with-activities-for-5-6-year-olds-6044247/)   A booklet containing activities linked to using plants from the local environment in lessons.   * [**Spring flowers**](http://www.tes.co.uk/teaching-resource/Spring-Flowers-6054943/)   Two PowerPoint presentations giving information about different spring flowers.   * [**Plants videos**](http://www.tes.co.uk/teaching-resource/-and-quot-Teachers-and-39-Domain-and-quot-Plants-and-Animals-6013762/)   A link to an American website with a variety of videos about plants. |
| * identify and describe the basic structure of a variety of common flowering plants, including trees | * [**Teaching with trees**](http://www.tes.co.uk/teaching-resource/Teaching-with-trees-6045329/)   A guide to teaching about trees in lessons and advice on planting trees in your school grounds.   * [**Name the parts of a plant**](http://www.tes.co.uk/teaching-resource/Name-the-parts-of-a-plant-3013138/)   A simple worksheet requiring children to name the parts of a plant.   * [**Parts of a plant and their function**](http://www.tes.co.uk/teaching-resource/Parts-of-a-plant-and-their-function-6321279/)   A PowerPoint presentation to aid whole-class teaching of this subject.   * [**Label a bean part game**](http://www.tes.co.uk/teaching-resource/Label-a-bean-plant-game-3012698/)   A great game to aid children with labelling skills. |

**Year 1 - Animals including humans**

Pupils should be taught to:

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| --- | --- |
| **Statutory requirements** | |
| * identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals | * [**Sea creature identification cards**](http://www.tes.co.uk/teaching-resource/Sea-Creatures-Identification-Cards-3005738/)   A series of cards to aid identification of sea creatures.   * [**Bird guide**](http://www.tes.co.uk/teaching-resource/Bird-Guide-6066913/)   An *RSPB* guide to British birds that is easy to adapt for use with children in Key Stage 1.   * [**Amphibian and reptile identification guide**](http://www.tes.co.uk/teaching-resource/Amphibian-and-Reptile-Identification-Guides-6202763/)   This guide provides information for the teacher to support teaching about amphibians and reptiles.   * [**Minibeast describing game**](http://www.tes.co.uk/teaching-resource/What-am-I-A-Minibeast-descriptions-game-for-IWB-3005927/)   A game where children have to guess the minibeast using the clues. Can be adapted to suit any animal. |
| * identify and name a variety of common animals that are carnivores, herbivores and omnivores | * [**Carniovres, herbivores and omnivores Venn diagram**](http://www.tes.co.uk/teaching-resource/Carnivores-omnivores-and-herbivores-Venn-diagram-6355183/)   A lesson plan and work sheet to help children sort animals into a Venn diagram.   * [**Animal teeth**](http://www.tes.co.uk/teaching-resource/Animal-Teeth-6070963/)   An activity where children sort different skulls based on their teeth, identifying which teeth different animals require according to what they eat.   * [**Pond dipping**](http://www.tes.co.uk/teaching-resource/Pond-dipping-6176164/)   A *BBC Class Clips* video that introduces the classifications of herbivore and carnivore.   * [**Herbivore or carnivore**](http://www.tes.co.uk/teaching-resource/Herbivore-or-Carnivore-6178627/)   A sorting activity for children. |
| * describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) | * [**Grouping animals**](http://www.tes.co.uk/teaching-resource/Grouping-Animals-6040850/)   A PowerPoint presentation and worksheet to aid identification of animals and sorting them into different groups.   * [**Animal classification**](http://www.tes.co.uk/teaching-resource/Animal-classification-6359568/)   A collection of resources for children including a fun classification game.   * [**Describing animals**](http://www.tes.co.uk/teaching-resource/Describing-Animals-6106048/)   A Smart exchange literacy link. Children are given pictures of animals to describe.   * [**Pets and wild animals**](http://www.tes.co.uk/teaching-resource/Pets-and-Wild-Animals-6054941/)   A PowerPoint presentation that gives children clues so that they can guess the animal. |
| * identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense | * [**Senses station**](http://www.tes.co.uk/teaching-resource/Activities-for-the-five-senses-6160819/)   A carousel of independent activities linked to the five senses.   * [**The five senses**](http://www.tes.co.uk/teaching-resource/My-5-senses-6125926/)   A PowerPoint presentation for identifying the five senses and the body parts associated with them.   * [**Cartoon character body part labelling**](http://www.tes.co.uk/teaching-resource/TV-Characters-to-label-ourselves-topic-unit-1-Non-fiction-Labels-and-Captions-6022267/)   A PowerPoint presentation of cartoon characters to help students label different body parts.   * [**Our bodies**](http://www.tes.co.uk/teaching-resource/Our-Bodies-6138771/)   An introduction to the different parts of the body and their functions. |

**Year 1 - Everyday materials**

Pupils should be taught to:

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| **Statutory requirements** | |
| * distinguish between an object and the material from which it is made | * [**What is it made of?**](http://www.tes.co.uk/teaching-resource/What-and-39-s-it-made-of-Materials-6322713/)   A PowerPoint presentation and worksheet to introduce the topic of materials.   * [**Sorting materials**](http://www.tes.co.uk/teaching-resource/sorting-materials-3010379/)   An activity for children to identify what material everyday objects are made from.   * [**Materials quiz**](http://www.tes.co.uk/teaching-resource/Materials-and-their-uses-quiz-3003775/)   A PowerPoint quiz to check children’s understanding of what they have already learnt about materials.   * [**Guess the material**](http://www.tes.co.uk/teaching-resource/Material-ppt-6398519/)   A game where children have to guess the material that each of a selection of objects are made from. |
| * identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock | * [**Materials**](http://www.tes.co.uk/teaching-resource/Sorting-and-Using-Materials-worksheets-3004204/)   Various activities and pictures to help children identify different materials.   * [**Materials hunt**](http://www.tes.co.uk/teaching-resource/Sorting-materials-worksheet-6293746/)   A fun task that gets children to identify items made from different materials.   * [**Different materials**](http://www.tes.co.uk/teaching-resource/Materials-powerpoint-6386922/)   A PowerPoint presentation that introduces different everyday materials and their properties.   * [**Materials posters**](http://www.tes.co.uk/teaching-resource/Materials-Posters-6038077/)   A collection of simple fact posters about different materials. |
| * describe the simple physical properties of a variety of everyday materials | * [**Properties of materials**](http://www.tes.co.uk/teaching-resource/Properties-of-materials-6178684/)   A worksheet to help children to identify properties of different materials.   * [**Feely-bag game**](http://www.tes.co.uk/teaching-resource/Feelie-bag-game-cards-6052811/)   A brief explanation of the feely-bag concept and ideas of items to include.   * [**Properties of materials labels**](http://www.tes.co.uk/teaching-resource/Properties-of-material-6169693/)   A collection of lovely labels to use around the classroom to identify properties of everyday materials.   * [**Describing and sorting**](http://www.tes.co.uk/teaching-resource/Describing-and-sorting-materials-worksheet-6356321/)   A great resource for bringing literacy into science learning, this worksheet asks children to brainstorm adjectives for describing everyday materials. |
| * compare and group together a variety of everyday materials on the basis of their simple physical properties | * [**Materials hunt**](http://www.tes.co.uk/teaching-resource/Materials-Investigation-Worksheet-6154551/)   An activity in which children hunt for items made from different materials and then discuss why they are made from that material.   * [**Sorting materials**](http://www.tes.co.uk/teaching-resource/ks1-sorting-materials-6063266/)   A worksheet to support children in sorting toys according to their properties.   * [**Materials**](http://www.tes.co.uk/teaching-resource/Material-ppt-6398519/)   A PowerPoint presentation to introduce how to group materials according to different properties.   * [**Sorting pictures**](http://www.tes.co.uk/teaching-resource/Sorting-pictures-for-materials-topic-6373814/)   A selection of pictures of objects for children to sort according to the object’s properties. |

**Year 1 - Seasonal changes**

Pupils should be taught to:

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| **Statutory requirements** | |
| * observe changes across the four seasons | * [**Seasons**](http://www.tes.co.uk/teaching-resource/Seasons-6016855/)   An introduction to the different seasons.   * [**Seasons wheel**](http://www.tes.co.uk/teaching-resource/Seasons-Wheel-6036731/)   A worksheet that asks children to put seasons into order then draw a picture to represent that season.   * [**Seasonal change art**](http://www.tes.co.uk/teaching-resource/Trees-Tree-Colours-6181208/)   Children create a piece of art depicting seasonal change in this lovely lesson for linking art and science.   * [**How trees change across the seasons**](http://www.tes.co.uk/teaching-resource/How-trees-change-from-one-season-to-another-6175295/)   A *BBC Class Clips* video that shows how trees change according to the seasons. |
| * observe and describe weather associated with the seasons and how day length varies | * [**Seasons clothes sort**](http://www.tes.co.uk/teaching-resource/Science-Seasons-Clothes-Sorting-6426253/)   A worksheet that asks children to sort pictures of clothes according to which season they would wear them in.   * [**Weather activities**](http://www.tes.co.uk/teaching-resource/WEATHER-BOXES-6011025/)   A selection of activity suggestions for different weathers to help children to observe how weather changes over the year.   * [**Night and day**](http://www.tes.co.uk/teaching-resource/Day-and-Night-science-worksheets-differentiated-6334756/)   Three differentiated worksheets for looking at why we have night and day.   * [**Day length**](http://www.tes.co.uk/teaching-resource/Day-and-night-in-the-world-and-39-s-most-northerly-city-6174559/)   A *BBC Class Clips* video in which a presenter visits the world’s most northerly city and investigates why day length changes. |

**Year 2 programme of study  
Year 2 - Living things and their habitats**

Pupils should be taught to:

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| **Statutory requirements** | |
| * explore and compare the differences between things that are living, dead, and things that have never been alive | * [**Dead or alive**](http://www.tes.co.uk/teaching-resource/Dead-or-Alive-6106381/)   A Smart exchange activity for identifying differences between things that are alive and things that are dead.   * [**Difference between living and non-living**](http://www.tes.co.uk/teaching-resource/Differences-Between-Living-and-Non-Living-Things-6205565/)   A series of activities and accompanying worksheets to help develop understanding of the difference between living and non-living.   * [**Compare and contrast**](http://www.tes.co.uk/teaching-resource/Compare-and-contrast-living-and-nonliving-6171119/)   A worksheet that asks children to compare and contrast a living animal to a toy of the same animal.   * [**Grouping living and non-living things**](http://www.tes.co.uk/teaching-resource/Grouping-Living-and-Non-Living-Things-6336342/)   A series of pictures and a worksheet where children have to group livings things and non-living things and then provide reasons for their choice. |
| * 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 | * [**Habitats**](http://www.tes.co.uk/teaching-resource/Habitats-powerpoint-3006022/)   A PowerPoint presentation containing pictures of different habitats.   * [**How animals have adapted to their habitat**](http://www.tes.co.uk/teaching-resource/How-have-different-animals-adapted-to-habitats-6175193/)   This clip from the CBeebies programme *Our Planet* shows the habitats of different animals.   * [**Habitats game**](http://www.tes.co.uk/teaching-resource/Habitats-game-6167313/)   A game in which children use clues to identify the correct habitat for different animals.   * [**Habitats heroes**](http://www.tes.co.uk/teaching-resource/Habitat-Heroes-6292174/)   A variety of factsheets and guides to help build shelters for wildlife in school grounds. |
| * identify and name a variety of plants and animals in their habitats, including microhabitats | * [**Habitat sorting activity**](http://www.tes.co.uk/teaching-resource/Match-the-animals-to-their-habitats-6122154/)   An activity in which children match animals to their correct habitat.   * [**Minibeast habitats**](http://www.tes.co.uk/teaching-resource/Minibeast-Habitats-6228889/)   A PowerPoint presentation introducing minibeasts and their habitats.   * [**Shoebox habitat**](http://www.tes.co.uk/teaching-resource/Shoebox-habitats-Under-the-sea-6345122/)   A lesson plan and resources that give instructions for how to make a habitat in a shoebox.   * [**Animal habitats**](http://www.tes.co.uk/teaching-resource/Animals-and-their-habitats-6335465/)   This worksheet requires children to identify evidence of animals in the local environment. |
| * 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. | * [**Food chain dominoes**](http://www.tes.co.uk/teaching-resource/Food-chains-games-6422803/)   A game for children to match predators to producers and consumers in the style of dominoes.   * [**Create your own woodland food chain**](http://www.tes.co.uk/teaching-resource/Create-your-own-woodland-foodchain-6414733/)   A collection of images and labels for children to create their own food chain.   * [**Disney food chains**](http://www.tes.co.uk/teaching-resource/Disney-Food-Chains-Resources-6159403/)   A Smart board document that uses Disney characters to illustrate food chains.   * [**Where does food come from?**](http://www.tes.co.uk/teaching-resource/Key-fact-1-all-foods-come-from-plants-or-animals-6048798/)   A series of activities to introduce children to the concept that all food comes from plants or animals. |

**Year 2 - Plants**

Pupils should be taught to:

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| **Statutory requirements** | |
| * observe and describe how seeds and bulbs grow into mature plants | * [**Life cycle of a plant**](http://www.tes.co.uk/teaching-resource/Life-Cycle-of-a-Plant-Worksheet-6242188/)   A worksheet about the life cycle of a plant for children to complete by filling in each section of the life cycle.   * [**Sunflower diary**](http://www.tes.co.uk/teaching-resource/Sunflower-Diary-Growing-and-amp-Growth-3005971/)   A diary template for children to record the growth of a sunflower.   * [**How a potato plant grows**](http://www.tes.co.uk/teaching-resource/Potato-plant-and-how-it-grows-6144854/)   A PowerPoint presentation to explain how a potato grows, including images.   * [**How to plant a bulb**](http://www.tes.co.uk/teaching-resource/How-to-plant-a-bulb-6038585/)   A child-friendly information document on how to plant a bulb. |
| * find out and describe how plants need water, light and a suitable temperature to grow and stay healthy | * [**What do plants need to grow?**](http://www.tes.co.uk/teaching-resource/What-Plants-Need-an-IWB-presentation-3005595/)   A PowerPoint presentation to introduce the topic of growing plants.   * [**What do plants need to grow prediction**](http://www.tes.co.uk/teaching-resource/Growing-plants-prediction-3011901/)   A worksheet to aid children in making predictions about the best conditions for plant growth.   * [**Broad bean investigation**](http://www.tes.co.uk/teaching-resource/Broad-Bean-Experiment-inc-resources-plan-slides-6427602/)   A variety of activities that will allow children to investigate the conditions needed for broad beans to grow.   * [**Experiment conditions**](http://www.tes.co.uk/teaching-resource/Experiment-Conditions-6106594/)   A Smart exchange resource that leads children through a step-by-step process to plan an investigation to discover what a plant needs to grow and stay healthy. |

**Year 2 - Animals including humans**

Pupils should be taught to:

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| **Statutory requirements** | |
| * notice that animals, including humans, have offspring which grow into adults | * [**Mother and baby matching**](http://www.tes.co.uk/teaching-resource/Mother-and-baby-matching-6033070/)   A game in which children match the offspring to the parent.   * [**Human life cycle**](http://www.tes.co.uk/teaching-resource/The-Human-Life-Cycle-Powerpoint-6319324/)   A PowerPoint presentation to introduce the human life cycle.   * [**Life cycle of a frog**](http://www.tes.co.uk/teaching-resource/Life-cycle-of-a-frog-for-IWB-3005530/)   A PowerPoint presentation for introducing the life cycle of a frog.   * [**Animals and their babies**](http://www.tes.co.uk/teaching-resource/Animals-and-their-babies-6332403/)   This PowerPoint presentation includes offspring that do not look like the parents as a challenge to more-able students. |
| * find out about and describe the basic needs of animals, including humans, for survival (water, food and air) | * [**Animals**](http://www.tes.co.uk/teaching-resource/Year-2-Science-Animals-including-humans-6376293/)   A collection of lesson plans and worksheets that cover a range of subjects in this topic.   * [**Keeping healthy**](http://www.tes.co.uk/teaching-resource/For-kids-Keeping-Healthy-6323704/)   A PowerPoint presentation to introduce the basic needs of humans.   * [**Animals including humans**](http://www.tes.co.uk/teaching-resource/year-2-Animals-including-humans-2014-plans-and-amp-res-6392088/)   A series of fully-differentiated lesson plans that meet the objectives of the 2014 curriculum.   * [**Earth Day lesson plans**](http://www.tes.co.uk/teaching-resource/Earth-Day-Lesson-Plans-6039681/)   A series of lesson plans and ideas for promoting the importance of conservation in meeting the needs of animals and humans. |
| * describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene | * [**Food sorting**](http://www.tes.co.uk/teaching-resource/Food-sorting-3011855/)   An activity where children sort food into the different food groups.   * [**Food**](http://www.tes.co.uk/teaching-resource/Labelled-pictures-of-foods-from-all-food-groups-6035367/)   Labelled pictures of foods from different food groups.   * [**Tooth decay**](http://www.tes.co.uk/teaching-resource/Tooth-decay-6054617/)   A lesson plan and worksheets to investigate how to keep teeth healthy.   * [**Healthy eating and exercise**](http://www.tes.co.uk/teaching-resource/Healthy-eating-and-exercise-6175092/)   A *BBC Class Clips* video that demonstrates what people need to stay healthy. |

**Year 2 - Uses of everyday materials**

Pupils should be taught to:

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| **Statutory requirements** | |
| * identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses | * [**Materials: Guided reading**](http://www.tes.co.uk/teaching-resource/Materials-PPT-Booklet-science-English-6044780/)   A guided-reading document about the properties of materials and their uses.   * [**Waterproof investigation**](http://www.tes.co.uk/teaching-resource/Waterproof-Materials-Lesson-Plan-and-Resources-6077051/)   A lesson plan and accompanying resources that will support an investigation into finding the best waterproof material.   * [**Characteristics of materials**](http://www.tes.co.uk/teaching-resource/Characteristics-descriptors-of-materials-Widgit-6054768/)   A game to remind children about the properties of materials and their uses.   * [**Why this material?**](http://www.tes.co.uk/teaching-resource/Why-are-these-things-made-from-these-materials-6013350/)   A worksheet to help children identify the material that has been used for an item and why it has been used. |
| * find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. | * [**Changing materials**](http://www.tes.co.uk/ResourceDetail.aspx?storyCode=6054124)   A lesson plan and worksheet to investigate how materials can be changed by different forces.   * [**Push and pulls**](http://www.tes.co.uk/teaching-resource/Science-Pushes-and-Pulls-Year-1-2-Intro-to-forces-6225065/)   A PowerPoint presentation that introduces students to pushes and pulls.   * [**Pudsey changes the shapes of materials**](http://www.tes.co.uk/teaching-resource/Children-In-Need-Pudsey-does-Science-with-yr-2-6166711/)   An easy-to-adapt PowerPoint presentation and worksheet to support an investigation into changing shape.   * [**Introduction to forces**](http://www.tes.co.uk/teaching-resource/Introduction-to-Forces-6325840/)   A very extensive PowerPoint presentation that covers a range of information about forces with some links to Key Stage 2 objectives. |

**Year 3 programme of study  
Year 3 - Plants**

Pupils should be taught to:

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| --- | --- |
| **Statutory requirements** | |
| * identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers | * [**The parts of a plant**](http://www.tes.co.uk/teaching-resource/Naming-the-parts-of-the-plant-6228929/)   A PowerPoint presentation to introduce the function of the different parts of a plant. Also includes a differentiated flashcard game.   * [**Parts of a plant poster**](http://www.tes.co.uk/teaching-resource/Parts-of-a-plant-3002259/)   A single PowerPoint presentation slide that concisely identifies the functions of the different parts of a flowering plant. Could be used as a poster to initiate a display.   * [**How plants grow**](http://www.tes.co.uk/teaching-resource/How-Plants-Grow-6243531/)   A PowerPoint presentation that introduces the parts of a plant and their function and then moves on to what a plant needs to grow.   * [**Match the function to the name**](http://www.tes.co.uk/teaching-resource/Activity-to-match-plant-names-to-their-jobs-6185108/)   A basic activity in which children match the name of the plant part to its function. |
| * explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant | * [**Plant experiment write up**](http://www.tes.co.uk/teaching-resource/Plants-experiment-write-up-6431118/)   A template to support the write up of an investigation into the optimum level of water for a tomato plant.   * [**Spring to life**](http://www.tes.co.uk/teaching-resource/Spring-to-life-6176255/)   A *BBC Class Clips* time-lapse video that shows what happens as spring begins.   * [**Bean diary**](http://www.tes.co.uk/teaching-resource/Bean-Diary-6225442/)   A diary for children to complete during an investigation into the best conditions for plant growth.   * [**Plant doctors**](http://www.tes.co.uk/teaching-resource/Plant-Doctors-What-affects-plant-growth-6435457/)   A recording sheet to help children study and analyse plants, making judgements about their health. |
| * investigate the way in which water is transported within plants | * [**Helping plants grow**](http://www.tes.co.uk/teaching-resource/Helping-Plants-Grow-6164769/)   This series of PowerPoint presentations covers all elements of plant growth and contains a useful introduction to how plants get water.   * [**The role of the stem**](http://www.tes.co.uk/teaching-resource/The-Role-of-the-Stem-6015243/)   A worksheet that allows children to record their observations about how water is transported around a plant, using celery to demonstrate.   * [**Root function**](http://www.tes.co.uk/teaching-resource/Root-functions-6054621/)   A lesson plan that presents an investigation into the function of roots in plants.   * [**Rainbow daffodils**](http://www.tes.co.uk/teaching-resource/Rainbow-Daffodils-6123970/)   A lovely activity that has strong links to art and shows the capillary action of plants. |
| * explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. | * [**Plant life cycle**](http://www.tes.co.uk/teaching-resource/Plants-Life-cycles-and-naming-parts-of-a-plant-6173666/)   A PowerPoint presentation that recaps the parts of a plant and then moves on to life cycles. Also includes a treasure-hunt-style activity for children to complete.   * [**Plant life cycle**](http://www.tes.co.uk/teaching-resource/PLANTS-including-parts-of-growth-and-seed-disper-6412551/)   A series of presentations and posters that cover the life cycle of a plant.   * [**Seed dispersal**](http://www.tes.co.uk/teaching-resource/Seed-Dispersal-6039189/)   A link to a website containing a child-friendly visual demonstration of each method of seed dispersal.   * [**Flower dissecting sheet**](http://www.tes.co.uk/teaching-resource/Blank-sheet-for-dissecting-flower-6147715/)   A worksheet designed to support children in dissecting a plant. |

**Year 3 - Animals including humans**

Pupils should be taught to:

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| **Statutory requirements** | |
| * identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat | * [**Space food**](http://www.tes.co.uk/teaching-resource/Space-Food-and-Nutrition-Teacher-Guide-6414250/)   A PDF guide from *NASA Education* with a variety of investigations looking at how to keep astronauts healthy in space.   * [**Food chain activity**](http://www.tes.co.uk/teaching-resource/Differentiated-Food-Chain-Activity-6397494/)   A differentiated set of activities in which children use pictures and arrows to construct food chains.   * [**Food chains**](http://www.tes.co.uk/teaching-resource/Food-chains-6018709/)   This interactive activity was designed with younger children in mind and therefore includes only basic terminology.   * [**Food chain introduction**](http://www.tes.co.uk/teaching-resource/Food-chains-6011184/)   An introduction to the concept that animals cannot make their own nutrition and have to get it from what they eat. |
| * identify that humans and some other animals have skeletons and muscles for support, protection and movement. | * [**Moving and growing booklet**](http://www.tes.co.uk/teaching-resource/Moving-and-Growing-booklet-6062500/)   A workbook for children to complete on the subject of moving and growing with a link to bones.   * [**Muscles and moving**](http://www.tes.co.uk/teaching-resource/SGM4AI03-Muscles-And-Moving-6035256/)   An investigation for children to complete into the role of muscles in movement.   * [**The skeleton and muscles**](http://www.tes.co.uk/teaching-resource/The-skeleton-and-muscles-Powerpoint-and-worksheets-6091043/)   An interactive presentation with videos and activities as well as some worksheets that could be adapted.   * [**Bones and skeletons**](http://www.tes.co.uk/teaching-resource/Bones-and-skeletoms-6012535/)   A PowerPoint presentation to introduce children to the different bones in the body and their functions. |

**Year 3 - Rocks**

Pupils should be taught to:

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| **Statutory requirements** | |
| * compare and group together different kinds of rocks on the basis of their appearance and simple physical properties | * [**Information about rocks**](http://www.tes.co.uk/teaching-resource/Information-about-Rocks-6077085/)   A PowerPoint presentation to explain what rocks are, looking at the three main types.   * [**Rock durability and permeability investigation**](http://www.tes.co.uk/teaching-resource/Rocks-and-Soils-Science-Investigation-6403906/)   An investigation into the durability and permeability of rocks and accompanying worksheets for children to complete.   * [**Table for rock investigation**](http://www.tes.co.uk/teaching-resource/Table-to-record-observations-about-rocks-year-3-6192289/)   A simple table for children to record their observations about a range of rocks.   * [**How rocks are formed**](http://www.tes.co.uk/teaching-resource/How-Rocks-are-Formed-LKS2-New-Curriculum-Science-6417966/)   An introduction to teaching the formation of sedentary and igneous rocks that includes an idea for a fun model using chocolate. |
| * describe in simple terms how fossils are formed when things that have lived are trapped within rock | * [**An introduction to fossils**](http://www.tes.co.uk/teaching-resource/Introduction-fossils-6339245/)   A PowerPoint presentation introducing fossils and how they are formed.   * [**Finding fossils**](http://www.tes.co.uk/teaching-resource/Finding-Fossils-3011803/)   A PowerPoint presentation about fossils and palaeontologists.   * [**How fossils are formed**](http://www.tes.co.uk/teaching-resource/How-fossils-are-formed-6408760/)   An activity where children match labels to pictures of fossils and put them in order.   * [**Rocks and fossils**](http://www.tes.co.uk/teaching-resource/Year-3-Science-Rocks-full-scheme-6376294/)   A series of five lessons linked to a past museum exhibition. Session four gives advice on how to make fossils with the children. |
| * recognise that soils are made from rocks and organic matter | * [**How soils are formed**](http://www.tes.co.uk/teaching-resource/How-Soils-Are-Formed-6327969/)   A Smart board presentation about a character called Roger Rock and how he is transformed into soil. The resource includes a storyboard for children to retell the story.   * [**Soil permeability**](http://www.tes.co.uk/teaching-resource/Soil-6379972/)   An investigation into the properties of different types of soil.   * [**Viking soil investigation**](http://www.tes.co.uk/teaching-resource/Viking-soil-investigation-6414886/)   This investigation into the permeability of soil is based around allowing a Viking to settle where the land is suitable for farming.   * [**The composition of soil**](http://www.tes.co.uk/teaching-resource/Explore-the-composition-of-the-soil-and-worms-6162087/)   A PowerPoint presentation for teaching children about the structure of soil, soil types and the things that live in soil. |

**Year 3 - Light**

Pupils should be taught to:

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| **Statutory requirements** | |
| * recognise that they need light in order to see things and that dark is the absence of light | * [**Light and shadow factsheet**](http://www.tes.co.uk/teaching-resource/Light-and-Shadows-Double-Sided-Fact-Sheet-6182658/)   A factsheet to support the teaching of a topic on light and shadows, including a glossary of terms.   * [**How different materials affect shadows**](http://www.tes.co.uk/teaching-resource/How-do-different-materials-affect-shadows-6175142/)   This *BBC Class Clips* video looks at how shadows are formed and how dark is the absence of light.   * [**Light and shadow chatterbox**](http://www.tes.co.uk/teaching-resource/Light-and-Shadow-Chatterbox-6027251/)   A fun activity to aid revision of a light and shadows topic.   * [**Light sources**](http://www.tes.co.uk/teaching-resource/Light-sources-in-your-bedroom-at-night-6175330/)   This animation from *BBC Class Clips* demonstrates why light sources are needed at night time. |
| * notice that light is reflected from surfaces | * [**Reflection**](http://www.tes.co.uk/teaching-resource/Reflection-6056639/)   Children investigate which surfaces reflect light best try to reflect a light source off of a mirror.   * [**Reflective clothing**](http://www.tes.co.uk/teaching-resource/Reflective-Clothing-Power-Point-6324742/)   A basic introduction to reflective clothing.   * [**Light science worksheets**](http://www.tes.co.uk/teaching-resource/LIGHT-Science-Worksheets-6074089/)   This great worksheet allows children to record results from an investigation into reflective surfaces.   * [**Sources of light flashcards**](http://www.tes.co.uk/teaching-resource/Sources-of-Light-Flashcards-3008907/)   A series of flashcards to demonstrate the differences between light sources and objects that reflect light. |
| * recognise that light from the sun can be dangerous and that there are ways to protect their eyes | * [**Sun safety**](http://www.tes.co.uk/teaching-resource/BUDDY-UP-FOR-SUN-SAFETY-WITH-NIVEA-SUN-6040552/)   Interactive activities that allow an investigation into staying safe in the sun.   * [**Sun safety poster**](http://www.tes.co.uk/teaching-resource/Sun-safety-poster-designing-6184988/)   A template for children to design a sun safety poster.   * [**The sun**](http://www.tes.co.uk/teaching-resource/The-sun-6188462/)   An introductory PowerPoint presentation all about the sun.   * [**Facts about the sun writing frame**](http://www.tes.co.uk/teaching-resource/Facts-about-the-Sun-writing-frame-3012104/)   A cloze activity that includes facts about the sun and sun safety. |
| * recognise that shadows are formed when the light from a light source is blocked by a solid object | * [**Which object makes the darkest shadows**](http://www.tes.co.uk/teaching-resource/Light-and-Shadows-6130083/)   A PowerPoint presentation and suggestion for an investigation into which objects make the darkest shadow.   * [**Shadow puppets**](http://www.tes.co.uk/teaching-resource/How-shadows-are-made-shadow-puppets-6175210/)   A BBC Class Clips video demonstrating how shadow puppets are made.   * [**Creating a shadow puppet**](http://www.tes.co.uk/teaching-resource/Creating-a-shadow-puppet-theatre-introduction-6135512/)   A Smart board-led project that asks children to design and create their own shadow-puppet theatre.   * [**Light and shadow planning**](http://www.tes.co.uk/teaching-resource/Light-and-amp-Shadow-Planning-6423615/)   A full series of lesson plans on the topic of light and shadow, including a lovely investigation into which objects will make shadows. |
| * find patterns in the way that the size of shadows change | * [**Light and shadows**](http://www.tes.co.uk/teaching-resource/Light-and-Shadows-unit-PowerPoint-6257455/)   A series of activities and worksheets on the topic of light and shadows, including some interesting ideas for investigations into how shadows change.   * [**Shadow investigation**](http://www.tes.co.uk/teaching-resource/Shadow-investigation-6054815/)   A lesson plan and worksheet for children to record how the length of a shadow changes throughout the day.   * [**Shadow investigation worksheet**](http://www.tes.co.uk/teaching-resource/Shadow-investigation-worksheet-6135519/)   An investigation for children to record how a shadow changes with the help of a torch and some play dough.   * [**Shadow worksheet**](http://www.tes.co.uk/teaching-resource/Shadow-worksheet-6190934/)   A simple worksheet showing the size and position of shadows throughout the day. |

**Year 3 - Forces and magnets**

Pupils should be taught to:

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| **Statutory requirements** | |
| * compare how things move on different surfaces | * [**Forces and magnets**](http://www.tes.co.uk/teaching-resource/FORCES-AND-MAGNETS-6412554/)   A complete lesson plan including activities and a PowerPoint presentation to introduce friction and different surfaces.   * [**Forces - friction**](http://www.tes.co.uk/teaching-resource/Forces-Friction-6427346/)   A very detailed PowerPoint presentation that makes a perfect introduction to friction on different surfaces.   * [**Friction investigation**](http://www.tes.co.uk/teaching-resource/Friction-Investigation-Worksheets-6125018/)   Some lovely worksheets to help children complete an investigation into friction and surfaces using Newton meters.   * [**Slippery shoes investigation**](http://www.tes.co.uk/teaching-resource/Slippy-Shoes-Science-Experiment-6334147/)   A lesson plan and recording worksheets to support children in investigating the safest surface to walk on whilst wearing slippers. |
| * notice that some forces need contact between two objects, but magnetic forces can act at a distance | * [**Magnetic forces in action**](http://www.tes.co.uk/teaching-resource/Forces-in-action-lesson-one-6304010/)   This complete lesson includes a great lesson plan and a worksheet based around an introduction to magnets and a carousel of activities.   * [**Magnets and springs**](http://www.tes.co.uk/teaching-resource/Magnets-and-springs-6150883/)   An introductory PowerPoint presentation on magnets.   * [**Magnetic pennies**](http://www.tes.co.uk/teaching-resource/Magnetic-Pennies-6181595/)   A variety of investigations into pennies and magnets.   * [**Magnets**](http://www.tes.co.uk/teaching-resource/Magnets-and-Springs-6330475/) **(presentation three)**   The third presentation in this series about magnetism suggests a great investigation into the strength of magnets. |
| * observe how magnets attract or repel each other and attract some materials and not others | * [**Feel the force**](http://www.tes.co.uk/teaching-resource/Feel-the-Force-6193019/)   A basic worksheet that allows children to record their findings into which objects are attracted to a magnet.   * [**Is it magnetic?**](http://www.tes.co.uk/teaching-resource/Is-It-Magnetic-6001833/)   A lesson plan and worksheet for investigating whether an object is magnetic or not.   * [**Magnets and springs**](http://www.tes.co.uk/teaching-resource/Magnets-and-Springs-6130909/)   A complete pack of lesson plan and worksheet for a magnets and springs topic, including a lovely worksheet in which children create a Carroll diagram to show whether objects are magnetic or not.   * [**Fridge magnets**](http://www.tes.co.uk/teaching-resource/What-should-be-stuck-to-your-fridge-6036036/)   In this lovely series of lessons linked to design and technology, children design and make a fridge magnet. It is originally aimed at Year 2 pupils but would be easy to adapt. |
| * compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials | * [**Magnets (presentations five and six**](http://www.tes.co.uk/teaching-resource/Magnets-and-Springs-6330475/)**)**   Presentations five and six of this series for investigating magnetism focus on sorting and grouping materials according to whether they are attracted to a magnet.   * [**Are all coins magnetic?**](http://www.tes.co.uk/teaching-resource/Are-coins-Magnetic-6412043/)   An unusual investigation into whether all coins are magnetic. Includes a worksheet for children to use.   * [**Magnetic investigation homework task**](http://www.tes.co.uk/teaching-resource/Magnets-Investigation-homework-task-6391614/)   A well-produced worksheet to help children investigate magnets at home. Could be adapted to be completed in school.   * [**Magnetic or magic?**](http://www.tes.co.uk/teaching-resource/MAGNETS-OR-MAGIC-6333960/)   A lovely *Harry Potter*-themed resource on sorting magnetic materials that also includes some literacy links. |
| * describe magnets as having two poles | * [**Magnetism**](http://www.tes.co.uk/teaching-resource/Magnetism-6183970/)   A very detailed worksheet that can be adapted to suit the ability of your class.   * [**Properties of magnets and magnetism**](http://www.tes.co.uk/teaching-resource/Magnets-magnetism-and-properties-of-magnets-6336544/)   Information for teachers about magnets and magnetism along with some suggestions for classroom activities.   * [**Magnets (presentation two)**](http://www.tes.co.uk/teaching-resource/Magnets-and-Springs-6330475/)   The second presentation in this series investigating magnetism focuses on magnets and poles and suggests a related investigation.   * [**Magnets and poles**](http://www.tes.co.uk/teaching-resource/Magnets-3002582/)   An interactive presentation with information on magnetic poles. |
| * predict whether two magnets will attract or repel each other, depending on which poles are facing. | * [**Magnets (presentation one)**](http://www.tes.co.uk/teaching-resource/What-should-be-stuck-to-your-fridge-6036036/)   The first in this series of PowerPoint presentations investigating magnetism focuses on attracting and repelling.   * [**Exploring magnets**](http://www.tes.co.uk/teaching-resource/Exploring-Magnets-6181591/)   A simple sheet that explores why magnets attract and repel.   * [**Magnetic trains**](http://www.tes.co.uk/teaching-resource/Trains-6057401/)   This lovely investigation allows children to apply previous learning to create a “floating” vehicle using the principles of attract and repel.   * [**Opposites attract**](http://www.tes.co.uk/teaching-resource/Static-Cling-6268966/)   Although not focussed on magnets, this video from *The Children’s Museum of Houston* gives an interesting explanation of attracting and repelling. |

**Year 4 programme of study**

**Year 4 - Living things and their habitats**

Pupils should be taught to:

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| **Statutory requirements** | |
| * recognise that living things can be grouped in a variety of ways | * [**Grouping living things**](http://www.tes.co.uk/teaching-resource/Grouping-Living-Things-6027308/)   A cut and stick activity for children to group animals.   * [**Grouping animals and variation**](http://www.tes.co.uk/teaching-resource/grouping-animals-and-variation-ks1-ks2-science-6016879/) Three PowerPoint presentations that demonstrate to children how animals can be grouped. * [**Living things**](http://www.tes.co.uk/teaching-resource/London-2-London-with-Sarah-Outen-6344413/)   A variety of activities with some lovely worksheets on grouping and classifying animals.   * [**A walk in woodlands**](http://www.tes.co.uk/teaching-resource/Walk-in-woodland-habitat-KS2-Year-6-6431671/)   Initially designed as pre- and post-work activities for a trip to London Zoo, these ideas could easily be adapted to suit any woodlands visit. |
| * explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment | * [**Habitats**](http://www.tes.co.uk/teaching-resource/Habitats-6100437/)   A whole programme of study about habitats, including resources on the grouping of animals and using a classification key.   * [**What is it?**](http://www.tes.co.uk/teaching-resource/What-is-it-6054851/)   A lesson plan and key introducing the idea of classification keys.   * [**Classification keys**](http://www.tes.co.uk/teaching-resource/Classification-Keys-6027307/)   Two worksheets for use as either an introduction to classification keys or for revision of the topic.   * [**Rainforest classification keys**](http://www.tes.co.uk/teaching-resource/Rainforest-Classification-Keys-6436005/)   A set of differentiated worksheets to assess children’s understanding of classification keys. |
| * recognise that environments can change and that this can sometimes pose dangers to living things. | * [**Habitats**](http://www.tes.co.uk/teaching-resource/Habitats-3000881/)   An introduction to habitats and how animals are suited to them.   * [**Share the world**](http://www.tes.co.uk/teaching-resource/Share-the-World-6040476/)   A PowerPoint presentation and worksheet about what it means to be extinct or endangered.   * [**Habitat heroes**](http://www.tes.co.uk/teaching-resource/Habitat-Heroes-assembly-powerpoint-6292153/)   A presentation to introduce children to the idea that we can protect animals by creating habitats for them.   * [**Arctic topic pack**](http://www.tes.co.uk/teaching-resource/Arctic-Topic-Pack-6262113/)   A complete topic pack focussing on the arctic, including the effects of climate change on the animals that live there. |

**Year 4 - Animals including humans**

Pupils should be taught to:

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| **Statutory requirements** | |
| * describe the simple functions of the basic parts of the digestive system in humans | * [**Digestive system**](http://www.tes.co.uk/teaching-resource/Digestive-system-powepoint-6002781/)   A PowerPoint presentation introducing the topic of digestion.   * [**Digestion**](http://www.tes.co.uk/teaching-resource/Digestion-6054614/)Vocabulary revision, food pyramid display activity and design-a-meal tasks. * [**Digestive system rap**](http://www.tes.co.uk/teaching-resource/fun-digestive-system-tutorial-rap-6092418/)   A video with a fun rap song about the digestive system.   * [**Eating a sandwich**](http://www.tes.co.uk/teaching-resource/Eating-a-sandwich-modelling-digestion-6429091/)   A two-part activity to model what happens when a sandwich is eaten and digested. |
| * identify the different types of teeth in humans and their simple functions | * [**Types of teeth**](http://www.tes.co.uk/teaching-resource/Types-of-and-parts-of-teeth-and-decay-6294843/)   A PowerPoint presentation introducing the different types of teeth.   * [**Teeth**](http://www.tes.co.uk/teaching-resource/Teeth-and-Eating-6197149/)   A variety of resources concerning teeth, including a labelling worksheet to identify the different types of human teeth.   * [**Teeth comprehension**](http://www.tes.co.uk/teaching-resource/Teeth-6257092/)   A series of comprehension-style questions linked to dental care.   * [**Teeth dough**](http://www.tes.co.uk/teaching-resource/Teeth-Dough-6409153/)   Instructions on how to create a fun activity where children make teeth models from dough. |
| * construct and interpret a variety of food chains, identifying producers, predators and prey. | * [**Food chains**](http://www.tes.co.uk/teaching-resource/Food-chains-6070198/)   An activity in which children discuss and ask questions about food chains.   * [**3D food chains**](http://www.tes.co.uk/teaching-resource/3D-Food-Webs-Food-Chains-6332409/)   An activity in which children use a variety of materials to create a 3D food web or chain.   * [**Food chains presentation**](http://www.tes.co.uk/teaching-resource/Food-Chains-Powerpoint-Year-3-4-6300951/)   A PowerPoint presentation that explains how food chains work.   * [**The food chain**](http://www.tes.co.uk/teaching-resource/The-Food-Chain-Animals-and-their-Habitats-6182903/)   A presentation and activity to help children design their own food chain. |

**Year 4 - States of matter**

Pupils should be taught to:

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| **Statutory requirements** | |
| * compare and group materials together, according to whether they are solids, liquids or gases | * [**States of matter**](http://www.tes.co.uk/teaching-resource/States-of-Matter-lesson-plan-PPoint-and-Worksheet-6361082/)   A pack containing a lesson plan, presentation and worksheet to assist children in grouping materials together according to whether they are solid, liquid or gas.   * [**Solid, liquid and gas**](http://www.tes.co.uk/teaching-resource/Solids-liquids-and-gases-images-6128851/)   An introductory PowerPoint presentation to solids, liquids and gases with images for children to identify.   * [**States of matter card sort**](http://www.tes.co.uk/teaching-resource/States-of-matter-card-sort-6164255/)   A series of cards for children to sort according to the state of matter.   * [**States of matter**](http://www.tes.co.uk/teaching-resource/States-of-Matter-6097550/)   An IWB lesson on different states of matter. |
| * observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C) | * [**Changing materials (heating and cooling)**](http://www.tes.co.uk/teaching-resource/Changing-materials-heating-and-cooling-6178679/)   A worksheet for children to discuss and record what they think will happen when materials are heated or cooled.   * [**Heating and cooling**](http://www.tes.co.uk/teaching-resource/Heating-and-Cooling-6145295/)   A set of differentiated worksheets on the topic of heating and cooling solids.   * [**States of matter - interactive simulation**](http://www.tes.co.uk/teaching-resource/States-of-Matter-Interactive-Simulation-6050123/)   A link to a website where children can investigate what happens to different materials when they are heated or cooled.   * [**Chocoholics school**](http://www.tes.co.uk/teaching-resource/Changing-materials-chocolate-school-6149109/)   An interesting take on discussion that links to heating and cooling. |
| * identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. | * [**The water cycle homework**](http://www.tes.co.uk/teaching-resource/Homework-worksheet-on-the-watercycle-6023966/)   A series of questions to help children identify the correct water cycle term.   * [**Evaporation investigation**](http://www.tes.co.uk/teaching-resource/Evaporation-experiment-6212335/)   A lesson plan and test questions about evaporation and drying washing.   * [**Evaporation and condensation**](http://www.tes.co.uk/teaching-resource/Teachers-TV-Evaporation-and-Condensation-Crusoe-6085195/)   A *Teachers TV* video that looks at how Robinson Crusoe could use evaporation and condensation to find drinking water.   * [**The water cycle**](http://www.tes.co.uk/teaching-resource/The-Water-Cycle-6293425/)   A PowerPoint presentation to introduce the water cycle and the role of evaporation and condensation. |

**Year 4 - Sound**

Pupils should be taught to:

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| **Statutory requirements** | |
| * identify how sounds are made, associating some of them with something vibrating | * [**Sound**](http://www.tes.co.uk/teaching-resource/Sound-6007157/)   A PowerPoint presentation that explains how sound is created.   * [**Seeing sounds**](http://www.tes.co.uk/teaching-resource/Seeing-Sound-6268190/)   A lesson plan and video from *The Children’s Museum of Houston* exploring how sound is created from vibrations.   * [**Sound follow-me cards**](http://www.tes.co.uk/teaching-resource/Sound-Dominos-Chase-Game-6307525/)   A set of “follow-me” cards that could be used to revise the topic of sound.   * [**Changing sounds**](http://www.tes.co.uk/teaching-resource/Changing-Sounds-investigation-6402175/)   A carousel of activities to initiate investigation into sound. |
| * recognise that vibrations from sounds travel through a medium to the ear | * [**Sound song**](http://www.tes.co.uk/teaching-resource/Sound-Mr-A-Mr-C-and-Mr-D-Present-6257091/)   A link to a song about sound and how it travels.   * [**How does sound travel through the air?**](http://www.tes.co.uk/teaching-resource/How-does-sound-travel-through-the-air-6175176/)   A *BBC Class Clips* video about how sound travels through the air.   * [**The ear**](http://www.tes.co.uk/teaching-resource/Resources-on-the-Ear-6310284/)   A set of worksheets and resources to help children to explore the ear and conduct an investigation into how we hear.   * [**Sound travelling through materials**](http://www.tes.co.uk/teaching-resource/Sound-travels-through-materials-6018703/)   A link to an interactive online lesson that demonstrates how sound travels through materials. |
| * find patterns between the pitch of a sound and features of the object that produced it | * [**Science investigation cards**](http://www.tes.co.uk/teaching-resource/Science-Investigation-Cards-3001731/)   A series of investigation cards on a variety of topics including one on changing pitch.   * [**Pitch investigation clip**](http://www.tes.co.uk/teaching-resource/Producing-sounds-and-pitches-6176290/)   A link to a *BBC Class Clips* video investigating pitch.   * [**Sound**](http://www.tes.co.uk/teaching-resource/Sound-homework-3-6197014/)   A series of worksheets looking at instruments and how they produce sound.   * [**Oboe, oh boy!**](http://www.tes.co.uk/teaching-resource/Oboe-Oh-Boy-6267939/)   A link to a video from *The Children’s University of Houston* with a suggestion of how to make a musical instrument to explore pitch. |
| * find patterns between the volume of a sound and the strength of the vibrations that produced it | * [**Sound display**](http://www.tes.co.uk/teaching-resource/Sound-display-3005655/)   A series of fact cards that can be used for display purposes.   * [**Sound volume investigation**](http://www.tes.co.uk/teaching-resource/Sound-investigation-6401035/)   An investigation into changing the volume of a sound.   * [**Blow the house down**](http://www.tes.co.uk/teaching-resource/Blowing-the-house-down-with-sound-waves-6174352/)   A BBC Class Clips video in which people attempt to blow a house down with sound waves.   * [**Sound mind map**](http://www.tes.co.uk/teaching-resource/Sound-Mind-Map-Worksheet-Exercise-6307482/)   A series of worksheets to help introduce or revise the topic of sound. |
| * recognise that sounds get fainter as the distance from the sound source increases. | * [**Signals and noise**](http://www.tes.co.uk/teaching-resource/Signals-and-Noise-Oh-Boy-Activity-6414227/)   A *NASA Education* lesson plan for an investigation into sound and distance.   * [**Changing sound planning**](http://www.tes.co.uk/teaching-resource/Year-5-6-Planning-Science-Changing-Sound-6138609/)   Although this set of lesson plans is linked to the old curriculum, week three provides an interesting investigation into sound that is still relevant to 2014 objectives.   * [**Sound experiment recording sheet**](http://www.tes.co.uk/teaching-resource/Science-Sound-investigation-recording-sheet-6229184/)   A recording sheet to help students carry out an investigation into sound and distance from the sound source.   * [**Sound walk**](http://www.tes.co.uk/teaching-resource/Identify-different-sounds-6054047/)   A lesson plan linked to a sound walk. Although aimed at Year 1, this activity could easily be adapted for an older audience. |

**Year 4 - Electricity**

Pupils should be taught to:

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| **Statutory requirements** | |
| * identify common appliances that run on electricity | * [**An introduction to electricity**](http://www.tes.co.uk/teaching-resource/Introduction-to-Electricity-PowerPoint-6015201/)   A basic introduction to electricity and appliances that use it.   * [**Electricity Venn diagram**](http://www.tes.co.uk/teaching-resource/Electricity-Venn-Diagram-6175594/)   A worksheet that asks children to sort appliances depending on whether they use mains electricity or battery power.   * [**Technology in the kitchen**](http://www.tes.co.uk/teaching-resource/Technology-in-the-kitchen-6176279/)Pupils watch a short video from *BBC Class Clips* and identify the electrical appliances being used. * [**Electricity in the home**](http://www.tes.co.uk/teaching-resource/TES-Primary-Plus-Electricity-in-the-home-3001399/)   A worksheet to support discussion into which appliances use electricity. |
| * construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers | * [**Make a circuit**](http://www.tes.co.uk/teaching-resource/Making-a-circuit-3002538/)   A PowerPoint presentation that demonstrates how to make a basic circuit.   * [**Electricity and circuits**](http://www.tes.co.uk/teaching-resource/Year-5-Electricity-and-amp-Circuits-6308497/)A PowerPoint presentation and worksheet covering electricity, circuits and circuit symbols. * [**Electricity as a form of energy**](http://www.tes.co.uk/teaching-resource/Electricity-as-a-form-of-energy-3006902/)   A worksheet designed to be used during a practical lesson introducing circuits.   * [**Electrical circuits - key words and display**](http://www.tes.co.uk/teaching-resource/Electrical-Circuits-Keywords-and-Symbols-Display-6309931/)   A series of posters demonstrating the names of basic electrical equipment and the standard circuit symbols. |
| * identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery | * [**Electricity worksheet**](http://www.tes.co.uk/teaching-resource/Electricity-worksheet-Year-2-6044855/)   A worksheet of simple circuit diagrams in which children have to determine whether the bulb will light up.   * [**Will it work?**](http://www.tes.co.uk/teaching-resource/Circuits-will-it-work-3001993/)   A series of differentiated worksheets that ask children to identify if the circuit will work or not.   * [**Electricity - circuits and conductors**](http://www.tes.co.uk/teaching-resource/Electricity-Circuits-and-conductors-6329831/)   A series of lesson plans exploring the topic of circuits and conductors.   * [**Circuits and electricity worksheets**](http://www.tes.co.uk/teaching-resource/Circuits-and-Electricity-Worsheets-6131735/)   A series of worksheets focussing on electrical circuits. |
| * recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit | * [**Switches**](http://www.tes.co.uk/teaching-resource/Circuits-will-it-work-3001993/)   A lesson plan to explore switches and their uses.   * [**Switches worksheet**](http://www.tes.co.uk/teaching-resource/Switches-worksheet-6318568/)   A worksheet designed to consolidate children’s learning about switches.   * [**Understanding how circuits work**](http://www.tes.co.uk/teaching-resource/Understanding-how-circuits-work-6433997/)   An explanation of how circuits work, with accompanying worksheet for children to complete.   * [**Series and parallel circuits**](http://www.tes.co.uk/teaching-resource/Series-and-Parallel-Circuits-6430894/)   A collection of lesson plans, tutorials and challenge cards to help children learn about series and parallel circuits. |
| * recognise some common conductors and insulators, and associate metals with being good conductors. | * [**Conductors and insulators**](http://www.tes.co.uk/teaching-resource/Conductors-and-Insulators-6065604/)   A set of worksheets and an introduction to an investigation into conductors and insulators.   * [**Electrical conductors**](http://www.tes.co.uk/teaching-resource/Electrical-conductors-6054823/)   A lesson plan and worksheet for an investigation into electrical conductors.   * [**Find out about conductors**](http://www.tes.co.uk/teaching-resource/Find-out-about-conductors-6098632/)   This worksheet makes a useful assessment tool.   * [**Electrical insulators and conductors**](http://www.tes.co.uk/teaching-resource/Electrical-insulators-and-conductors-6174658/)   A BBC Class Clips video that looks at electrical insulators and conductors. |

**Year 5 programme of study  
Year 5 - Living things and their habitats**

Pupils should be taught to:

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| **Statutory requirements** | |
| * describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird | * [**From spawn to frog**](http://www.tes.co.uk/teaching-resource/Lifecycles-From-spawn-to-frog-6396737/)   A lesson plan, activities and worksheet from the *RSPCA*.   * [**The life cycle of a butterfly**](http://www.tes.co.uk/teaching-resource/Lifecycle-of-a-Butterfly-6258181/)   A PowerPoint presentation and differentiated worksheets to help students sequence the life cycle of a butterfly.   * [**Animal life cycles**](http://www.tes.co.uk/teaching-resource/Life-Cycles-6018734/)   A series of PowerPoint presentations and worksheets looking at life cycles of different animals.   * [**The life cycle of a chicken**](http://www.tes.co.uk/teaching-resource/The-life-cycle-of-a-chicken-3005341/)   A very basic worksheet that explains the life cycle of a chicken. Although aimed at Year 2 students, it could be adapted to suit an older audience. |
| * describe the life process of reproduction in some plants and animals | * [**Reproduction in plants**](http://www.tes.co.uk/teaching-resource/Reproduction-in-plants-6139916/)   A very detailed revision aid that outlines the principles of reproduction in plants.   * [**Seed dispersal in plants**](http://www.tes.co.uk/teaching-resource/Seed-dispersal-powerpoint-6098858/)   A presentation about how different seeds are dispersed in the life cycle process.   * [**Life cycles: Flower parts for reproduction**](http://www.tes.co.uk/teaching-resource/Unit-5B-Life-cycles-Flower-parts-for-reproduction-6076554/)   Although these lesson plans refer to an old QCDA scheme of work, they still contain relevant information and ideas.   * [**Plant life cycle fact sheet**](http://www.tes.co.uk/teaching-resource/Plant-Life-Cycle-Double-Sided-Fact-Sheet-6182631/)   Two fact sheets to support the teaching of life cycles. |

**Year 5 - Animals including humans**

Pupils should be taught to:

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| **Statutory requirements** | |
| * describe the changes as humans develop to old age. | * [**How humans change as they grow**](http://www.tes.co.uk/teaching-resource/How-Humans-Change-as-They-Grow-6039525/)   A very simple PowerPoint presentation that outlines the changes that occur as humans grow and age.   * [**Human life cycles**](http://www.tes.co.uk/teaching-resource/The-human-life-cycle-6302623/)   A PowerPoint presentation that demonstrates the six parts of the human life cycle.   * [**Human stages of development**](http://www.tes.co.uk/teaching-resource/Human-Life-Cycle-Human-Stages-of-Development-6367114/)   A lesson plan, explanation text and worksheet designed for Year 2 but adaptable for an older audience.   * [**Changes**](http://www.tes.co.uk/teaching-resource/Babies-6056617/)   A lesson plan and worksheet in which children consider the development they have undergone since they were babies. |

**Year 5 - Properties and changes of materials**

Pupils should be taught to:

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| **Statutory requirements** | |
| * compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets | * [**Classifying materials**](http://www.tes.co.uk/teaching-resource/Classifying-Materials-Levelled-SATs-questions-6435093/)   A series of levelled SATs-style questions on classifying materials.   * [**Conduction in metals**](http://www.tes.co.uk/teaching-resource/Conduction-in-metals-6147697/)   A Promethean investigation for exploring the thermal conductivity of metals.   * [**Transparency**](http://www.tes.co.uk/teaching-resource/Transparency-6120766/)   A lesson plan and worksheet investigating transparency.   * [**Soluble and insoluble materials**](http://www.tes.co.uk/teaching-resource/Soluble-and-insoluble-materials-6176246/)A video introduction to solvents and soluble and insoluble materials. |
| * know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution | * [**More about dissolving**](http://www.tes.co.uk/teaching-resource/More-about-Dissolving-Filtering-6066779/)   A PowerPoint presentation and an investigation challenge for introducing dissolving.   * [**Introduction to dissolving**](http://www.tes.co.uk/teaching-resource/dissolving-IWB-activity-6085419/)   A Smart board activity in which children need to decide if the solid has dissolved or not in the liquid.   * [**Separating solutions**](http://www.tes.co.uk/teaching-resource/More-about-dissolving-Separating-Solutions-6066781/)   A well-structured investigation, activities and supporting worksheets about making predictions in investigations.   * [**Solids, liquids and gases - dissolving**](http://www.tes.co.uk/teaching-resource/Solids-Liquids-and-Gases-Dissolving-6335262/)   A differentiated worksheet for children to demonstrate their understanding of dissolving. |
| * use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating | * [**Separating a wizard's brew**](http://www.tes.co.uk/teaching-resource/Separating-a-wizard-and-39-s-brew-6126090/)   A Smart board investigation in which children are given a variety of objects to separate.   * [**Dissolving**](http://www.tes.co.uk/teaching-resource/dissolving-ppt-6143111/)   A PowerPoint presentation that covers filtering, sieving and evaporating as well as dissolving. Includes an accompanying cloze procedure worksheet.   * [**Separating mixtures**](http://www.tes.co.uk/teaching-resource/Separating-Mixtures-6304679/)   A simple introduction to the main methods of separating mixtures.   * [**Separating mixtures card sort**](http://www.tes.co.uk/teaching-resource/Separating-mixtures-matching-cards-3010373/)   A simple set of cards for children to match processes to the appropriate descriptions and pictures. |
| * give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic | * [**What stuff does**](http://www.tes.co.uk/teaching-resource/Teachers-TV-What-Stuff-Does-6047888/)   A *Teachers TV* video looking at properties and uses of materials.   * [**Materials and their properties poem**](http://www.tes.co.uk/teaching-resource/Poem-about-Materials-and-their-purpose-6317259/)   A fun poem that explores the uses of materials and properties.   * [**What are war memorials made from?**](http://www.tes.co.uk/teaching-resource/What-are-war-memorials-made-from-primary-lesson-6290772/)   A lesson plan and presentation for investigating the materials that war memorials are typically made from.   * [**Save Hagrid's hut**](http://www.tes.co.uk/teaching-resource/Introduction-to-Materials-Save-Hagrid-and-39-s-Hut-6378347/)   A *Harry Potter-themed* stimulus and follow-up lesson that challenges children to investigate the best material to rebuild Hagrid’s hut. |
| * demonstrate that dissolving, mixing and changes of state are reversible changes | * [**Reversible and irreversible changes mind map**](http://www.tes.co.uk/teaching-resource/Reversible-and-Irreversible-Changes-Mind-Map-6309935/)   A mind-mapping exercise covering the main vocabulary of changes of state.   * [**Reversible changes**](http://www.tes.co.uk/teaching-resource/Reversible-changes-6056643/)   A lesson plan and worksheets that provide investigation opportunities.   * [**Reversible changes lesson planning**](http://www.tes.co.uk/teaching-resource/Science-separating-materials-Reversible-planning-6207888/)   A series of lesson plans that could be adapted to teach about changes of state.   * [**Reversible changes levelled questions**](http://www.tes.co.uk/teaching-resource/Reversible-changes-Levelled-SATs-questions-6435297/)   A series of levelled SATs-style questions. |
| * explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda. | * [**Reversible and irreversible changes**](http://www.tes.co.uk/teaching-resource/Reversible-and-Irreversible-changes-6304678/)   A PowerPoint presentation and worksheet for introducing changes that result in the formation of new materials.   * [**Reversible and irreversible changes – fact sheet**](http://www.tes.co.uk/teaching-resource/Reversible-and-Irreversible-D-Sided-Fact-Sheet-6182648/)   A double-sided fact sheet containing definitions and information about reversible and irreversible changes.   * [**Halloween reversible and irreversible changes**](http://www.tes.co.uk/teaching-resource/Halloween-Reversible-and-Irreversible-Changes-6365583/)   A collection of fun investigations that could be conducted at Halloween.   * [**Burning materials**](http://www.tes.co.uk/teaching-resource/Burning-materials-6056648/)   A lesson plan and worksheet to investigate what happens to materials when they are burnt rather than heated. |

**Year 5 - Earth and space**

Pupils should be taught to:

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| **Statutory requirements** | |
| * describe the movement of the Earth, and other planets, relative to the Sun in the solar system | * [**Earth, sun and moon**](http://www.tes.co.uk/teaching-resource/Earth-sun-and-moon-introductory-Ppt-6088949/)   An introductory PowerPoint that provides links to *BBC Learning Zone* clips.   * [**The solar system**](http://www.tes.co.uk/teaching-resource/The-Solar-System-6053660/)   A set of worksheets to help familiarise children with the solar system.   * [**Planets**](http://www.tes.co.uk/teaching-resource/Planets-6121756/)   A poster demonstrating the relative sizes and positions of the planets in our solar system.   * [**Earth in space**](http://www.tes.co.uk/teaching-resource/Teachers-TV-Earth-in-Space-1-6063518/)   A link to a *Teachers TV* video looking at methods to teach about the Earth in space with a focus on night and day. |
| * describe the movement of the Moon relative to the Earth | * [**The phases of the moon**](http://www.tes.co.uk/teaching-resource/Phases-of-the-moon-3010595/)   A simple worksheet to develop understanding of the phases of the moon.   * [**The moon**](http://www.tes.co.uk/teaching-resource/PowerPoint-and-Worksheet-on-The-Moon-6303763/)   A PowerPoint presentation and worksheet focusing on the moon.   * [**Moon phases and plant scale**](http://www.tes.co.uk/teaching-resource/EARTH-IN-SPACE-Moon-Phases-and-Planet-Scale-6074492/)   Two worksheets for children to complete on the topic of the movement of the moon.   * [**Phases of the moon**](http://www.tes.co.uk/teaching-resource/KS2-Phases-of-the-Moon-Higher-Level-6362811/)   A worksheet in which children link the changes in the phases of the moon to the movement of the moon around Earth. |
| * describe the Sun, Earth and Moon as approximately spherical bodies | * [**Earth and space**](http://www.tes.co.uk/teaching-resource/Yr-5-2014-Science-Earth-and-amp-Space-plans-and-amp-resources-6395088/)   A set of lesson plans with resources produced for the 2014 curriculum.   * [**Space decision tree**](http://www.tes.co.uk/teaching-resource/Space-Decision-Tree-6047217/)   A *TES iboard* sorting and organising activity.   * [**Planet Earth**](http://www.tes.co.uk/teaching-resource/Planet-Earth-PowerPoint-Lesson-6303761/)   A presentation-based lesson introducing the features of Earth.   * [**Earth, sun and moon**](http://www.tes.co.uk/teaching-resource/Images-of-the-Earth-Sun-and-Moon-6175312/)   A *BBC Class Clips* video that shows a series of images of the Earth, sun and moon. |
| * use the idea of the Earth’s rotation to explain day and night and the apparent movement of the sun across the sky. | * [**Demonstrating night and day**](http://www.tes.co.uk/teaching-resource/Demonstrating-night-and-day-6004869/)   A game to demonstrate night and day.   * [**Night and day**](http://www.tes.co.uk/teaching-resource/PowerPoint-on-Day-and-Night-6305325/)   A PowerPoint presentation explaining how night and day occurs.   * [**Day and night**](http://www.tes.co.uk/teaching-resource/Day-and-amp-night-6056397/)   A lesson plan and worksheet exploring night and day.   * [**How does the Earth's rotation create night and day?**](http://www.tes.co.uk/teaching-resource/How-does-the-Earth-and-39-s-rotation-create-day-and-night-6175179/)   A video that links the Earth’s rotation to the creation of night and day. |

**Year 5 - Forces**

Pupils should be taught to:

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| **Statutory requirements** | |
| * explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object | * [**Gravity experiment**](http://www.tes.co.uk/teaching-resource/Gravity-experiment-6425237/)   A simple activity and worksheet for testing the effects of gravity.   * [**Our world, gravity in space**](http://www.tes.co.uk/teaching-resource/Our-World-Gravity-in-Space-6378261/)   A link to a *NASA Education* video about gravity.   * [**Gravity**](http://www.tes.co.uk/teaching-resource/Gravity-Powerpoint-3002365/)   A PowerPoint presentation that introduces gravity.   * [**Gravity misconceptions**](http://www.tes.co.uk/teaching-resource/Gravity-misconception-cards-6029307/)A set of true-or-false cards about gravity to help students consolidate and test their knowledge. |
| * identify the effects of air resistance, water resistance and friction, that act between moving surfaces | * [**Forces**](http://www.tes.co.uk/teaching-resource/Differentiated-forces-sheets-6119872/)   A set of differentiated worksheets for children to demonstrate their understanding of forces.   * [**Air resistance**](http://www.tes.co.uk/teaching-resource/Air-resistance-powerpoint-3013937/)   A PowerPoint presentation and accompanying worksheets that explore an investigation into air resistance.   * [**Balloon buggies**](http://www.tes.co.uk/teaching-resource/KS2-3-Forces-and-amp-Motion-Make-and-amp-Test-Balloon-Buggies-6290971/)   A plan for a practical lesson in which children apply their understanding to design and make buggies.   * [**Skitch the force**](http://www.tes.co.uk/teaching-resource/Skitch-the-Force-6163079/)   A lesson plan that uses the Skitch app to allow children to take pictures of different situations where forces are acting and then edit to include arrows and labels. |
| * recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect. | * [**Design and make catapults**](http://www.tes.co.uk/teaching-resource/Design-and-amp-Make-Catapults-6055861/)   Children use their knowledge of mechanisms to design and make catapults in this lesson that can be adapted for Year 5.   * [**Everyday levers**](http://www.tes.co.uk/teaching-resource/Everyday-levers-6429086/)   A series of pictures of everyday levers for children to discuss. Although a KS3 activity can easily be adapted.   * [**Levers**](http://www.tes.co.uk/teaching-resource/KS3-Physics-Moments-levers-6322716/)   A guide to how levers work, including a practical task for students.   * [**Our world - science in the circus**](http://www.tes.co.uk/teaching-resource/Our-World-Science-in-the-Circus-6378527/)   A *NASA Education* video that explores science principles, such as levers and pulleys, which can be found in the circus. |

**Year 6 programme of study**

**Year 6 - Living things and their habitats**

Pupils should be taught to:

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| **Statutory requirements** | |
| * describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals | * [**Animal classification**](http://www.tes.co.uk/teaching-resource/Animal-Classifications-6110279/)   A PowerPoint presentation for revising the main five animal classes.   * [**Vertebrate/invertebrate classification**](http://www.tes.co.uk/teaching-resource/Vertebrate-Invertebrate-Classification-Worksheet-6310292/)   A worksheet comprising of four tasks based on how vertebrate and invertebrates are classified into taxonomic groups.   * [**An introduction to plant life**](http://www.tes.co.uk/teaching-resource/An-introduction-to-plant-life-6174235/)   A video introduction to the variety of plant life.   * [**An introduction to micro-organisms**](http://www.tes.co.uk/teaching-resource/Micro-organisms-Introduction-Powerpoint-6162858/)   A basic PowerPoint presentation about micro-organisms. |
| * give reasons for classifying plants and animals based on specific characteristics | * [**Keys glorious keys**](http://www.tes.co.uk/teaching-resource/Keys-Glorious-Keys-6434335/)   An activity in which children have to fill in the gaps to complete a key that can be used to classify common UK minibeasts.   * [**Classifying living organisms**](http://www.tes.co.uk/teaching-resource/Classifying-Living-Organisms-6093416/)   An example of a key and a set of cards describing the five animal classes.   * [**Classification of plants and animals**](http://www.tes.co.uk/teaching-resource/Classification-of-Plants-and-Animals-6133682/)   A PowerPoint presentation and table to help children identify the main characteristics of each animal class.   * [**Making classification keys**](http://www.tes.co.uk/teaching-resource/Making-Classification-Keys-6133039/)   A series of activities to help pupils create classification keys. |

**Year 6 - Animals including humans**

Pupils should be taught to:

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| **Statutory requirements** | |
| * identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood | * [**The circulatory system**](http://www.tes.co.uk/teaching-resource/The-Circulatory-System-Poster-6400655/)   A poster from *The British Heart Foundation* demonstrating the circulatory system.   * [**The heart and circulatory system**](http://www.tes.co.uk/teaching-resource/Heart-Circulatory-system-6341526/)   A task in which children label and colour the main features of the circulatory system.   * [**Workings of the hear**t](http://www.tes.co.uk/teaching-resource/Workings-of-the-heart-Powerpoint-6010636/)   An introductory PowerPoint presentation describing the heart.   * [**Heart and the lungs**](http://www.tes.co.uk/teaching-resource/Heart-and-the-Lungs-Year-5-6412031/)   A cloze procedure on the circulatory system. |
| * recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function | * [**Exercise**](http://www.tes.co.uk/teaching-resource/Exercise-powerpoint-for-keeping-healthy-unit-yr5-3002261/)   A PowerPoint presentation about the effects of exercise on the body.   * [**Drugs**](http://www.tes.co.uk/teaching-resource/Drugs-PowerPoint-y5-6-6038328/)   A presentation to introduce children to the effects of drugs.   * [**Keeping healthy fact sheet**](http://www.tes.co.uk/teaching-resource/Keeping-Healthy-Double-Sided-Fact-Sheet-6182625/)   A double-sided fact sheet of key words and definitions.   * [**Diet and drugs mind map**](http://www.tes.co.uk/teaching-resource/B1-1-Mindmap-on-Diet-and-drugs-6341392/)   A very detailed cloze procedure mind map on the topic of diet and drugs. |
| * describe the ways in which nutrients and water are transported within animals, including humans. | * [**Circulation**](http://www.tes.co.uk/teaching-resource/Circulation-powerpoint-6374238/)   A PowerPoint presentation that recaps what children have learnt about the circulatory system.   * [**Blood fact sheet**](http://www.tes.co.uk/teaching-resource/Blood-Fact-Sheet-6378089/)   An information sheet about blood with key words for children to write definitions.   * [**Role of the heart**](http://www.tes.co.uk/teaching-resource/Role-of-the-Heart-6400484/)   A PowerPoint presentation explaining the function of the heart.   * [**Blood**](http://www.tes.co.uk/teaching-resource/Blood-6054881/)   A lesson plan and worksheet investigating important features of blood. |

**Year 6 - Evolution and inheritance**

Pupils should be taught to:

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| **Statutory requirements** | |
| * recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago | * [**Fossils - natural selection**](http://www.tes.co.uk/teaching-resource/Evolution-Fossils-Natural-Selection-6435667/)   A set of presentations and activities for investigating fossils and natural selection.   * [**Jelly fossils - modelling**](http://www.tes.co.uk/teaching-resource/Jelly-fossils-Modelling-6429087/)   A lesson plan and video demonstrating how children can make a jelly-sweet fossil.   * [**Dinosaur fossils and locations**](http://www.tes.co.uk/teaching-resource/Dinosaur-fossils-and-locations-6377414/)   A lesson plan and activities to explore the location of dinosaur fossils. Although originally designed for a Year 3 class, it could be adapted for older students.   * [**Fossil fact sheet**](http://www.tes.co.uk/teaching-resource/Fossils-factsheet-6257618/)   A fact sheet on fossils, covering fossil types, fossil formation and evidence for evolution. |
| * recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents | * [**Punk science - selective breeding**](http://www.tes.co.uk/teaching-resource/Punk-Science-Selective-breeding-6229448/)   A video from *The Science Museum* demonstrating selective breeding and genetic modification.   * [**Evolution plans and resources**](http://www.tes.co.uk/teaching-resource/Yr-6-Evolution-plans-and-amp-resources-2014-6392091/)   A set of differentiated lesson plans and resources.   * [**Discovering DNA**](http://www.tes.co.uk/teaching-resource/Discovering-DNA-the-recipe-of-life-6289790/)   A link to the *BBSRC* website, which contains a wealth of information and activities.   * [**Evolution and inheritance**](http://www.tes.co.uk/teaching-resource/Evolution-and-Inheritance-powerpoint-6396331/)   A simple PowerPoint presentation for introducing the idea of evolution and inheritance. |
| * identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. | * [**Evolution**](http://www.tes.co.uk/teaching-resource/Year-6-Science-Evolution-full-scheme-6376298/)   This full scheme of work for teaching evolution has been designed to support a trip to a museum, though also works well without a visit.   * [**Charles Darwin evolution**](http://www.tes.co.uk/teaching-resource/Evolution-6434003/)   A PowerPoint presentation and series of activities to help children explore evolution.   * [**Galapagos Islands evolution**](http://www.tes.co.uk/teaching-resource/Evolution-6110518/)   A presentation and several activities designed to support children’s investigations into adaptation and evolution.   * [**Darwin activities and games**](http://www.tes.co.uk/teaching-resource/Darwin-Activities-and-Games-6289766/)   A wide variety of activities and games for exploring natural selection. |

**Year 6 - Light**

Pupils should be taught to:

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| **Statutory requirements** | |
| * recognise that light appears to travel in straight lines | * [**Light travels in a straight line**](http://www.tes.co.uk/teaching-resource/Light-travels-in-a-straight-line-6406816/)   A worksheet and supporting document to allow children to demonstrate their existing understanding of how light travels.   * [**Demonstrating how light travels in a straight line**](http://www.tes.co.uk/teaching-resource/Demonstrating-how-light-travels-in-straight-lines-6174573/)   A link to a BBC Class Clips video demonstrating this concept.   * [**Light travels in a straight line**](http://www.tes.co.uk/teaching-resource/Light-Travels-In-A-Straight-Line-6320728/)   A worksheet with an investigation that children can complete to discover how light travels.   * [**Light**](http://www.tes.co.uk/teaching-resource/Light-Levelled-SATs-questions-6435166/)   A series of differentiated, levelled SATs-style questions about light. |
| * use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye | * [**How we see things**](http://www.tes.co.uk/teaching-resource/Year-6-Light-How-we-see-things-6310056/)   A series of teaching activities and worksheets exploring the topic of sight.   * [**How our eyes work**](http://www.tes.co.uk/teaching-resource/How-our-eyes-work-6302055/)   An activity and worksheet for children to complete about the eye.   * [**Light refraction and reflection**](http://www.tes.co.uk/teaching-resource/light-refraction-and-reflection-6002777/)   A detailed introduction to refraction and reflection.   * [**Light and shadow**](http://www.tes.co.uk/teaching-resource/Light-and-Shadow-6224597/) **(lessons three and four)**   Lessons three and four are particularly relevant in this series of PowerPoint presentations about light and shadow. |
| * explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes | * [**How we see things**](http://www.tes.co.uk/teaching-resource/Y6-How-we-see-things-10-6062226/)   A very detailed Smart board presentation about all things light-related.   * [**How we see things display materials**](http://www.tes.co.uk/teaching-resource/How-We-See-Things-Display-6121825/)   A document of display materials linked to the topic of how we see.   * [**How we see things presentation**](http://www.tes.co.uk/teaching-resource/How-we-see-things-powerpoint-6012448/)   An introduction to ray diagrams.   * [**Light - seeing things/behaviour of light**](http://www.tes.co.uk/teaching-resource/Light-seeing-things-behaviour-of-light-6165444/)   A presentation introduction to how light travels and how it enables us to see things. |
| * use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them. | * [**Light fact sheet**](http://www.tes.co.uk/teaching-resource/How-We-See-Things-Double-Sided-Fact-Sheet-6182663/)   A double-sided fact sheet containing information about light and how we see things.   * [**Shadow investigation**](http://www.tes.co.uk/teaching-resource/AT1-Open-investigation-Year-6-6063279/)   A collection of open ideas for investigations, including one on shadows.   * [**Light and shadow**](http://www.tes.co.uk/teaching-resource/Light-and-Shadow-6224597/) **(lessons five and six)**   Lessons five and six of this series of presentations are excellent for teaching about shadows.   * [**Light and shadow chatterbox**](http://www.tes.co.uk/teaching-resource/Light-and-Shadow-Chatterbox-6027251/)   A fun origami activity to reinforce children’s knowledge about light and shadow. |

**Year 6 - Electricity**

Pupils should be taught to:

|  |  |
| --- | --- |
| **Statutory requirements** | |
| * associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit | * [**How voltage affects bulb brightness**](http://www.tes.co.uk/teaching-resource/How-voltage-affects-the-brightness-of-light-bulbs-6175299/)   A *BBC Class Clips* video exploring the topic of voltage.   * [**Current electricity**](http://www.tes.co.uk/teaching-resource/Current-electricity-powerpoint-6002779/)   A very detailed PowerPoint presentation to introduce the topic of current electricity.   * [**Circuits - changing brightness**](http://www.tes.co.uk/teaching-resource/Circuits-electricity-changing-brightness-6342762/)   An activity that asks children to explore what will happen to the brightness of a bulb when they change various components of a connected circuit.   * [**Series and parallel circuits**](http://www.tes.co.uk/teaching-resource/Series-and-Parallel-Circuits-6430894/)   A lesson plan and resources to introduce the concept of series and parallel circuits. |
| * compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches | * [**Circuits investigation - bulbs**](http://www.tes.co.uk/teaching-resource/Circuit-investigations-6056608/)   A lesson plan and worksheet for an investigation into whether the thickness of a wire makes a difference to bulb brightness.   * [**Electric circuits**](http://www.tes.co.uk/teaching-resource/Electric-circuits-homework-8-6203143/)   A set of differentiated worksheets for children to present results of an investigation.   * [**Circuits assessment**](http://www.tes.co.uk/teaching-resource/YEAR-6-G-CHANGING-CIRCUITS-ASSESSMENT-6098079/)   A worksheet assessing children’s understanding.   * [**How fast should your buggy be?**](http://www.tes.co.uk/teaching-resource/How-fast-should-your-buggy-be-6036058/)   A lovely project that challenges children to apply their knowledge and understanding of electrical components. |
| * use recognised symbols when representing a simple circuit in a diagram. | * [**Circuit symbol reference sheet**](http://www.tes.co.uk/teaching-resource/Circuit-symbols-reference-sheet-6024856/)   A simple sheet with a list of circuit symbols.   * [**Electric circuit symbols**](http://www.tes.co.uk/teaching-resource/Electric-Circuit-Symbols-6180186/)   A PowerPoint presentation and series of flash cards to introduce the common symbols used in circuits.   * [**Circuit symbols for diagrams**](http://www.tes.co.uk/teaching-resource/Circuit-symbols-for-diagrams-6300590/)   A Smart board presentation to introduce the topic.   * [**Circuits**](http://www.tes.co.uk/teaching-resource/Circuits-Year-6-lesson-plans-and-amp-resources-6373694/)   A series of lesson plans and resources that could be used as a starting point for teaching about circuits. |