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| **Topic** | **EYFS** | **Y1** | **Y2** | **Y3** | **Y4** | **Y5** | **Y6** |
| **Working Scientifically:** **KS1**Ask simple Qs and recognise that they can be answered in different ways. Perform simple tests. Observe closely, using simple equipment. Gather and record data to help in answering questions. Identify and classify. Use their observations and use appropriate scientific language to communicate ideas. Use their observations and ideas to suggest answers to questions.**Lower KS2**Ask relevant questions and use different types of scientific enquiries to answer them. Set up simple practical enquiries, comparative and fair tests. Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. Gather, record, classify and present data in a variety of ways to help in answering questions. Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables. Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. Identify differences, similarities or changes related to simple scientific ideas and processes. Use results to draw simple conclusions, make predictions for new values, suggest improvements, and raise further questions. Use straightforward scientific evidence to answer questions**Upper KS2**Plan different types of scientific enquiries to answer their own questions, including recognising and controlling variables where necessary. Use test results to make predictions to set up further comparative and fair tests. Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate. Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs. Report and present findings from enquiries, including conclusions and causal relationships, in oral and written forms such as displays and other presentations, using appropriate scientific language. Explain degree of trust in results. Identify and evaluate scientific evidence (their own and others) that has been used to support or refute ideas or arguments. |
| Topic | EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| Plants |  | Identify and name a variety of common wild and garden plants, including deciduous and evergreen treesIdentify and describe the basic structure of a variety of common flowering plants, including trees  | Observe and describe howseeds grow into healthy plantsand investigate requirementsfor plant growth. | Identify and describe thefunctions of parts of aflowering plant.Explore pollination, seedformation and seed dispersal. |  | . |  |
| Seasonal Changes | Observe changes across the four seasons, including weather and how day length varies. |  |  |  |  |  |
| Everyday Materials |  | Name, describe, compare, sort and group a range of materials based on their simple physical properties. | Identify and compare thesuitability of different materialsfor particular uses andinvestigate how some solids canchange shape by squashing, bending, twisting and stretching. |  | Compare and group materials together, according to whether they are solids, liquids or gasesObserves that some materials change state when they are heated or cooled, and measure or research the temperature degrees Celsius (°C)Link to water cycle. | Compare and groupmaterials by theirproperties.Investigate how somematerials can dissolve, mix,separate.Understand that somechanges are reversible. |  |
| Living things and their habitats |  |  | Identify and describe(including naming ofplants and animals)habitats and explore howthey meet the needs andrequirements of differentanimals.Describe simple foodchains.Can compare the differences between things that are living, dead, and things that have never been alive. |  | Classify (usingclassification keys) andgroup animals bydifferent properties.Recognise changes inenvironments and hedangers this can pose toliving things. | Describe and observedifferences in a rangeof life cycles.Describe the lifeprocess ofreproduction. | Describe and classify abroad range of livingthings using commonobservablecharacteristics and givereasons for choicesmade. |
| Light and Dark |  |  |  | Explore light and how it allows us to see.Recognise that UV light can bedangerous and describe ways toprotects ourselves from it.Investigate and explore shadows. |  |  | Recognise that light travels in straightlines. Explore in detail how lighttravelling in a straight line links to visionand why shadows are the same shape asthe objects that cast them. |
| Animals Including humans |  | Identify andclassify a variety of common animals.Describe and compare thestructures ofdifferent animalsand label(including labellingbasic parts of thehuman body). | Observe thatanimals haveoffspring that growinto adults.Investigate thebasic needs ofanimals for survivalas well as the needfor exercise andhygiene. | Identify thatanimals need therighttypes/amounts ofnutrition.Identify andexplore skeletonsand muscles. | Explore the simplefunction of thedigestive system inhumans.Construct andinterpret a varietyof food chains. | Describe howhumans changeand develop to oldage. | Identify and namethe main parts ofthe circulatorysystem.Describe hownutrients and waterare transportedaround the body.Recognise theimpact of diet,exercise and drugson the human body. |
| Forces and Magnets |  |  |  | Compare movement of differentsurfaces.Investigate the requirements for forces(including magnetism).Explore investigate the properties anduses of magnets. |  | Explore and describe the effects ofgravity, air resistance, water resistanceand friction.Recognise that some mechanisms canallow smaller forces to have a greatereffect. |  |
| Rocks |  |  |  | Compare and group together rocks based on physical properties.Describe the formation of fossils.Explore soils. |  |  |  |
| States of Matter |  |  |  |  |  |  |  |
| Properties and Changes of Materials |  |  |  |  |  |  |  |
| Earth and Space |  |  |  |  |  | Describe the movement of the Earth and other planets around the Sun.Describe the movement of the Moon around the Earth.Understand that the Earth’s rotation causes day and night. |  |
| Sound |  |  |  |  | Identify how sounds are made including, vibrations from sound travelthrough a medium to the ear.Explore pitch and volume. |  |  |
| Electricity |  |  |  |  | Identify common appliances that run onelectricity.Construct simple circuits and investigate common conductors and insulators. |  | Associate the brightness of a lampwith voltage and give reasons forthis.Use recognised symbols to drawsimple circuit diagrams. |
| Evolution and Inheritance |  |  |  |  |  |  | Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions ofyears ago.Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. |