

# **ORANGE HIGH SCHOOL**

# ASSESSMENT TASK NOTIFICATION

Subject	Science – End of Course Examination
Торіс	Earth and Space, Physical World, Living World and Chemical World
Class Teachers	Mrs Boardman, Mr Ruwona, Miss Williams, Ms Mansur, Miss Loud, Mr Johnston, Miss Percival
Head Teacher	Ms Jess Huggett
Year	9
Date Given	Term 4 Week 3
Date Completed	Term 4 week 5 (exact dates given by classroom teacher)
Weighting	40%

#### Examination Outline

The examination will be completed online via a Google Form. The examination will take 1 Period. If you have a laptop please bring it to the period your teacher sets for the exam.

#### The exam will include

- 17 Multiple Choice Questions
- 9 Short answer Questions
- 3 Long response questions

#### Topics in the examination will include:

- Earth and Space: exploring the universe, stellar objects, units of distance in the solar system and across the universe
- Living World: Nervous System, Responding to Stimulus, Hormones, Infectious and Non infectious disease and ecosystems.
- Physical World: Electricity and energy efficiency
- Chemical World: Atomic theory and the Periodic table

PLEASE SEE THE STUDY SHEET FOR FURTHER DETAILS OF WHAT MAY BE IN THE EXAM.

# The assessment will examine all the work you have completed throughout the year including skills in working scientifically.

#### Non-completion of Task:

If you know you are going to be away on the day that the task is due, you must make alternative arrangements with your teacher beforehand. If you are suddenly away on the day that the task is due, you must contact your teacher or Head Teacher on your return to school. Documentation will be required in both cases.

#### **Outcomes to be Assessed:**

**SC5-10PW3** Scientific understanding of current electricity has resulted in technological developments designed to improve the efficiency in generation and use of electricity.

SC5-10PW4 Energy conservation in a system can be explained by describing energy transfers and transformations

SC5-LW1 Multicellular organisms rely on coordinated and interdependent internal systems to respond to changes in their environment.

**SC5-LW2** Conserving and maintaining the quality and sustainability of the environment requires scientific understanding of interactions within, the cycling of matter and the flow of energy through ecosystems

SC5-ES1 Scientific understanding, including models and theories, are contestable and are refined over time through a process of review by the scientific community

SC5-CW1 Scientific understanding changes and is refined over time through a process of review by the scientific community.

SC5-CW2 The atomic structure and properties of elements are used to organise them in the Periodic Table

SC5-5WS Produces a plan to investigate identified questions, hypotheses, or problems, individually and collaboratively

SC5-7WS Processes, analyses and evaluates data from first-hand investigations and secondary sources to develop evidence-based arguments and conclusions

# YEAR 9 REVISION GUIDE

### Earth & Space:

- Components universe: Stars, solar systems, galaxies, planets, nebulae, asteroids, comets etc
- Life cycle of a star
- Big Bang Theory and previous theories of creation of the universe (cultural)
- Gravity and its effect on other objects
- Technology: telescopes, rovers, satellites, space station etc
- Size and scales of the universe
- Calculation of distance

# Physics:

- Basic electricity concepts: circuits, conductors, and insulators.
- Convection, conduction and radiation
- Relationship between voltage, resistance and current (Ohms Law)
- Different forms of energy: kinetic, potential, thermal, and electrical
- Energy transformations and the law of conservation of energy
- Exploration of renewable and non-renewable energy sources
- Series and parallel electrical circuits
- Energy efficiency

## Biology - Diseases:

- Nervous system including senses, CNS and PNS
- Infectious diseases and their transmission
- Non infectious diseases and their causes
- The role of microorganisms (bacteria, viruses, etc.) in causing diseases
- Functions of the immune system and its response to infections
- Importance of vaccination in preventing diseases
- Common diseases and their impact on the human body

### Biology - Ecosystems:

- Components of ecosystems: biotic and abiotic factors
- Food chains, food webs, and trophic levels
- Interactions in ecosystem
- Nutrient Cycles
- Human impact on ecosystems

# Chemistry - Periodic Table and Atomic Theory:

- History of understanding of the atom
- Introduction to the periodic table