

### Double-shot

It seems lightning does strike the same place twice, in a way. This rare double lightning-strike was captured in Germany in June of 2000. Close inspection will show you that these are indeed two distinct bolts of lightning, not a mirror image. Such strikes generally happen when negatively-charged cloud bases set down over positively-charged land.

# Science!

## Have a **SPARK** of inspiration!



# 2019/20 – Course Structure

## Quick Summary:

Combined Science – Biology, Chemistry and Physics – 2 GCSE grades. 6 Exams – 1 hour and 10 minutes each.

Separate Science – Biology GCSE, Chemistry GCSE, Physics GCSE – 3 GCSE grades. 6 Exams – 1 hour and 45 minutes each.

1. The **9–1** grading system, replaced A\*– G:

**Foundation tier** will cover grades 1–5, more likely to get a 5.

**Higher tier** will cover grades 4–9, only if targeted above a 5.

2. There are **no controlled assessments** in the ‘new’ qualifications. No coursework!

3. **Questions assessing students’ use of mathematical skills will make up at least 15% of each exam.** There is some recall of equations required in physics – **LEARN the EQUATIONS!**

4. **Maths skills for the higher paper are equivalent to the foundation Mathematics GCSE.**



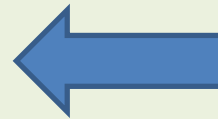
# Revision: Essentially - Simple

Specification:  
Science: Edexcel exam board.  
Combined Science:  
Separate (Triple) Science  
Memory then Application



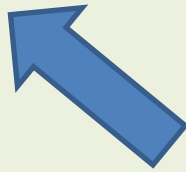
## 1. Know what it is you have to learn.

## 2. Learn / Revise it.



Revision Techniques:  
Flash Cards, Revision Guides,  
Revision Workbooks, Revision  
Sites, Revision Apps, Podcasts  
Ensure you can Apply what you  
have memorised.

## 3. Practise Exam Questions



Question Types & Key Words:  
Knowledge – **Memory** then **Application**  
Skills / Using the Provided Information in a question  
correctly.  
Long Answer Questions.  
Not being caught out by the Question.



GCSE Science: Please read the questions below:

## Q1 Reading End

Rather than use fertilisers, farmers could encourage bacteria to grow **grow** in the soil to provide their **crypts** with the minerals they require.

Explain how bacteria **a.** in the soil can cycle essential plant nutrients.

## Q2

The electromagnetic spectrum is continuous.

Different regions of the spectrum have different properties.

Radiation from different regions of the electromagnetic spectrum can **can** affect the human body in **manly** ways.

Discuss the different ways in which excessive **explitives** to **to electromagnetic** damage to the human body.

## Writing End

**Read the Question carefully!**

# Science Specific – 6 Mark Questions

\*Rather than use fertilisers, farmers could encourage bacteria to grow in the soil to provide their crops with the minerals they require.

Explain how bacteria in the soil can cycle essential plant nutrients.

**(6)**

# Science Specific – 6 Mark Questions – Broken Down

\*Rather than use fertilisers, farmers could encourage **bacteria** to grow in the soil to **provide** their **crops** with the **minerals** they require.

**Explain** how **bacteria in the soil can cycle essential plant nutrients.**

**Linking of Knowledge and Logical order are essential – Include Practical techniques where possible!**

**(6)**

Answer the following:

**1. Describe a bacteria:**

**2. Explain a bacteria:**

**3. Evaluate/Discuss the uses of Bacteria:**

Describe: Linking facts/knowledge in a logical order.

\* Describe how *Agrobacterium tumefaciens* can be used to create transgenic plants.

Explain: Highest mark questions – Say how or why something happens.

\* The survival of some organisms may depend on mutualism. Explain, using three examples, how some organisms benefit from mutualism.

Discuss: Compare two or more viewpoints/systems and then explain why or create a conclusion (your viewpoint).

\* Discuss the advantages and disadvantages of the use of GM organisms.



Any Questions

