

Year 11 Science Half-term Revision

Over half-term, your focus is to **improve your practical knowledge** this will form part of your mocks in SPR2. Mocks will cover a **full paper 2 for biology, chemistry and physics**.

Mocks topics

Paper 2: <ul style="list-style-type: none">• Homeostasis and response• Inheritance, variation and evolution• Ecology	Paper 2: <ul style="list-style-type: none">• The rate and extent of chemical change• Organic chemistry• Chemical analysis• Chemistry of the atmosphere• Using resources	Paper 2: <ul style="list-style-type: none">• Forces• Waves• Magnetism and electromagnetism• <i>Space Physics (GCSE Physics only)</i>
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Tasks

- 1) You must complete **400 points** of Tassomai over the half-term. This is due on **Monday 19th February**
- 2) Create revision cards answering the following core questions, using the **videos** below.

Key resources

<https://www.bbc.co.uk/bitesize/examspecs/z8r997h>

<https://www.youtube.com/@Freesciencelessons>

Biology - Sampling techniques	Chemistry - Investigating water	Physics - $f=ma$
Video here <ol style="list-style-type: none">1) Define abundance and distribution2) How do you ensure random sampling?3) Explain why random sampling is important4) State the equation used to estimate the total population size5) Describe how you would use a quadrat to investigate the effect of an abiotic factor.6) Name 2 abiotic factors.7) Describe how to calculate the area of a field	Video here <ol style="list-style-type: none">1) Define potable water and explain how it is different to pure water2) Describe the stages of distillation3) Describe a method used to identify the pH of a solution4) Describe the steps in identifying the mass of dissolved solids.5) What piece of equipment is used to measure the mass of solids?6) Why is it important to reheat the evaporating dish again?7) Describe when distillation may be used to obtain potable water?	Video here <ol style="list-style-type: none">1) Describe the relationships between force and acceleration2) Explain what provides the force acting on the car.3) How does the set-up reduce friction?4) Explain what needs to be measured to calculate acceleration5) What must be controlled in this experiment?6) What must be kept constant when investigating the effect of force on acceleration?