



LEAP

Multi Academy Trust

Achieving Excellence

Part of
LEAP
Multi Academy Trust

Year 9 Raising Achievement Evening *Science*

Science at Eckington School

Key Stage 4: now Y9-11

Key Stage 5: A levels and BTEC Level 3

Our current Key Stage 4 courses:

GCSE AQA Combined Science Trilogy

GCSE AQA Separate Sciences

GCSE Biology, Chemistry, Physics

Entry Level Certificate in Science

New GCSE

first examined Summer 2017

- Includes new and more up to date content
- More challenging (physics equations)
- No controlled assessment
- Required practical activities (21 combined and 27 for single GCSE sciences in total) with a minimum 15% of exam Qs on practical content
- Maths content - 20% of exam in combined, 10% biology, 20% chemistry 30% physics

New grading structure

Current grading structure

9

8

7

6

5

4

3

2

1

U

A*

A

B

C

D

E

F

G

U

GOOD PASS (DfE)

5 and above = top of C and above

AWARDING

4 and above = bottom of C and above

GCSE Assessment

No controlled assessment (coursework)

100% Exams

Combined Science GCSE exams

6 x 1 hour 15 min papers : 2 for each subject.

Separate science GCSE exams

6 x 1 hour 45 min papers : 2 for each

3 separate GCSE grades (numbers)

Foundation and higher tiers 1-5 and 4-9

Progression Routes in Science

9-6: A levels –biology, chemistry and physics

4/5+: BTEC Level 3 Applied Science

Many/most employers and colleges still ask for a certain grade in science

Year 9 Students 2018/19

- All follow a common year 9 covering the start of the GCSE topics common to both Combined Science and Separate Sciences
- Following the first progress test in Year 10 (Nov/Dec 2019) initial decisions will be made about which students will follow Separate Science pathway and which students Combined. This will be shared with students and parents.
- Firm pathway decisions will be made following the second Y10 progress test (March 2020)
- After March 2020 re-setting will take place, students will either be in a 'Triple' Science class or a Combined Science class.

Support with science

- Educake
- Look through books at home and discuss****
- Teach me!
- Follow up reading – Bitesize, Q's on both
- Revision guides
- Wider reading – Websites (BBC News: Science)
- Science books ('The Science of Everyday Life' and 'Bad Science') and films (Gravity)
- Online videos/films: TED talks with a science theme
- Wider enrichment/experiences - visits

If you want another way to revise then check out the free science lessons youtube channel.

<https://goo.gl/4QhM3m>

Look for the videos with the “(9-1)” label.

The screenshot shows the YouTube channel 'Free science lessons' with a search bar containing 'free science lessons'. The channel has tabs for 'Videos', 'Playlists', 'Channels', 'Discussion', and 'About'. The video grid contains the following items:

- GCSE Chemistry (9-1) Required practical: Rates of reaction** (232 views • 20 hours ago, 4:32): Shows a flask with 10 cm³ sodium thiosulfate solution and 10 cm³ hydrochloric acid. Instruction: 'Swirl the solution and start a stopwatch.'
- GCSE Chemistry (9-1) Effect of concentration on rate** (228 views • 1 day ago, 3:50): Shows two containers with different concentrations of red particles. Text: 'In this case, the right hand container would have a higher gas pressure.'
- GCSE Chemistry (9-1) Using tangents to determine rate** (245 views • 1 day ago, 3:55): Shows a graph of 'Quantity of product formed (g)' vs 'Time (s)'. A tangent is drawn at 40 seconds, with a slope of 1.4.
- GCSE Biology (9-1) Transpiration** (531 views • 3 days ago, 3:55): Shows a diagram of a leaf with labels for 'palisade mesophyll' and 'xylem'. Text: 'Water enters the roots through root hair cells.'
- GCSE Biology (9-1) Plant tissues** (483 views • 3 days ago, 4:05): Shows a diagram of a leaf with labels for 'spongy mesophyll' and 'air spaces'. Text: 'The spongy mesophyll is full of air spaces.'
- GCSE Chemistry (9-1) Mean Rate of Reaction** (904 views • 1 week ago, 4:41): Shows a graph of 'Quantity of product formed (g)' vs 'Time'. Text: 'At the end, the slope of the line is now zero. The line is flat.'
- GCSE Biology (9-1) Metabolism** (783 views • 1 week ago, 2:44): Shows a photo of runners on a track. Text: 'Metabolism is the sum of all the chemical reactions in a cell or the body.'
- GCSE Biology (9-1) Exercise** (463 views • 1 week ago, 3:20): Shows a photo of runners. Text: 'The lactic acid is then taken to the liver and converted back to glucose in a series of chemical reactions.'
- Anaerobic respiration in muscles** (Thumbnail only): Shows a photo of runners.
- Rate of photosynthesis** (Thumbnail only): Shows a graph of 'Rate of photosynthesis' vs 'Light intensity' with a 'higher temperature' curve.
- Titration** (Thumbnail only): Shows a titration setup with a burette and a test tube.
- Oranges** (Thumbnail only): Shows a photo of oranges.

Educake



Educake Science
Online Formative Assessment