



**Science Curriculum, Assessment,  
Expectations and Opportunities in  
year 8 and 9**

# *Yr 8 Curriculum Map - Activate 2*

Building on ideas learned in year 7

Biology (B2)

- Health and Lifestyle
- Ecosystems and processes
- Adaptation and inheritance

Chemistry (C2)

- The periodic table
- Separation techniques
- Metals and acids
- The Earth

Physics (P2)

- Electricity and magnetism
- Energy
- Motion and pressure

Assessment is carried out by a series of in class, content based tests, leading to an end of year examination

# Big Question

Compare the properties of metals and non-metals. (6 marks QWC)

## What I need to know

Before answering a 6-mark question, you should always think about the information you need to know to answer it.

The table below states the things you need to be able to do to answer the question. You might not know how to answer all of them yet. Tick the box for the answers you know, and write your answer in the answer box.

6 mark  
questions in  
training for  
GCSE

Learning objective	✓	Answer
Compare the physical appearance, state, and material behaviour (e.g. what happens when you hammer it) of metals and non-metals.		
Compare the electrical and heat conduction of metals and non-metals.		
Compare the melting points and densities of metals and non-metals.		

6 mark  
questions in  
training for  
GCSE

- 1 Metals conduct heat alot better than non metals as the <sup>(sp)</sup> ~~carley~~ conduct heat, metal also conducts
- 1 electricity while non metals are poor conductors of
- 1 electricity, metal can usually be scratched easier than non metals. metals have
- 1 a high melting point and high densities while non metals have low melting
- 1 points and low density <sup>ie</sup> metal is more
- 1 shiny usually while non metals are more dull.

### Improvements

Your teacher will give you a mark scheme for the question. Mark your own work or swap with a classmate. Write any suggestions for improvement in the box below.

6/6  
I agree!

# New Grading System in Science – first award August 2018

GCSE Targets

Classed as 2 GCSEs

99

88

77

66

55

44

33

22

New grading structure	Current grading structure
9	
8	A*
7	A
6	B
5	
4	C
3	D
2	E
1	F
	G
U	U

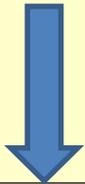
**GOOD PASS (DfE)**  
5 and above = top of C and above

**AWARDING**  
4 and above = bottom of C and above

We use a 'B' to represent 'below the GCSE scale'

# *Yr 9 Curriculum Map*

KS4 GCSE content



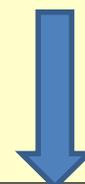
## **Biology**

- **Ecology**
  - **Cells**
  - **Organisation**
  - **Homeostasis and response**
- ...



## **Chemistry**

- **Atoms**
  - **Periodic table**
  - **Bonding and structure**
- ...



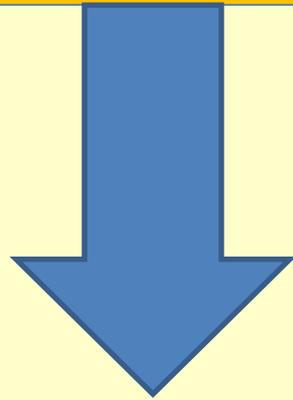
## **Physics**

- **Energy**
  - **Electricity**
  - **Particle model of matter**
- ...

## Options for year 9 students

### **Majority of the year group**

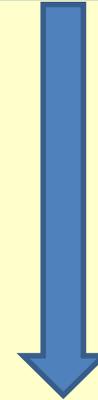
- Grades 1-9
- Set by ability to provide challenge and support as appropriate



**Trilogy Science**

### **Selected Students**

- Student choice
- Scientific Ability



**Triple Science**

– one option block

# Homework

## Science Homework...

- Extends learning beyond the classroom
- Is relevant and current
- Is set every week
- Is marked and stuck into the front of books
- Is referred to in lessons
- Helps students to make progress because they can recall what is being studied between lessons
- Is rewarded in line with School policy
- Is recorded on SMHW when it is Submitted and is awarded Red, Amber or Green for below, on and above expectations for each student.

## Science homework should be...

- Presented neatly on A4 paper
- Appropriately titled, labelled and named
- Submitted on time
- Have taken approximately 30 minutes to complete
- Completed to the best of the ability of the student

# OPPORTUNITIES BEYOND THE CLASSROOM

Competitions

EcoSchools Club

Science Week Activities

Trips and visits

Robot club

Thank you for your help at the KS2 Science and Technology Fair

The KS2 students and teachers were really impressed with the way you delivered the activities and interacted with the children.

The Barnwell staff are very proud of the way in which you represented the School. Thank you and well done!



**Year 8 field trip**



Look up at the stars and not down at your feet. Try to make sense of what you see, and wonder about what makes the universe exist. Be curious.

Stephen Hawking

**To help you support your child in your quest for knowledge and success:**

- All homework is on Show my homework – now keep track of submissions and grading
- KS3 Revision guides are available to buy at a reduced price from the School
- You can contact your child's Science teacher or Mrs Butterfield if you have any questions about your child's learning in Science

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