Dear Parent/Carer

I am writing to make you aware that **Year 8 pupils will have a Science end of year assessment the week beginning 8th April 2024**

There will be 3 separate papers that will cover the **Biology, Chemistry and Physics** topics mentioned below.

- The assessments will take place during lesson time.
- Each assessment will be approximately 40 minutes.

Topic	Monday 8/4	Tuesday 9/4	Wednesday 10/4	Thursday 11/4	Friday 12/4
Biology	**P3 8Z** **P4 8Y** **P5 8X**				
Chemistry		**P2 8X** **P5 8Y**	**P4 Z**		
Physics				**P3 X**	**P1 Y** **P3 Z**

- We encourage all students to use the available resources such as **previous revision materials provided by teachers, Tassomai, Knowledge Organisers**, **PLC's, BBC Bitesize** and **CGP KS3 revision guides**. They have also got access to a study skill drive that has ideas of how to revise.
- Page numbers for the revision guides have been included by each subtopic to help direct revision.

All Students should bring the following to their exams

- x2 Pens (blue or black)
- Pencil
- Ruler
- Rubber
- **Scientific calculator**

If you have any questions, please do not hesitate to contact Ms Gajjar on dgajjar@brookvalegroby.com

Kind regards

Ms Gajjar

Assistant faculty lead Science - KS3

KS3 Progress Lead

MCL Making Change Lead

What to Revise

Organisms 1 (p2&3, p14&15, p26)

- Animal and Plant Cells
- Adaptation of Cells
- Unicellular Organisms
- Skeleton
- Joints
- Muscles

Organisms 2 (p8-13 & 18-20)

- Understanding how we breathe
- Measuring breathing
- Explaining gas exchange in humans
- Exploring the effects of disease and lifestyle Exploring a healthy diet
- Understanding the effects of an unbalanced diet
  Understanding the human digestive system
  Understanding the roles of the digestive organs

Genes 1 (p21-27)

- Looking at variation
- Exploring causes of variation
- Considering the importance of variation
- Understanding the female reproductive system and fertility
- Understanding the male reproductive system and fertilisation
- Learning how a foetus develops
- Understanding factors affecting a developing foetus
- Communicating ideas about smoking in pregnancy

Genes 2 (p41-47)

- Genes: Introduction
- Explaining natural selection
- Understanding the importance of biodiversity
- Explaining extinction
- Understanding the nature of genetic material Exploring the role of chromosomes
- Understanding variation
- Modelling inheritance

Matter 1 (p49-51 & 62-64)

- Particles
- Solids, Liquids and Gases
- Diffusion
- Changes in state
- Separating Mixtures
- Solutions
- Distillation
- Chromatography

Matter 2 (p55-59, 67-71)

- Looking at the Periodic Table of elements
- Exploring metals in the periodic table
- Exploring non-metals in the periodic table
- Combining elements
- Comparing elements and compounds
- Exploring polymers
- Exploring ceramics and composites

Earth 1 (p91-94; 163-166)

- Understanding the structure of the Earth
- Exploring igneous rocks
- Exploring sedimentary rocks
- Exploring metamorphic rocks
- Understanding the rock cycle
- Describing stars and galaxies
- Explaining the effects of the Earth's motion
  Exploring our neighbours in the Universe

Earth 2 (p97-99)

- Understanding our atmosphere
- Understanding how carbon is recycled
- Exploring how humans affect the carbon cycle
- Understanding global warming
- Exploring damage to the Earth's resources
- Considering the importance of recycling
  How to extract metals

Forces 1 (p120-121, 123-128, 162)

- Speed
- Speed distance time graphs
- Forces
- Gravity
- Mass and Weight
- Distance vs. Time Graphs

Forces 2 (p128-135)

- Analysing equilibrium
- Understanding stretch and compression
- Investigating Hooke's Law
- Exploring pressure on a solid surface
- Exploring pressure in a fluid
- Calculating pressure
- Explaining sinking and floating
- moments

Waves 1 (p136-150)

- Exploring sound and what it is
- Hearing sounds
- Understanding how sound travels through materials
- Learning about the reflection and absorption of sound
- Exploring properties of light
- Exploring reflection
- Exploring refraction
- Seeing clearly
- Seeing colour

Energy 1 (p102-113)

- Understanding energy transfer by fuels and food
- Comparing rates of energy transfer
- Looking at the cost of energy use in the home
- Getting the electricity we need
- Using electricity responsibly
- Energy stores and transfers
- Exploring energy transfers
- Understanding potential energy
  and kinetic energy

	Reactions 1 (p67-90) ● Properties of metals and on-metals ● Using metals and non-metals ● Exploring the reactions of metals with acids ● Understanding displacement reactions ● Understanding oxidation reactions ● Exploring acids ● Exploring alkalis ● Using indicators ● Exploring neutralisation ● Investigating neutralisation	**Electromagnets 1 (p151-161)** ● Describing electric circuits ● Understanding energy in circuits ● Explaining resistance ● Describing series and parallel circuits ● Comparing series and parallel circuits ● Investigating static charge ● Explaining static charge ● Understanding electric fields ● Forces and magnetic fields