



Blooket



PHET

St Patrick's



Science Department

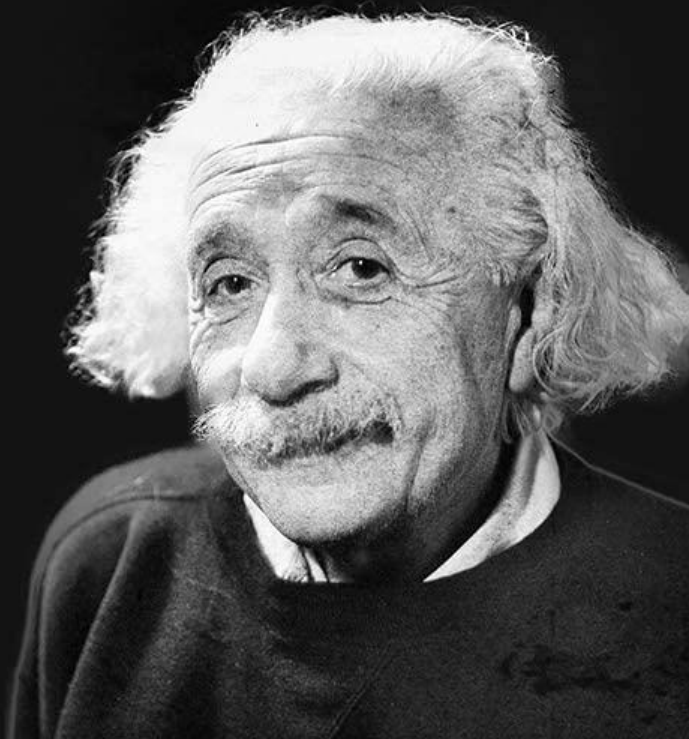


e-chalk

Science Revision Strategies

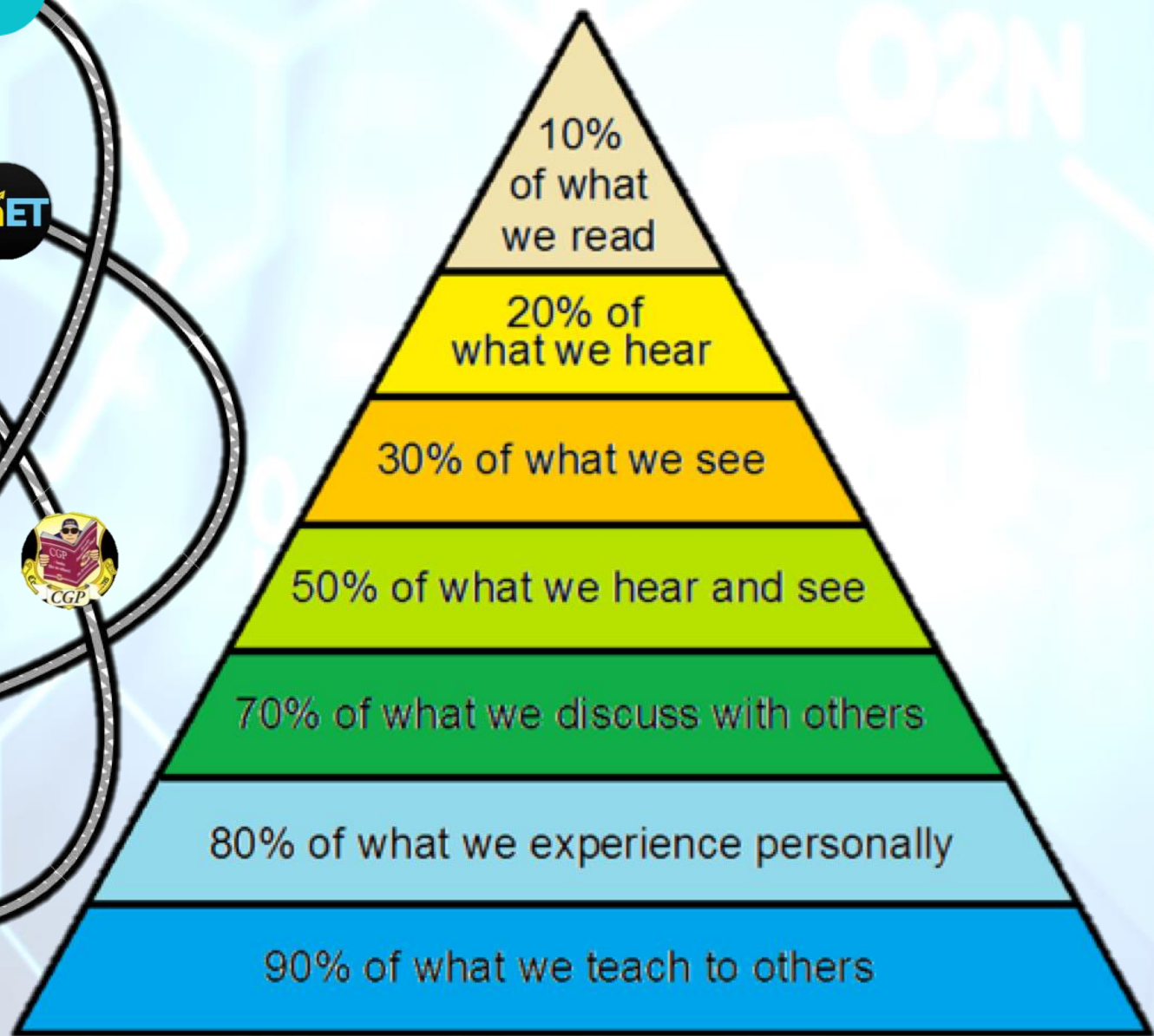
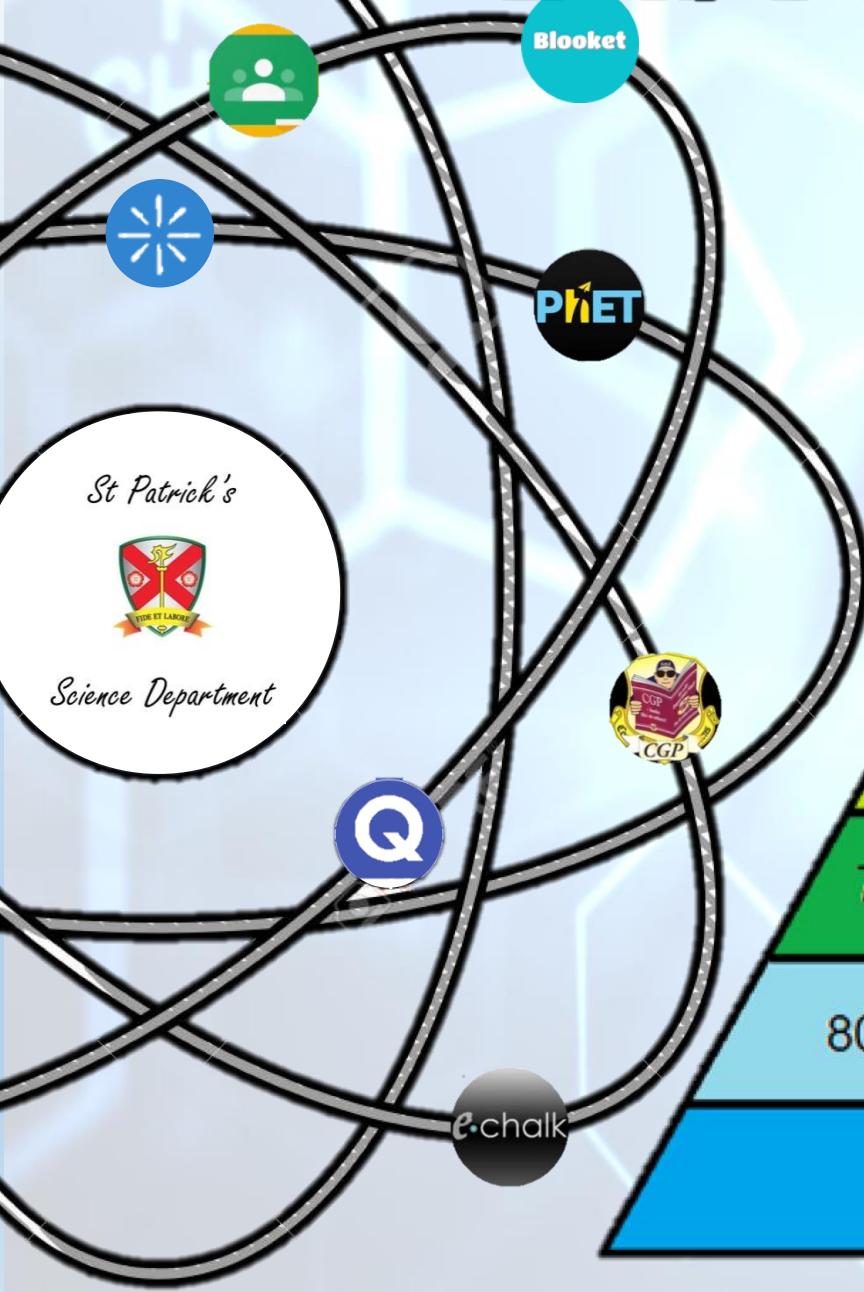
Insanity: doing the
same thing over
and over again and
expecting different
results.

ALBERT EINSTEIN



- Vary your revision to increase your understanding.

How much do we remember?



Science Revision Guides and Work Books

- Completing the Science workbook is revision.
- Completing the Science workbook is completing 'past papers'.
- Use the revision guide to help you complete the questions.



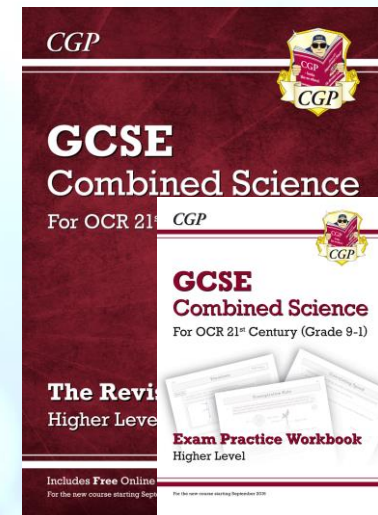
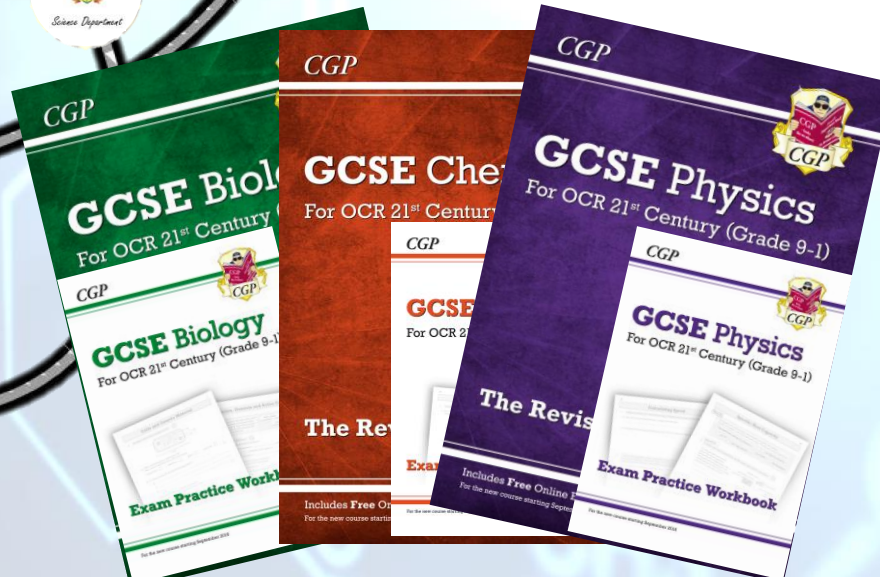
Booklet

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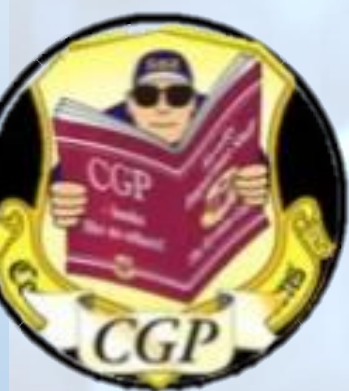
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Science Revision Guides and Work Books

– Follow the schedule.. Spares available!



Booklet

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Q

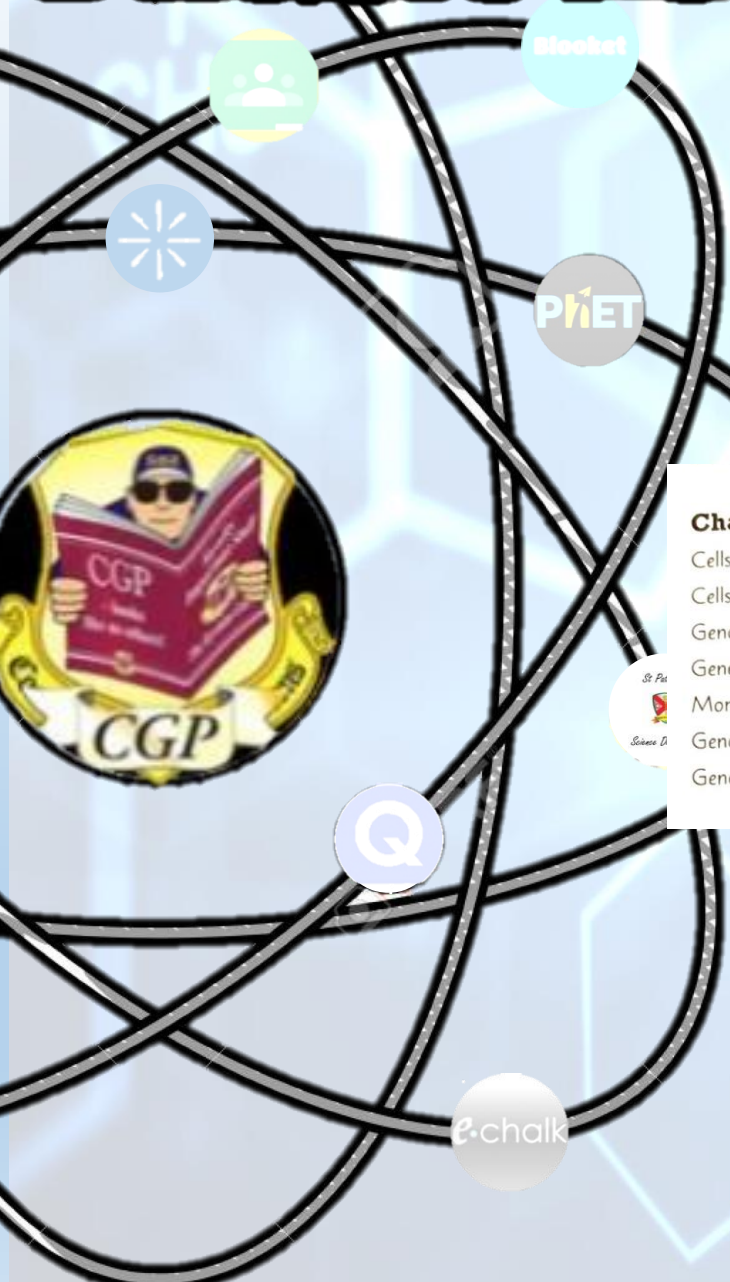
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Year 11 Science Workbook Schedule 2021-2022



Topic (*number of pages)	Due	No. weeks
B1 - You and your genes (8)	Wednesday 15 th September	2 weeks
C1 - Air and water (15)	Wednesday 29 th September	2 weeks
P1 - Radiation and waves (13)	Wednesday 6 th October	1 week
B2 - Keeping healthy (17)	Wednesday 20 th October	2 weeks
October half-term – 1 week off		
C2 - Chemical patterns (12)	Wednesday 3 rd November	2 weeks (inc. hols)
P2 - Sustainable energy (7)	Wednesday 10 th November	1 week
B3 - Living together – Food and ecosystems (28)	Wednesday 1 st December	3 weeks
C3 - Chemicals of the natural environment (17)	Wednesday 15 th December	2 weeks
Christmas holidays – 2 weeks off		
P3 - Electric circuits (15)	Wednesday 13 th January	4 weeks (inc. hols)
B4 - Using food and controlling growth (10)	Wednesday 19 th January	1 week
C4 - Material choices (9)	Wednesday 26 th January	1 week
P4 - Explaining motion (21)	Wednesday 9 th February	2 weeks
B5 - The human body – Staying alive (15)	Wednesday 16 th February	1 week
February half-term – 1 week off		
C5 - Chemical analysis (17)	Wednesday 2 nd March	2 weeks (inc. hols)
P5 - Radioactive materials (7)	Wednesday 9 th March	1 week
B6 - Life on Earth – Past, present and future (8)	Wednesday 16 th March	1 week
C6 - Making useful chemicals (12)	Wednesday 23 rd March	1 week
P6 - Matter – models and explanations (8)	Wednesday 30 th March	1 week
Biology mixed questions (5)	Wednesday 6 th April	1 week
Easter holidays – 2 weeks off		
Chemistry mixed questions (6)	Wednesday 27 th April	3 weeks (inc. hols)
Physics mixed questions (6)		

Science Revision Guides and Work Books



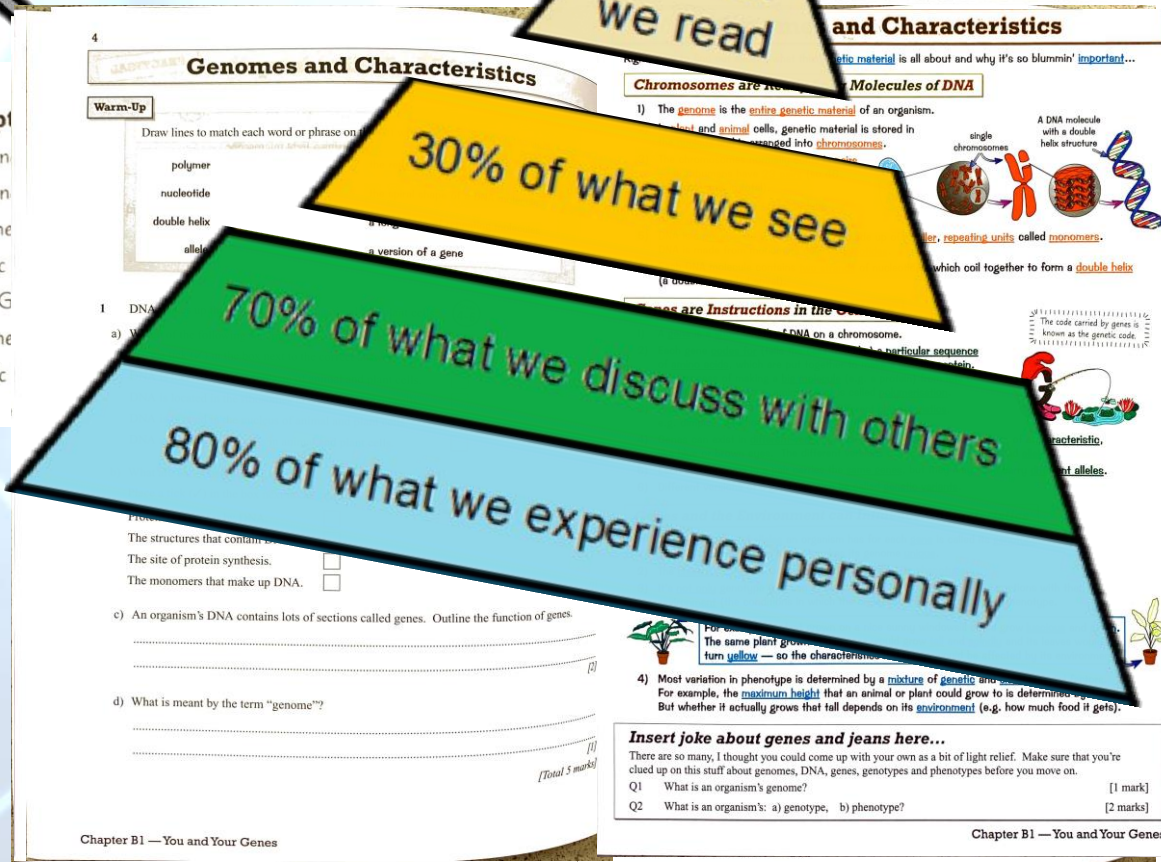
- Use the revision guide to help you complete the questions (the same as the revision guide Workbook)

10% of what we read

30% of what we see

70% of what we discuss with others

80% of what we experience personally



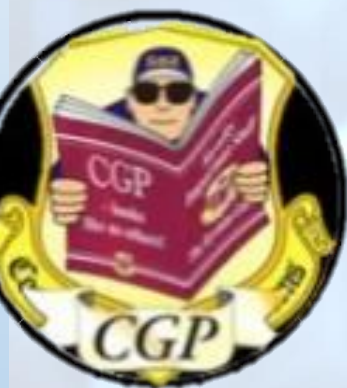
Optional, but highly recommended



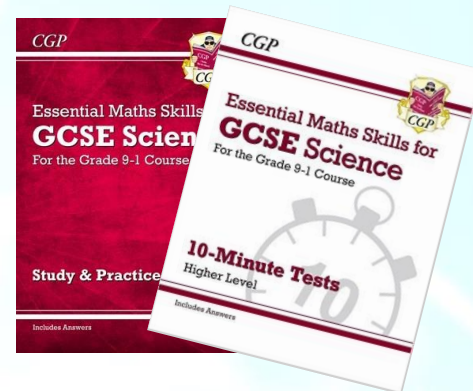
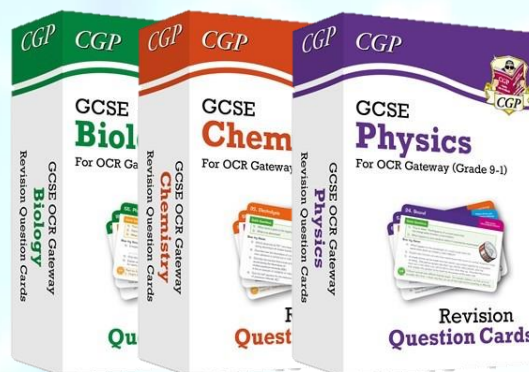
Blocket



PhET



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Other science resources are also available for you to purchase include:

- Science revision question cards.
- Essential maths skills for GCSE Science revision guide.
- Essential maths skills for GCSE Science workbook.

A letter has been sent home if you would like to purchase any of these.

Combined revision cards: £10.50 (full set)

Triple revision cards: £4.50 per set

Maths in science revision guide: £3.00

Maths in science workbook: £2.00

eChalk

eChalk is full of Science simulations to help you understand challenging concepts and bring them to life.

You can use eChalk at school, at home, on your tablet and on your mobile.

Username: stpatricksrc
Password: cleverFriar



e.chalk ...learning for the fun of it

subjects | help | logout

Chemistry

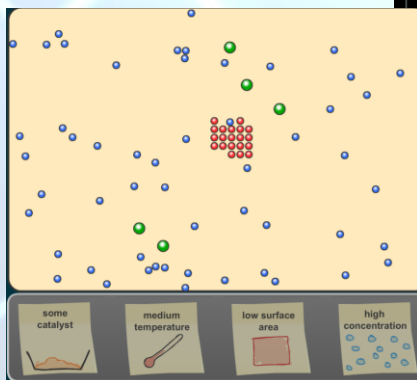
 Entire chemistry listing	 Particle models and the structure of matter	 Atomic structure and bonding
 The periodic table	 Chemical formulae, equations & calculations	 Chemical reactions
 oil fuels and carbon chemistry	 The Earth, its resources and their extraction	 3D molecules

simulation time
00:03

key
reactant 1 ● 55
reactant 2 ● 20
product ● 5

10 products
20 products
all products

some catalyst
medium temperature
low surface area
high concentration





petrol engine

35000 J chemical



8750 J kinetic

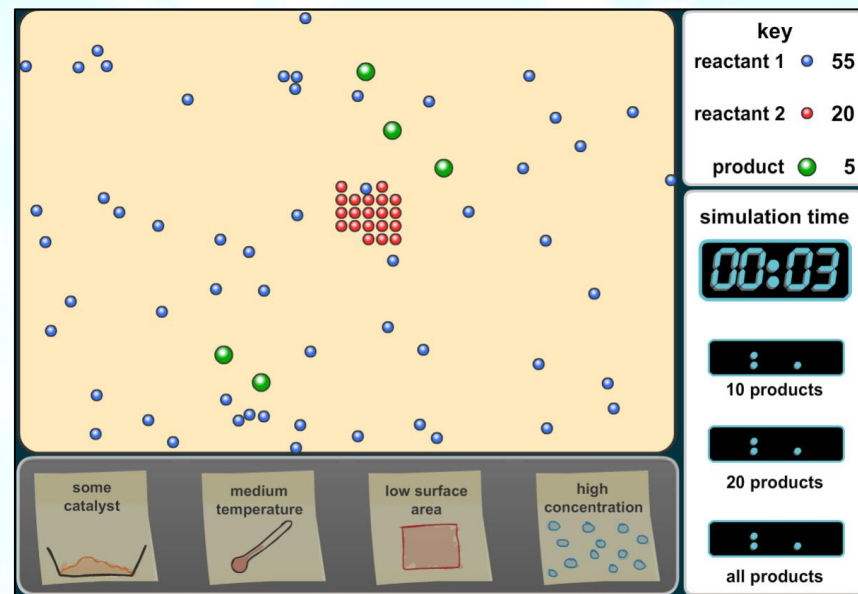
26250 J heat

☒ show efficiency calculation

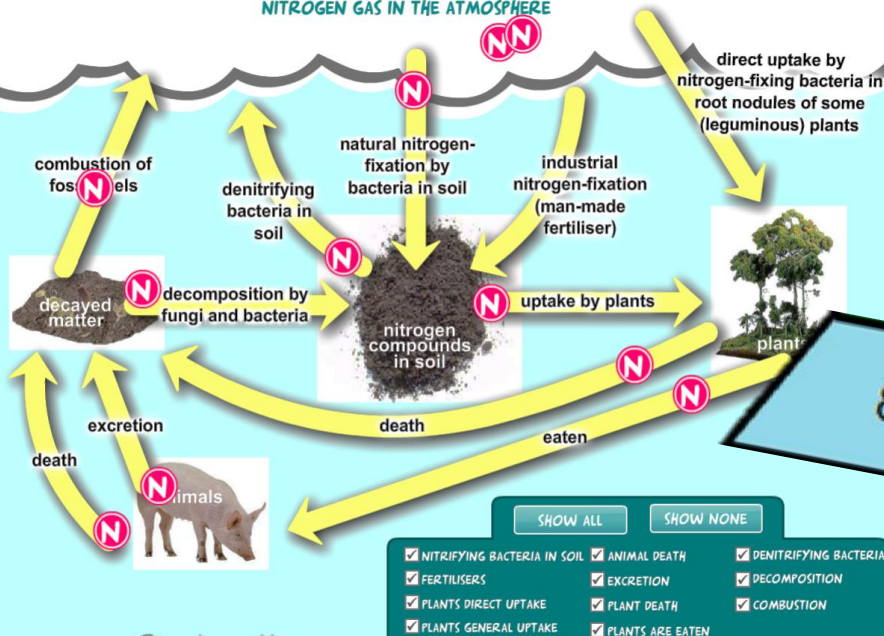
$$\text{efficiency (\%)} = \frac{\text{useful energy output}}{\text{total energy input}} \times 100 = \frac{8750}{35000} \times 100 = 25\%$$

Different designs of petrol engine have different efficiencies. The values above are typical of engines in use at the turn of the millennium.

eChalk



NITROGEN GAS IN THE ATMOSPHERE



30% of what we see

80% of what we experience personally

PhET Simulations

PhET simulations is full of Science simulations to help you understand challenging concepts and bring them to life.

You can use PhET simulations at school, at home, on your tablet and on your mobile. No username or password required.

Search "PhET simulations" in google.

The screenshot shows the PhET website interface. At the top, there is a search bar and the University of Colorado Boulder logo. Below the search bar, there is a section titled "Be an HTML5 Hero!" with a description of the HTML5 conversion project. The main content area features a simulation titled "My Isotope" with a nitrogen-14 atom model and a table of properties. A yellow callout box with the text "30% of what we see" points to the simulation. Below the simulation, there is a section titled "PhET for Every Classroom" with a "DONATE" button. At the bottom, there is a section titled "New Sims" with a grid of simulation thumbnails. A blue callout box with the text "80% of what we experience personally" points to the "New Sims" section.

30% of what we see

80% of what we experience personally

Seneca Learning

Google "Seneca Learning" and log-in/sign up using your school email address.

Here you can see of what any **knowledge retention** we read **eng** activities to consolidate knowledge.

Seneca Learning was developed by

30% of what we see

A student who uses Seneca Learning who use other revision techniques learned 2x faster than those students using only one form of

80% of what we experience personally



Seneca Learning



PhET



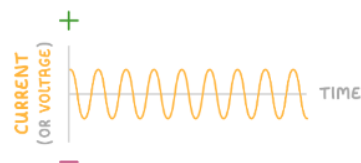
e-chalk



COGNITO

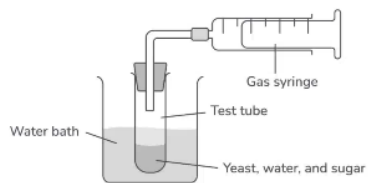
Over 400 video lessons that teach you everything you need to know

Flashcards help you memorise content as quickly as possible



Which type of current does the above oscilloscope trace represent?

c) A scientist is investigating respiration in a species of yeast, using the following apparatus.



i) Suggest one variable the scientist should aim to control during their experiment.

A mass of sugar

B temperature

C volume of water

Submit

(0/1 marks)

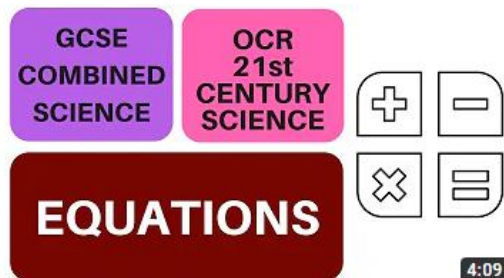
Thousands of interactive exam questions organised by topic and provided with built-in mark schemes

Search COGNITO on YouTube OR <https://cognitoedu.org/home>



Know your exam board
OCR 21st Century Science
Combined / Triple

MAKE NOTES AND FLASHCARDS WHILST WATCHING



GCSE Science Equations (OCR 21st Century Combined Science)

120 views • 5 years ago

✓ Science Revision

These are the equations you need to memorise for your exam! We post daily social media updates to help with your revision: ...



GCSE OCR 21st Century Living together Food and ecosystems Complete Revision Summary in just 48 min

208 views • 2 years ago

Expert Guidance by Mahima Laroyia

Living together Food and ecosystems :- Photosynthesis Factors affecting photosynthesis How plants use glucose Greenhouses ...

Photosynthesis | Endothermic | Factors That Affects the Rate of Photosynthesis | How Does Light... 50 moments

Search COGNITO on YouTube *OR* *<https://cognitoedu.org/home>*

Topics

Podcasts >

Exam practice >

Biology (Combined Science) >

[You and your genes](#)

[Keeping healthy](#)

[Living together - Food and ecosystems](#)

[Using food and controlling growth](#)

[The human body - Staying alive](#)

[Life on Earth - Past, present and future](#)

[Ideas about science](#)

[Practical skills](#)

Chemistry (Combined Science) >

[Air and water](#)

[Chemical patterns](#)

[Chemicals of the natural environment](#)

[Material choices](#)

What happens during cellular respiration? - OCR 21st Century >

 [Revise](#)

 [Audio](#)

 [Test](#)

How do we know about mitochondria and other cell structures? >

 [Revise](#)

 [Test](#)

How do organisms grow and develop? - OCR 21st Century >

 [Revise](#)

 [Video](#)

 [Test](#)

Links



[Combined Science Exam practice](#)
Prepare for GCSE examinations

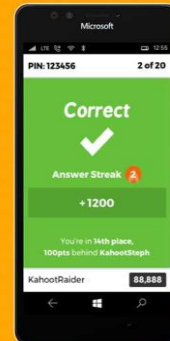
Kahoot!

Download the KAHOOT app or go to the website.

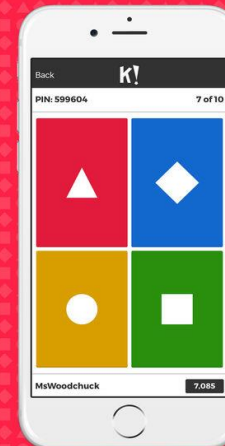
Thousands of free quizzes ready to play.

Test your understanding.

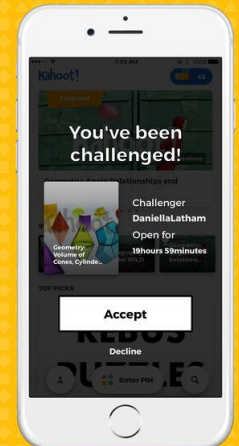
**MAKE LEARNING
AWESOME**



**JOIN GAMES
HOSTED LIVE!**



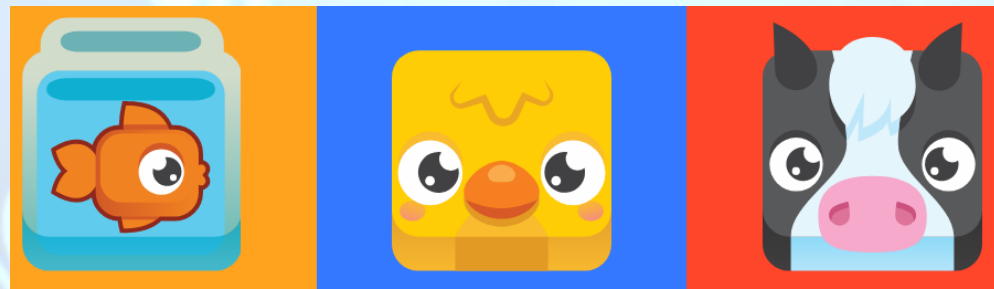
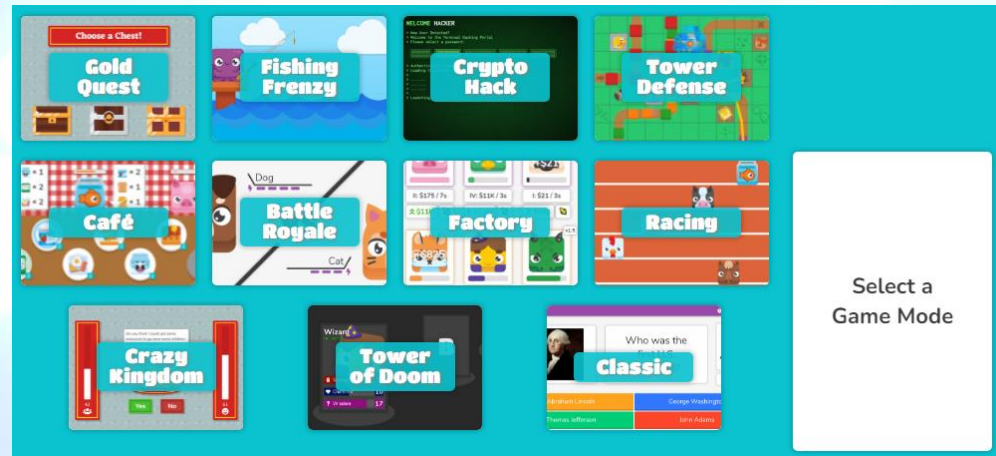
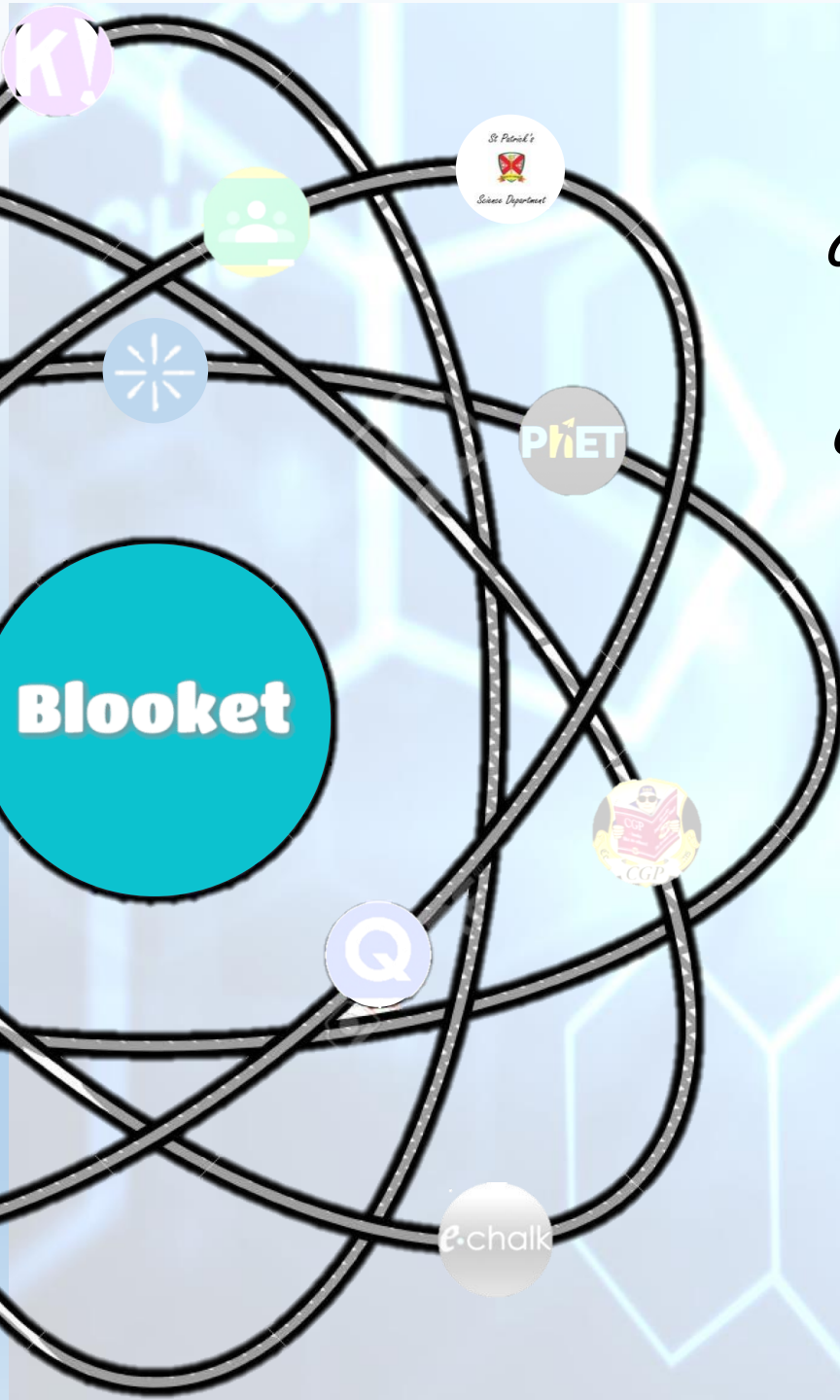
**CHALLENGE
YOUR FRIENDS!**



Blooket

Go to www.blooket.com for more free quizzes ready to play.

Choose your favourite Blook and play test your understanding by playing one of their many review games in a group.



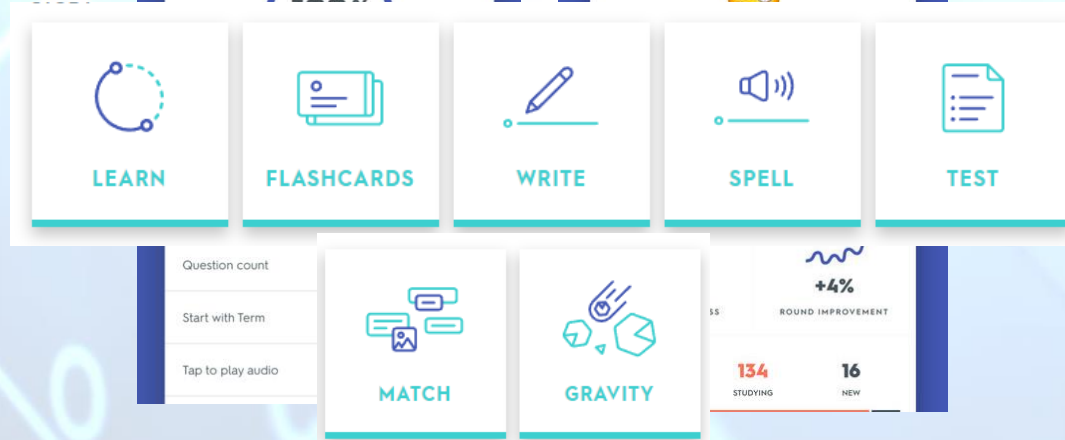
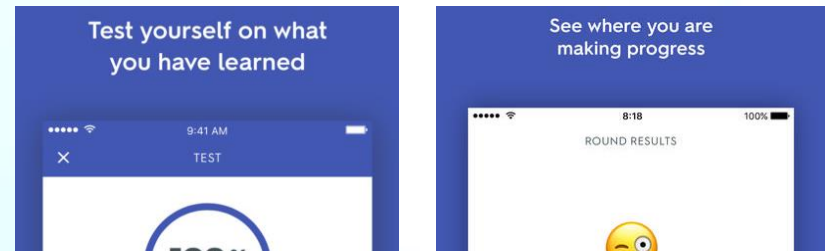


Download the QUIZLET app or go to the website.

Thousands of free flashcard sets ready to use.

You can also make your own flashcards.

Test your understanding.



Get Organised!

Notes:

- Prioritise weaker subjects.
- Leave space where possible to include extra info e.g. Chemistry – C4, even if logged rather than planned.

How to make the most of revision

- Be realistic.
- Be determined, both with revision and breaks.
- Use your time effectively; no 3 hour blocks without breaks!
- Revise in chunks; 30 mins max then a short break. Repeat.
- Be kind to yourself during breaks (e.g. FIFA, walk the dog, bath).
- Be flexible.
- Use a multi angled approach; read, make mind maps, stick post-it notes around the house on cupboards etc., make revision cards, test your friends, discuss what you've learned, teach your friends and family, practise exam papers, watch revision videos on YouTube, and ask teachers for help if you are really not sure on something.
- Use a quiet space; no music, TV, phone or siblings (use school if it helps).

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Planning your revision

- ▶ - How to create a revision timetable

First task...

- ▶ List all the subjects that you need to do revision for.
- ▶ Now rank them in order, with the first being the subject in which you need to do the most revision. Think about your target grades and current attainment to work this out. Discuss with teachers if you need to.
- ▶ See example on next slide.

An example:

Subjects to revise for:

- ▶ Maths
- ▶ English Literature
- ▶ English Language
- ▶ Biology
- ▶ Chemistry
- ▶ Physics
- ▶ Geography
- ▶ RE
- ▶ Music
- ▶ Business Studies



Rank order (most revision needed)

- 1st. Chemistry
- 2nd. Maths
- 3rd. Geography
- 4th. Business studies
- 5th. Biology
- 6th. Physics
- 7th. English Literature
- 8th. English Language
- 9th. Music
- 10th. RE

So this student needs to make sure that they spend more time revising subjects like chemistry, maths and geography.

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
8:00 - 9:00							
9:00 - 10:00							
10:00 - 11:00							
11:00 - 12:00							
12:00 - 1:00							
1:00 - 2:00							
2:00 - 3:00							
3:00 - 4:00							
4:00 - 5:00							
5:00 - 6:00							
6:00 - 7:00							
7:00 - 8:00							
8:00 - 9:00							
9:00 - 10:00							

An example timetable

- 1st. Chemistry
- 2nd. Maths
- 3rd. Geography
- 4th. Business studies
- 5th. Biology
- 6th. Physics
- 7th. English Literature
- 8th. English Language
- 9th. Music
- 10th. RE

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY					
8:00 - 9:00	SCHOOL DAY					FOOTBAL L TRAINING						
9:00 - 10:00												HOMEWORK
10:00 - 11:00												
11:00 - 12:00											HOMEWORK	
12:00 - 1:00												
1:00 - 2:00											Maths	HOMEWORK
2:00 - 3:00												
3:00 - 4:00	Science intervention	English intervention	Maths intervention		Geography / History	English Language						
4:00 - 5:00												
5:00 - 6:00	TEATIME	TEATIME	TEATIME	TEATIME	TEATIME							
6:00 - 7:00	RE	Maths	Biology	Option A	Option B	TV & CHILL						
7:00 - 8:00					OUT							
8:00 - 9:00	Physics	English		Chemistry								
9:00 - 10:00			English Literature									

Get Organised!

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Blackboard



PhET

Science

Revision

Strategies

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The harder you work, the more
successful you will be.
Work hard, be successful.