End of year exam

Revisit and revise

14. Electricity and magnetism Focusing on:

- Associate the concept of voltage with the transfer of energy in a circuit
- Investigate the effect of resistance
- Magnetism, magnetic fields and electromagnets

13. Useful chemical reactions Focusing on:

- The reactivity series and displacement reactions
- Extracting metals and using metals (catalysts)
- Relative mass and calculating yield.

12. Waves sound and light Focusing on:

- The different types of waves and the properties of each one.
- Light waves and how they are affected by objects they hit
- The uses of waves in medicine and technology

11. Chemical changes Focusing on:

- the idea that chemical change results in new substances that are different from the ones from which they were made
- explore burning as a chemical reaction involving a gas, air or oxygen
- identify hydrogen and carbon dioxide as substances made during some of these reactions
- begin to use word equations as shorthand descriptions of reaction

10. Fertilisation and implantation Focusing on:

- Fertilisation and implantation, sexual reproduction and how to prevent pregnancy.
- The menstrual cycle
- Investigating seed dispersal and inheriting characteristics

8. Atoms andPeriodic table Focusing on:

- Classifying elements based on patterns and properties.
- Using patterns in the periodic table to predict properties
- Inside the atom, electronic structure and bonding

9. Energy Focusing on:

- The different stores of energy and how it can be transferred from store to store
- The fact that energy cannot be created or destroyed
- That energy can be useful or wasted and dissipated into its surroundings.

Work and power, efficiency and Hooke's law.

6. Forces and Motion Focusing on:

- How forces act on other forces and the resulting effect
- How to measure forces and the outcomes of pairs of forces.
- The relationship between speed and distance travelled.
- Measurement and analysis of acceleration and velocity

7. Cell systems Focusing on:

- Cell and organ systems.
- Digestive system and Enzymes
- Respiratory system and gas exchange
- Leaf structure and photosynthesis
- Transpiration

3. Working scientifically Focusing on:

- Planning investigations, Recording and presenting data 1

Recording and presenting data 2 and analysing and evaluating

1. Ecosystems and adaptations focusing on:

- Food Chains and food webs
- Distrubutions of food chains and food webs
- Ecosystem
- Competition
- Adapting to change

5. Particles model and state changes Focusing on:

- learn how the particle model can be used to explain differences between solids, liquids and gases
- explore how experimental evidence relates to theories and models

4. Cells Focusing on:

- learn that cells are the basic units of life and are organised into tissues from which organs are made
- explore cell structure and differences between plant and animal cells
- learn about some functions of cells

2. Inheritance Focusing on:

- Variation
- Continuous and Discontinuous
- Inheritance
- Natural selection
- Extinction

Year 9 Science

From Year 8