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| **Science: Key Stage 1- Year 2** | | | |
| **Learning Challenges** | | | |
| **Why would a dinosaur not make a good pet?** | | **How old are the trees around us?** | **What would Traction Man use to build our school?** |
| **National Curriculum content** | | | |
| Biology – living things and their habitat | | Biology- Plants | Chemistry – Everyday Materials |
| Explore and compare differences between things that are living, dead and never been alive  Identify that most living things live in habitats to which they are suited and describe how different habitats provide 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 micro habitats.  Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain and identity and name different sources of food. | | Observe and describe how seeds and bulbs grow into mature plants.  Find out and describe how plants need water, light and a suitable temperature to stay healthy | Identify and compare the suitability of a variety of everyday materials (including wood, metal, plastic, glass, brick, rock and cardboard) for particular uses  Find out how the shape of solid objects made from some materials can be changed by squashing, bending, twisting and stretching |
| **Key Knowledge** | | | |
| * Classify things by living, dead, never lived * Know how a specific habitat provides the basic needs of things living there * Match living things to their habitat * Name some different sources of food for animals * Know about and explain a simple food chain | | * Know and explain how seeds and bulbs grow into plants * Know what plants need in order to grow and stay healthy (water, light and suitable temperature) | * Know how materials can be changed by bending, squashing, twisting and stretching * Know why a material might or might not be used for a specific job |
| **Learning Challenges** | | | |
| **How will 5 a day help to keep us healthy?** | | **How have scientists changed the world?** | |
| **National Curriculum content** | | | |
| Biology – Animals including humans | Scientist and Inventors | | |
| *Notice that animals, including humans, have offspring which grow into adults*  *Find out about and describe the basic needs of animals, including humans, for survival (air, water and food)*  *Describe the importance for humans of exercise, eating the right amounts of different types of food and hygiene* | Describe the theory of pasteurisation and how liquids can be heated to kill microbes.  Explore Jane Goodall’s scientific develops and how primates create their own tools out of grass and other materials to catch their prey.  To understand what a computer programme is and investigate early computers.  To research pioneering scientists. | | |
| **Key Knowledge** | | | |
| * Know the basic stages in a life cycle for animals (including humans) * Know why exercise, a balanced diet and good hygiene are important for humans | * Know that Louis Pasteur was a famous scientist and his knowledge of germs led to his discovery of pasteurisation. * Know that Grace Hopper was a computer scientist and inventor who invented one of the first computer programmes. * Know Jane Goodall is a primatologist most known for long-term study of wild chimpanzees. | | |