Working Scientifically means I can:

- 1. Ask relevant questions
- 2. Use observations & knowledge to answer scientific questions.
- 3. Set up a simple enquiry to explore scientific questions.
- 4. Set up a test to compare 2 things.
- 5. Set up a fair test & explain why it is fair.
- Make careful & accurate observations, including the use of standard units.
- 7. Use equipment, including thermometers & data loggers to make measurements.
- 8. Gather, record, classify & present data in different ways to answer scientific questions.
- 9. Use diagrams, keys, bar charts & tables; using scientific language.
- 10. Use findings to report in different ways, including oral & written explanations & presentation.
- 11. Draw conclusions & suggest improvements.
- 12. Make a prediction with a reason.
- 13. Identify differences, similarities & changes related to an enquiry.

Being a Scientist Year Four

Being a chemist mean I can:

States of matter

- Group materials based on their state of matter (solid, liquid, gas)
- 2. Describe how some materials can change state.
- 3. Explore how materials change state.
- 4. Measure the temperature at which materials change state.
- 5. Describe the water cycle.
- 6. Explain the part played by evaporation & condensation in the water cycle.

Being a biologist means I can:

Animals, including humans

- 5. Explain the importance of a nutritious, balanced diet.
- 6. Explain how nutrients, water & oxygen are transported within animals & humans.
- 7. Describe and explain the skeletal system of a human.
- 8. Describe and explain the muscular system of a human.
- 9. Describe the purpose of the skeleton in humans & animals.

Living things and their habitats

- 10. Identify & name the parts of the human digestive system.
- 11. Describe the functions of the organs in the human digestive system.
- 12. Identify & describe the different types of teeth in humans.
- 13. Describe the functions of different human teeth.
- 14. Use, identify & construct food chains to identify producers, predators & prey.

Being a physicist means I can:

Sound

- 1. Describe how a sound is made.
- 2. Explain how sound travels from a source to our ears.
- 3. Explain the place of vibration in hearing.
- 4. Explore the correlation between pitch & the object producing the sound.
- 5. Explore the correlation between the volume of a sound & the strength of the vibrations that produced it.
- 6. Describe what happens to a sound as it travels away from its source.

Electricity

- 7. Identify & name appliances that require electricity to function.
- 8. Construct a series circuit.
- 9. Identify & name the components in a series circuit (including cells, wires, bulbs, switches & buzzers)
- 10. Draw a circuit diagram.
- 11. Predict and test whether a lamp will light within a circuit.
- 2. Describe the difference between a conductor & insulators; giving examples of each.