What will my child be assessed on nationally at the end of Year 6?

St. Peter's C of E (A) Primary Whetstone

SCIENCE

End of Year 6 Statutory Assessment

Dear Parent/Carer,

At the end of Year 6 children are expected to be working at the expected standard. The table below provides information on what they need to be able to demonstrate in Science to achieve the expected standard.

Working at Expected Standard
Working scientifically **The pupil can, using appropriate scientific language from the national curriculum:** • describe and evaluate their own and others' scientific ideas related to topics in the national curriculum (including ideas that have changed over time), using evidence from a range of sources. • ask their own questions about the scientific phenomena that they are studying, and select the most appropriate ways to answer these questions, recognising and controlling variables where necessary (i.e. observing changes over different periods of time, noticing patterns, grouping and classifying things, carrying out comparative and fair tests, and finding things out using a wide range of secondary sources). • use a range of scientific equipment to take accurate and precise measurements or readings, with repeat readings where appropriate. • record data and results using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs. • draw conclusions, explain and evaluate their methods and findings, communicating these in a variety of ways. • raise further questions that could be investigated, based on their data and observations. **Science content** **The pupil can:** • name and describe the functions of the main parts of the digestive [year 4], musculoskeletal [year 3] and circulatory systems [year 6]; and describe and compare different reproductive processes and life cycles in animals [year 5]. • describe the effects of diet, exercise, drugs and lifestyle on how the body functions [year 6]. • name, locate and describe the functions of the main parts of plants, including those involved in reproduction [year 5] and transporting water and nutrients [year 3]. • use the observable features of plants, animals and micro-organisms to group, classify and identify them into broad groups, using keys or other methods [year 6]. • construct and interpret food chains [year 4]. • describe the requirements of plants for life and growth [year 3]; and explain how environmental changes may have an impact on living things [year 4]. • use the basic ideas of inheritance, variation and adaptation to describe how living things have changed over time and evolved [year 6]; and describe how fossils are formed [year 3] and provide evidence for evolution [year 6].

- group and identify materials [year 5], including rocks [year 3], in different ways according to their properties, based on first-hand observation; and justify the use of different everyday materials for different uses, based on their properties [year 5].
- describe the characteristics of different states of matter and group materials on this basis; and describe how materials change state at different temperatures, using this to explain everyday phenomena, including the water cycle [year 4].
- identify and describe what happens when dissolving occurs in everyday situations; and describe how to separate mixtures and solutions into their components [year 5].
- identify, with reasons, whether changes in materials are reversible or not [year 5].
- use the idea that light from light sources, or reflected light, travels in straight lines and enters our eyes to explain how we see objects [year 6], and the formation [year 3], shape [year 6] and size of shadows [year 3].
- use the idea that sounds are associated with vibrations, and that they require a medium to travel through, to explain how sounds are made and heard [year 4].
- describe the relationship between the pitch of a sound and the features of its source; and between the volume of a sound, the strength of the vibrations and the distance from its source [year 4].
- describe the effects of simple forces that involve contact (air and water resistance, friction) [year 5], that act at a distance (magnetic forces, including those between like and unlike magnetic poles) [year 3], and gravity [year 5].
- identify simple mechanisms, including levers, gears and pulleys, that increase the effect of a force [year 5].
- use simple apparatus to construct and control a series circuit, and describe how the circuit may be affected when changes are made to it; and use recognised symbols to represent simple series circuit diagrams [year 6].
- describe the shapes and relative movements of the Sun, Moon, Earth and other planets in the solar system; and explain the apparent movement of the sun across the sky in terms of the Earth's rotation and that this results in day and night [year 5].