**National Curriculum Subject** - **Science** **Year 2**

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| **Topic title/theme**  ***(why now? /rationale)*** | **Activities/ investigations** | **National Curriculum objective** | **Vocabulary** | **Knowledge** | **Skills** |
| *Autumn 1 – 3 weeks*  *To start the year off by learning about ourselves*  Cycle A  Funnybones  Cycle B  Getting to know you, getting to know all about you/All Abroad  Cycle C  Marvellous Me |  | Animals including Humans  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 (water, food and air)  Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene | growth, nutrients, offspring,  reproduction  adult  survival  hygiene  exercise | Know that animals produce offspring that grow into adults.  Know that animals, including humans, need water, food and air to survive.  Know the basic food groups: fruit and veg, carbohydrates, protein, dairy, fat and sugary foods.  Know that more than ½ of our diet should be made up of carbohydrates, fruit and veg.  Know that fats and sugary foods should be eaten rarely and in small amounts.  Know that people need to exercise often to help their body stay strong and fit.  Know that keeping clean, including washing and brushing teeth, is an important part of staying healthy. | Identify and classify – compare, sort and group animals.  Ask simple questions and use secondary sources to find answers.  Use observations and ideas to suggest answers to questions.  Use simple scientific language. |
| *Autumn 2*  Cycle A  Superheroes  Cycle B  The naughty little shoe maker and the runaway gingerbread man  Cycle C  Traditional Tales – 3 Little Pigs |  | Uses of everyday materials  Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for different uses  Compare how things move on different surfaces  Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching | Revision from yr 1  Bendy  Transparent  opaque  absorbent  waterproof  Yr 2  movement  suitability  surface  properties  squash  stretch  twist  flexible  rigid  lightweight | Know that materials can have useful properties for a given job  Know that many types of plastic are waterproof, that steel is strong, that rock is hard, that cotton wool is soft, that rubber is flexible, that rock is rigid, that polystyrene is light and iron is heavy | Observe closely using simple equipment  Perform simple tests  Identify and classify  Gather and record data to help in answering questions |
| *Spring 1*  Cycle A  The animals of Ormesby Wood  Cycle B  Lift Wanted around the world  Cycle C  Bear in the World… |  | Living things and their habitats  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. | living processes  living  dead  never lived  food chain  food sources  habitat  microhabitat  depend  survive | Know that some things are living, some things are dead and some things have never lived  Understand the food chain and how living things stay alive  Know and name different habitats/microhabitats and where certain animals can survive | Observe closely using simple equipment Identify and classify  Gather and record data to help in answering questions |
| *Spring 2*  Cycle B  My World Kitchen | **Science week**  To fit in with National Science Week |  |  |  |  |
| *Summer 2*  Cycle A  Jack and the beanstalk  Cycle B  Mr Body – save our School Grounds  Cycle C  Into the Woods  *To allow us to grow & study plants at the right time of year* |  | Plants  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 grow and stay healthy. | bulb  seed  temperature  growth  energy  habitat | Know that seeds and bulbs need to be buried underground in soil and that they will grow into adult plants under the right conditions  Know that plants that are deprived of light, food or air will not grow and will die | Observe closely using simple equipment  Identify and classify based on observational properties  Test questions to see if they are true  Gather and record data to help in answering questions |