



## SCIENCE

Year 10 2021

### Chemical Reactions & Investigating Scientifically Topic Test Information

**Date:**

10SB, 10SP, 10SI, 10SV Thursday 25<sup>th</sup> March

10SR, 10SO, 10Y, 10G Friday 26<sup>th</sup> March

**Weighting: 15%**

**Task information:**

In this exam you will be tested on your ability to demonstrate the knowledge and skills outcomes learnt in these topics.

A separate tick box revision sheet for both topics is provided on the back of this sheet. You will also be able to find this on the school website.

Equipment required by you is: calculator, pen, pencil, rubber and ruler.

**There will be no borrowing of any equipment during the test.**

***All students are required to submit their class workbook for marking on the date of the test or a mark of zero will be awarded. Marks for bookwork include both topics – Chemical Reactions & Working Scientifically.***

**Absence:**

If you are absent on the day of your exam, you must bring a medical certificate otherwise you will be awarded zero, in line with the Year 10 assessment schedule in your assessment booklet. On the day you return to school, you must report to your Science teacher and a suitable time will be organised for you to do the test.

**To do your best in the test you should start revising your work now!**

# Chemical Reactions

Tick the boxes when you are able to:

- ☐ State that new substances are formed during chemical reactions by rearranging atoms rather than creating or destroying them.
- ☐ Describe what is happening in exothermic and endothermic reactions.
- ☐ Describe each of the following types of chemical reactions and write the general word equation for each of them: combustion, acids on metals, corrosion, precipitation, neutralisation, decomposition and acids on carbonates.
- ☐ Identify examples of chemical reactions that occur in living systems such as respiration and reactions involving acids such as those involved in digestion.
- ☐ Distinguish between acids and alkalis by observing the colour change of Universal Indicator.
- ☐ Describe how temperature and catalysts can affect the rate of chemical reactions.

## Investigation Scientifically

Tick the boxes when you are able to:

- ☐ Write an aim and a hypothesis for an investigation.
- ☐ Describe a logical procedure for undertaking a range of investigation types.
- ☐ Identify dependent and independent variables for controlled experiments.
- ☐ Identify factors that need to be controlled (kept the same) in an investigation.
- ☐ Explain the need for safety when constructing, assembling and manipulating identified equipment.
- ☐ Collect data and communicate information in a variety of methods including diagrams, tables and graphs.
- ☐ Draw scientific conclusions from an investigation.