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| **YEAR GROUP** | **AUTUMN TERM** | | **SPRING TERM** | | **SUMMER TERM** | |
| **Cycle A** | | | | | | |
| **Lions**  **EYFS** | **Woodland animals**  Habitats  Seasonal changes – Summer to Autumn | **Torches/Dark Den/ Shadows**  Seasonal Change – Autumn to Winter  Light and Dark | **Animals with amazing abilities.**  Guide dogs  Labelling parts of animals  Naming common animals  Seasonal Change | **Seasonal changes.**  Winter to Spring  Light changes  Plants recap | **Planting bulb**  Plants – observing  Cress  Seed bombs  Flowers  Parts of plants  Names of common plants in our area. | **Natural object scavenger hunts**   * Observation skills   Seasonal changes- Spring to Summer |
| **Tigers**  **1&2** | **Uses of Materials**   * Can you identify and compare the suitability of a variety of everyday materials, for particular uses? * Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching * Identify that some materials can be found naturally; others have to be made. | **Animals and Their Habitats**  Can you tell the difference between things that are living, dead or things that have never been alive?  Can you talk about how living things have a habitat that is suited to meet their basic needs?  Can you use a simple food chain to explain where animals get their food? | **Humans and Health**  How do humans stay healthy?  What are the things that humans need to survive?  Understand that medicines can be harmful if not used properly. | **Plants and Growth**   * How do seeds and bulbs grow into mature plants? * What do the plants need in order to grow and stay healthy? * Know that plants are living and eventually die | **Seasons**  **Plants Recap**  How does the weather change as we move into the different seasons?  What happens to the amount of day light we have as the seasons change? | **Working Scientifically & Science Exploration**  Can you make detailed observations?  Can you use your observations to raise questions?  Can you plan and set up a simple comparative test?  Can you use your findings to answer your questions? |
| **Jaguars**  **3&4** | **States of Matter**  What re solids, liquids and gases?  How do materials change when they are heated/cooled?  What is evaporation and condensation and what part do they play in the water cycle? | **Sound**  How are sounds made?  How does sound travel to our ears?  What is volume and pitch?  What happens to sounds the further we are away? Why? | **Electricity**  What appliances use electricity?  What makes up a simple circuit?  How does a switch work?  What are conductors and insulators?  What makes a good conductor and why? | **Animals inc Humans, Digestion & Teeth**  What makes up our digestive systems and what are their functions?  What are the different functions of each organ that makes up our digestive system?  What different teeth do we have and why are they so different?  What makes up the food chain? | | **Living things & Habitats**  What is classification?  How can I categories living things?  How are environments changing and what are the effects of this on living things?  What living things live in my environment? |
| **Panthers**  **5&6** | **Animal life cycles (Living things and their habitats)**   * Can you describe the life process of reproduction in some plants and animals? * Can you compare how different animals reproduce and grow? * Can you describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.? * Can you compare the life cycles of plants and animals in their local environment with other plants and animals around the world? | **Human life cycles**   * Can you describe the changes as humans develop to old age? * Can you describe how animals are alive; they move, feed, grow, use their senses, reproduce, breathe/respire and excrete? | **Light**   * Can you explain why light appears to travel in straight lines? * Can you explain how objects are seen? * Why do shadows have the same shape as the objects that cast them? | **Electricity**   * Can you describe how the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit. * Can you investigate why the bulb brightness changes when the voltage is changed? * Can you draw a simple circuit in a diagram? * Can you make predictions on whether a circuit will work and give reasons why? | **Material properties**   * Can you describe how to recover a substance from a solution? * Can you solve how to separate mixtures? * Are they reversible or irreversible? * What is the difference between melting and dissolving? * How do we separate different size solids? * How do we separate solids and liquids? * What rates do materials change? | **Evolution**   * How have living things changed over time? * What information do fossils provide? * Can you describe how living things produce? * How do plants and animals adapt? * How does adaptation lead to evolution? |
| **Cycle B** | | | | | | |
| **Lions**  **EYFS** | **Materials – making a den**  Seasonal Changes  Summer to autumn | **Dark Den**  Blindfold walks  Senses – My body  Autumn to winter | **Star constellations.**  **Shapes of natural things.**   * Observation skills | **Floating/sinking boat making.**  **Investigating cause and effect.**  Seasonal Changes – winter to spring | **Planting bulb**  Plants – observing  Cress  Seed bombs  Flowers  Naming common plants. | **Natural object scavenger hunts**  **Seasonal Changes**  Spring to Summer |
| **Tigers**  **1&2** | **Humans**   * What are 5 senses and which body part are they linked with? * What are our main body parts? Why do we need them? * What do humans have in common with each other? * How do we differ from each other? | **Seasons & Light**   * What season are we in now? * How many seasons are there? What are they called? * How do the seasons differ from each other? * What happens to the length of the day during the different seasons? | **Material Properties**   * What are the names of the everyday materials we have in our world? * How can we describe these materials using their properties? * How do these materials differ from each other? * Can you name everyday objects and then name the material they’re made from? | **Animals**   * What are the names of the animal groups? * What are the different groups we can sort animals into based on what they eat? * Can we label animal body parts? * How do animals differ from each other? | **Plants**   * What are the two types of trees? * What are the names of our common plants that we have in our area? * What are the parts of a plant? Can you label these? | **Animal Survival and Growth**   * What does the term ‘offspring’ mean? * How do different animals create their offspring? * What is the life cycle of a frog? Can you label it? * What do animals need to survive? |
| **Jaguars**  **3&4** | **Rocks**  How are rocks similar or different?  How are fossils formed?  What is soil made from? | **Forces inc Magnets**  How can we change the amount of force on an object?  How do magnets work?  What materials do magnets attract/repel?  Why are some materials attracted/repelled by magnets and others not? | **Animals inc Humans/ Skeletons**  What is a skeleton?  Why do we need a skeleton? (protection)  Why do we need a skeleton? (support)  Why do we need a skeleton? (movement) | **Animals inc Humans – Nutrition**  What are the different food groups?  Why do we need a balanced diet?  How healthy is my food?  How are animals diets different and why? | **Functions of a Plant**   * Can you label the different parts and functions of a flower? * What are the requirements for plants to grow? * What is a plants life cycle? * Why are the roots important?. * How do plants get food? * Can you describe what pollination is? * How is a plant fertilised? * How does a plant grow healthy? | **Light**   * Why do we need light? * What does reflection mean? * Why do we wear sunglasses? * How are shadows formed? * Can you find patterns in the way that the size of shadows change**?** |
| **Panthers**  **5&6** | **Forces**  How do we know that forces exist?  Who discovered gravity and what effects does it have on our lives?  Does the size of a parachute affect the air resistance on it?  What is the most streamlined shape to counteract water resistance?  How do brake pads work and what would be the best material for them?  How does using a mechanism change the forces needed? | **Material changes (reversible)**  What different properties of materials can we name?  Which material is the best insulator?  Which material is the best conductor?  How are dissolving and melting different?  How can we reverse the effects of dissolving a material?  How can we effectively separate materials by using our knowledge of their properties? | **Material changes (irreversible)**  Why are some material changes irreversible?  How does cooking change a material?  Can we reverse the chemical reaction of an acid mixed with bicarb?  What is oxidisation and how can we prevent it? | **Earth and Space**  How does the Earth move round the Sun?  How does day and night happen?  How do all the planets move?  Why do our shadows change shape?  How does the Moon move round the Earth?  How do we know about other planets? | **Classification**   * Can you describe the similarities and differences between micro-organisms, plants and animals? * Can you discuss why you have classed the plants and animals based on their specific characteristics? * Can you group living things into micro-organisms, plants and animals? * Can you group vertebrates into fish, amphibians, reptiles, birds and mammals? * Can you group invertebrates into snails and slugs, worms, spiders and insects? * Can you group plants into flowering plants (incl. trees and grasses) and non-flowering plants (such as ferns and mosses)? | **The circulatory system**   * Can you identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood? * What is the impact of diet, exercise, drugs and lifestyle on the way our bodies function? * Can you describe the ways in which nutrients and water are transported within animals, including humans? * Can you describe how the heart is made up and what is its job in the body? * Can you explain the importance of blood and how it affects muscles? * How does a balanced diet affect our bodies and animals? * Can you explain why tobacco, alcohol and other ‘drugs’ can be harmful? |