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| Year Group | Unit | Objectives | Possible activities/ additional guidance | Love2Investiaget resources that could be used from previous year group |
| 1 | * Understanding the World – Summer term from overview
 | * Compare animals and plants
* Look at life cycles (frog, butterfly) and use correct terms
* Answer open ended questions – How can we?  What would happen if?
* Record findings by drawing, writing, making a model, photographing
 | Mini beast huntOrdering life cycleObserving and drawingLabelling images | n/a |
| 2 | Plants (Yr 1) | * identify and name a variety of common wild and garden plants, including deciduous and evergreen trees
* identify and describe the basic structure of a variety of common flowering plants, including trees
 | They should become familiar with common names of flowers, examples of deciduous and evergreen trees, and plant structures (including leaves, flowers (blossom), petals, fruit, roots, bulb, seed, trunk, branches, stem). Pupils might work scientifically by: observing closely, perhaps using magnifying glasses, and comparing and contrasting familiar plants; describing how they were able to identify and group them, and drawing diagrams showing the parts of different plants including trees. | Are all leaves the same?What’s in a bud?How do leaves change?Do pine cones know it’s raining? |
| 3 | Living things and their habitats (Yr2) | * explore and compare the differences between things that are living, dead, and things that have never been alive
* identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other
* identify and name a variety of plants and animals in their habitats, including microhabitats
* 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
 | They should raise and answer questions about the local environment that help them to identify and study a variety of plants and animals within their habitat and observe how living things depend on each other, for example, plants serving as a source of food and shelter for animals. Pupils should compare animals in familiar habitats with animals found in less familiar habitats, for example, on the seashore, in woodland, in the ocean, in the rainforest.Pupils might work scientifically by: sorting and classifying things according to whether they are living, dead or were never alive, and recording their findings using charts. They should describe how they decided where to place things, exploring questions like: ‘Is a flame alive? Is a deciduous tree dead in winter?’ and talk about ways of answering their questions. They could construct a simple food chain that includes humans (eg, grass, cow, human). They could describe the conditions in different habitats and microhabitats (under log, on stony path, under bushes); and find out how the conditions affect the number and type(s) of plants and animals that live there. | Do insects have a favourite colour?Where do snails live?Where do worms like to live?What is the lifecycle of a ladybird? |
| 4 | Plants (Yr3) | * identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers
* 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
* investigate the way in which water is transported within plants
* explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal
 | hey should explore questions that focus on the role of the roots and stem in nutrition and support, leaves for nutrition and flowers for reproduction.Note: pupils can be introduced to the idea that plants can make their own food, but at this stage they do not need to understand how this happens.Pupils might work scientifically by: comparing the effect of different factors on plant growth, for example, the amount of light, the amount of fertiliser; discovering how seeds are formed by observing the different stages of plant life cycles over a period of time; looking for patterns in the structure of fruits that relate to how the seeds are dispersed. They might observe how water is transported in plants, for example, by putting cut, white carnations into coloured water and observing how water travels up the stem to the flowers. | Are mushrooms deadly?Do plants have legs?What are flowers for?Why are trees tall? |
| 5 | States of Matter (Yr4) | * compare and group materials together, according to whether they are solids, liquids or gases
* 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)
* identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature
 | Pupils should explore a variety of everyday materials and develop simple descriptions of the states of matter (solids hold their shape; liquids form a pool not a pile; gases escape from an unsealed container). Pupils should observe water as a solid, a liquid and a gas and should note the changes to water when it is heated or cooled.Note: teachers should avoid using materials where heating is associated with chemical change, for example, through baking or burning.Pupils might work scientifically by: grouping and classifying a variety of different materials; exploring the effect of temperature on substances such as chocolate, butter, cream (for example, to make food such as chocolate crispy cakes and ice-cream for a party). They could research the temperature at which materials change state, for example, when iron melts or when oxygen condenses into a liquid. They might observe and record evaporation over a period of time, for example, a puddle in the playground or washing on a line, and investigate the effect of temperature on washing drying or snowmen melting. | Are all liquids runny?Is custard a liquid?How do smells get up your nose? |
| 6 | Living things and their habitats (Yr5) | * describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird
* describe the life process of reproduction in some plants and animals
 | Pupils should study and raise questions about their local environment throughout the year. They should observe life-cycle changes in a variety of living things, for example, plants in the vegetable garden or flower border, and animals in the local environment. They should find out about the work of naturalists and animal behaviourists, for example, David Attenborough and Jane Goodall.Pupils should find out about different types of reproduction, including sexual and asexual reproduction in plants, and sexual reproduction in animals.Pupils might work scientifically by: observing and comparing the life cycles of plants and animals in their local environment with other plants and animals around the world (in the rainforest, in the oceans, in desert areas and in prehistoric times), asking pertinent questions and suggesting reasons for similarities and differences. They might try to grow new plants from different parts of the parent plant, for example, seeds, stem and root cuttings, tubers, bulbs. They might observe changes in an animal over a period of time (for example, by hatching and rearing chicks), comparing how different animals reproduce and grow. | How do worms reproduce?What is the lifecycle of a mealworm?Why do birds lay eggs? |