Science - 8X revision

Your assessments in November will be split into three papers; Biology, Chemistry and Physics.

The questions in these papers will cover topics you have covered in year 6 & 7, as well as what you have learned this term.

Please use this document to help direct your revision.

- *Be honest with revision - Do not keep revising the photosynthesis equation if you already know it.*
- *Revise the aspects you struggle with.*
- *Re-reading a textbook again and again is not revision. Test yourself using various formats and question styles.*

Pupils can ask or email their teachers for advice:
fcb@holwmood.house
olw@holmwood.house

Please click here for a full list of revision topics.

- **There is a revision grid on Google Classroom to use to sign off when you have covered a topic.**

- **Useful sites and apps are;**
  - **http://www.gojimo.com/**
  - **http://www.thesciencesite.co.uk/**
  -

Good luck

Useful equations

- ❏ Density [learned this term]
- ❏ Pressure
- ❏ Speed
- ❏ Photosynthesis
- ❏ Respiration
- ❏ Neutralization reactions
- ❏ Products of combustion

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Biology Topics

Cells and Organisation **https://www.bbc.co.uk/bitesize/topics/znyycdm**

- ❑ Structure of animals and plant cells
- ❑ Role of specific organelles (Cytoplasm, Nucleus etc)

Humans (Biology)

- ❑ Breathing (mechanical) https://www.bbc.co.uk/bitesize/topics/zvrrd2p
- ❑ Structure of the respiratory system
- ❑ Mechanism of breathing
- ❑ Circulation (Structure of the heart)
- ❑ Negative effective of smoking
- ❑ Nutrition https://www.bbc.co.uk/bitesize/topics/zf339j6, https://www.bbc.co.uk/bitesize/topics/ztnnb9q
- ❑ Respiration https://www.bbc.co.uk/bitesize/guides/zq349j6/revision/1
- ❑ Reproduction https://www.bbc.co.uk/bitesize/topics/zybbkqt

Green Plants (Biology) **https://www.bbc.co.uk/bitesize/topics/zvrrd2p**

- ❑ Structure of a plant
- ❑ Photosynthesis is daytime
- ❑ Equation of photosynthesis
- ❑ Respiration
- ❑ Adaptation of leaves

Ecology (Biology) **https://www.bbc.co.uk/bitesize/topics/zxhhvcw**

- ❑ Habitats
- ❑ Ecosystems
- ❑ Food chains

Chemistry topics

Particle Theory/Separating mixtures (Chemistry) [learned this term]
https://www.bbc.co.uk/bitesize/topics/z9r4jxs

- ❑ Structures of solids liquids and gases
- ❑ Changing state
- ❑ Expansion and Contraction
- ❑ Diffusion
- ❑ Solubility, included saturated solutions and solubility curves https://www.bbc.co.uk/bitesize/guides/z4s48mn/revision/2
- ❑ Separation techniques

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Acids and alkalis (Chemistry)
https://www.bbc.co.uk/bitesize/topics/zn6hvcw

- ❏ Universal indicator paper
- ❏ PH scale
- ❏ Example of everyday acids and alkalis
- ❏ Neutralisation (green)
- ❏ Acid + Akalias = Water - Salt

Carbon Chemistry

- ❏ The Greenhouse Effect https://www.bbc.co.uk/bitesize/guides/zt6sfg8/revision/2
- ❏ Acid Rain https://www.bbc.co.uk/bitesize/guides/znsk7ty/revision/1
- ❏ Combustion https://www.bbc.co.uk/bitesize/guides/zqd2mp3/revision/3

Tests for: https://www.bbc.co.uk/bitesize/topics/zypsgk7

- ❏ Oxygen - relights a glowing splint
- ❏ CO2 - Limewater cloudy
- ❏ Hydrogen - burning splint make a squeaky pop
- ❏ Water - Cobalt chloride paper turns from blue to pink

Atom elements and compounds (Chemistry)
https://www.bbc.co.uk/bitesize/topics/zstp34j

- ❏ Gases of the air
- ❏ Reactivity series - as a concept

Physics

Energy (Physics)https://www.bbc.co.uk/bitesize/topics/zc3g87h

- ❏ Seven types
- ❏ Resources, 'renewable resource is something that can be replenished in a human life time'
- ❏ Sun source of all other energy resources
- ❏ How electricity is generated
- ❏ Law of conservation - energy

Light (Physics) https://www.bbc.co.uk/bitesize/topics/zw982hv

- ❏ Law of reflection
- ❏ Law of refraction
- ❏ Dispersion

Sound (Physics) https://www.bbc.co.uk/bitesize/topics/zw982hv

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- ❏ Vibrations ,Frequency, Pitch and Amplitude
- ❏ Travelling through different mediums

Space (Physics) https://www.bbc.co.uk/bitesize/topics/z8c9q6f

- ❏ Define day
- ❏ Define year
- ❏ Explain seasons
- ❏ Eclipse
- ❏ Mass and weight difference
- ❏ Satellites
- ❏ Solar system

Electricity (Physics) https://www.bbc.co.uk/bitesize/topics/zgy39j6

- ❏ The more difficult components
- ❏ Series and parallel circuits
- ❏ How to measure amps
- ❏ Electromagnets and how to make them stronger https://www.bbc.co.uk/bitesize/topics/zrvbkqt
- ❏ Benefits of electromagnets