| **Science****Core Learning****Class 2****YEAR A**  |
| --- |
|  | **Autumn Term**  | **Spring term**  | **Summer Term**  |
| **Unit of work**  | Animals including humansSeasonal Change | Everyday materialsPlants - Needs and growth | Animals including humans - Bodies and healthLiving things and their habitats |
| **Prior Learning**  | In EYFS children looked at freezing and what happens when it is cold. They’ve looked at changes during their Autumn term.  | In EYFS children have looked at naming different materials and have used these practically. Children have looked at plants and how they look after them.  | Children have previously looked at mini-beasts and have completed observational drawings. They have learned about themselves and body parts.  |
| **5 essential key knowledge****Nuggets** | How do babies become adults?* What are my body parts and senses?
* What do we need to survive?
* Why should we exercise and choose a varied diet?

Seasonal change* What changes throughout the year?
* Why are some days longer than others?
* Why is there different weather?
* Why is the summer warm and the winter wet?
 | Materials * What are things made of?
* What are the properties of materials?
* Why are some materials more useful than others?

Plants* What plants and trees live in my local environment?
* How do seeds grow to be plants?
* How do bulbs grow?
* What do plants need to thrive?
 | Animals* What groups do animals sort in to?
* What do we all need to survive?
* How do we change as we get older?
* Are all parts and structures of animals the same?

Living things* What is a food chain and who is involved?
* Do we all need the same habitat to live?
* What are microhabitats?
* How do I know if something is living, dead or never lived?
 |
| **Core Learning****Knowledge** | Animals including humans1. Can I notice that animals, including humans, have offspring which grow into adults?
2. Can I Identify, name, draw and label the basic parts of the human body and say which of the body is associated with each sense?
3. Can I Identify, name, draw and label the basic parts of the human body and say which of the body is associated with each sense? sound
4. Can I find out about and describe the basic needs of animals, including humans, for survival (water, food and air)?
5. Can I use my senses to identify?
6. Can I describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene?

Seasonal Change 1. Can I observe changes across the four seasons?
2. Can I observe and describe weather associated with the seasons and how day length varies? weather
3. Can I observe and describe weather associated with the seasons and how day length varies? daylight
4. Can I observe changes across the four seasons? (Rainfall)
5. Can I observe and describe weather associated with the seasons? (Wind)
6. Can I observe and describe weather associated with the seasons? (Temperature)
 | Everyday materials1. Can I Distinguish between an object and the material from which it is made?
2. Can I describe the simple physical properties of a variety of everyday materials?
3. Can I Compare and group together a variety of everyday materials on the basis of their simple physical properties?
4. Can I Compare and group together a variety of everyday materials on the basis of their simple physical properties?
5. Can I Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses?
6. Can I Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses?

Plants1. Can I Identify and name a variety of common wild and garden plants, including deciduous and evergreen tree?
2. Can I Observe and describe how seeds and bulbs grow into mature plants ?
3. Can I find out and describe how plants need water, light and a suitable temperature to grow and stay healthy?
4. Can I Observe and describe how seeds and bulbs grow into mature plants? cress
5. Can I Observe and describe how seeds and bulbs grow into mature plants ? beans
6. Consolidation

 Sketch and talk about what they see, including facts about the stem and leaves and the seed coat left at the base of each cress plant.Be able to talk about what the seed has produced and how the plant grewNotice and explain the differences between the plant left to grow in the classroom and the cress left in the cupboard.  | Animals including humans1. Can I Identify and name a variety of common animals that are birds, fish, amphibians, reptiles, mammals and invertebrates?
2. Can I Consider the differences/similarities between what humans want and what they need to survive?
3. Can I Describe and compare the structure of a variety of common animals?
4. Can I Notice that animals, including humans, have offspring which grow into adults?
5. Can I Identify, name a variety of common animals that are carnivores, herbivores and omnivores?
6. Can I Describe and compare the structure of a variety of common animals (birds, fish, amphibians, reptiles, mammals and invertebrates?

Living things and their habitats?1. Can I 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?
2. Can I 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?
3. Can I Explore and compare the differences between things that are living, dead and things that have never been alive?
4. Can I Identify and name a variety of plants and animals in their habitats, including micro-habitats?
5. Can I 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? fish
6. Can I describe simple food chain, and identify and name different sources of food?
 |
| **Core Learning****Skills** | Working Scientifically* Ask simple questions and recognise that they can be answered in different ways
* Observe closely, using simple equipment
* asking simple questions and recognising that they can be answered in different ways
* observing closely, using simple equipment
* performing simple tests
* using their observations and ideas to suggest answers to questions
* gathering and recording data to help in answering questions
 | observing closely, using simple equipmentusing their observations and ideas to suggest answers to questions |  |
| **Vocabulary** | Compare, describe, similar, different, Notice patterns, compare, measure, record, predict, gather, centimetre, millimetre, Ears, senses, hearing, spotting patterns, Fruit/vegetables, bread/rice/potatoes/pasta, milk/dairy/food high in fat/sugar, meat/fish/egg/beans, Rain, snow, storm, thunder, lightning, cloudy, clothing, warm, cold, forecast, Rain, snow, storm, thunder, lightning, warm, cold, forecast, summer, autumn, winter, spring, seasons, Day, night, shadow length, change, light, dark, Weather, rainfall, precipitation, data, Weather, rainfall, precipitation, data, wind, direction, gauge, patterns | Rough/smooth, flat/bumpy, sharp/blunt, wood, metal, plastic, glass, rock, materials, properties, Rough/smooth, flat/bumpy, sharp/blunt, wood, metal, plastic, glass, rock, materials, properties, Magnetic, non-magnetic, metal, materials, properties, Rough/smooth, flat/bumpy, sharp/blunt useful, materials, properties, Plant, leaf, grow, weed, change, living, water, healthy, similar to, different from, Plant, leaf, grow, weed, change, living, water, healthy, similar to, different from, potato, chitting, Plant, leaf, root, grow, weed, change, living, water, healthy, different, seeds, garden centre, Warmth, light, water, dry, wet, moist, growth, germination, Seed, seed coat, bean, water, warmth, nutrients, leaves, stem, roots,  | Birds, fish, reptiles, mammals, invertebrates, group, classify, carnivores, herbivores, omnivores, Birds, fish, reptiles, mammals, invertebrates, group, classify, habitats, offspring, babies, adults,Food chain, predator, habitats, dependence,dead, alive, savannah, rainforest, tundra, micro-habitat, features, ocean, water, micro-habitat, features,  |
| Quick quiz/assessment task | Report like David Attenborough and inform the nation of all things animal!Become a meteorologist and read the weather and explain the seasons.  | investigate and inform the local builder of appropriate materials for the new build estate near school, create a presentation/leaflet to inform them. Information leaflet on a variety of seeds and bulbs. Create sandwiches from grown cress.  | Create a safari information tour and take people on a trip. Create habitats and explain foods chain and survival of your animal.  |