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LSST

Revision preparation

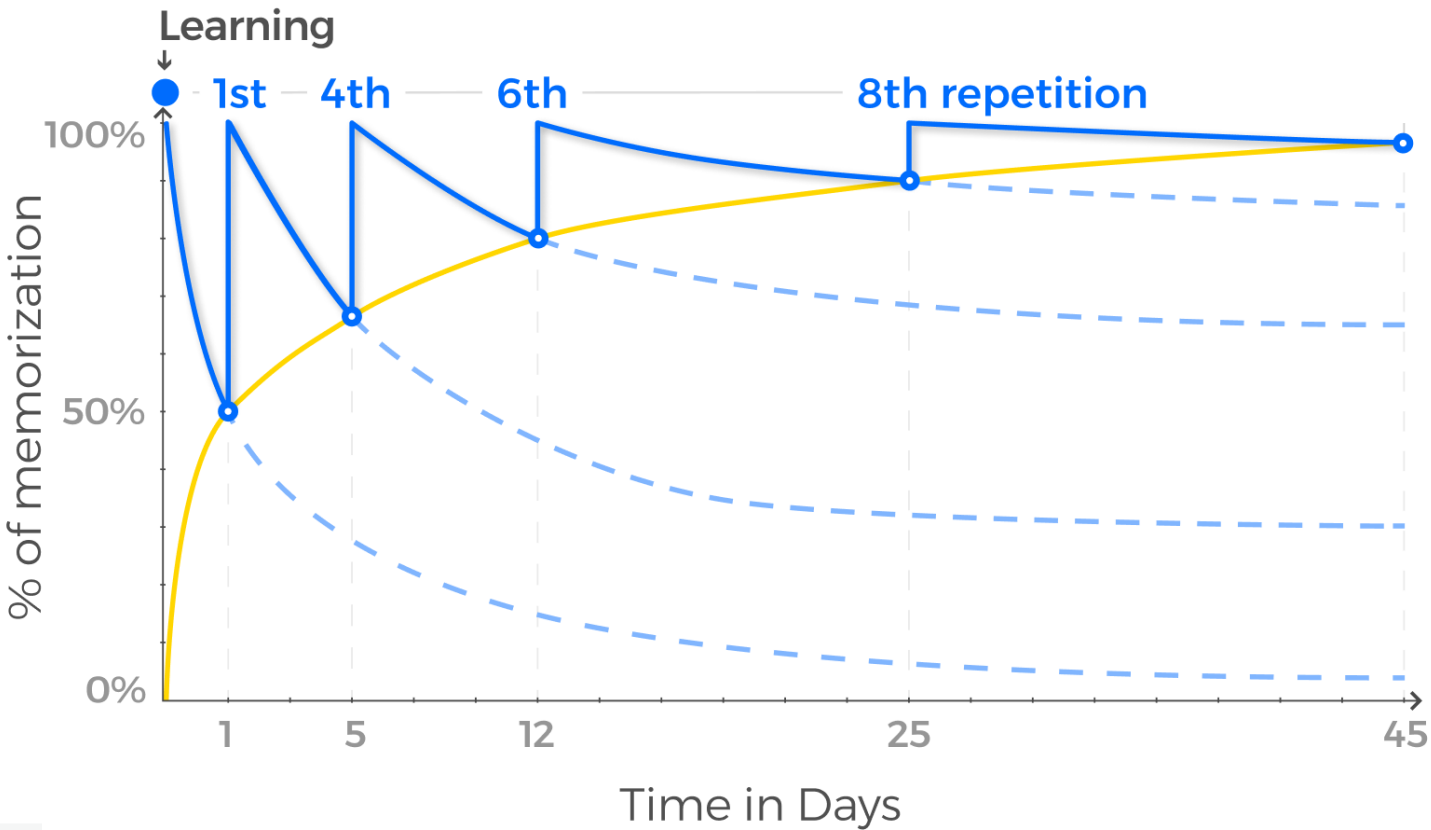
Examples of different revision techniques that can be used to suit different students.

Key Apps and resources that we recommend to support revision.

THE PRIORY FEDERATION OF ACADEMIES TRUST

Why do we revise?

- All children are different and learn/revise differently.
- However, commonality… repetition is key!



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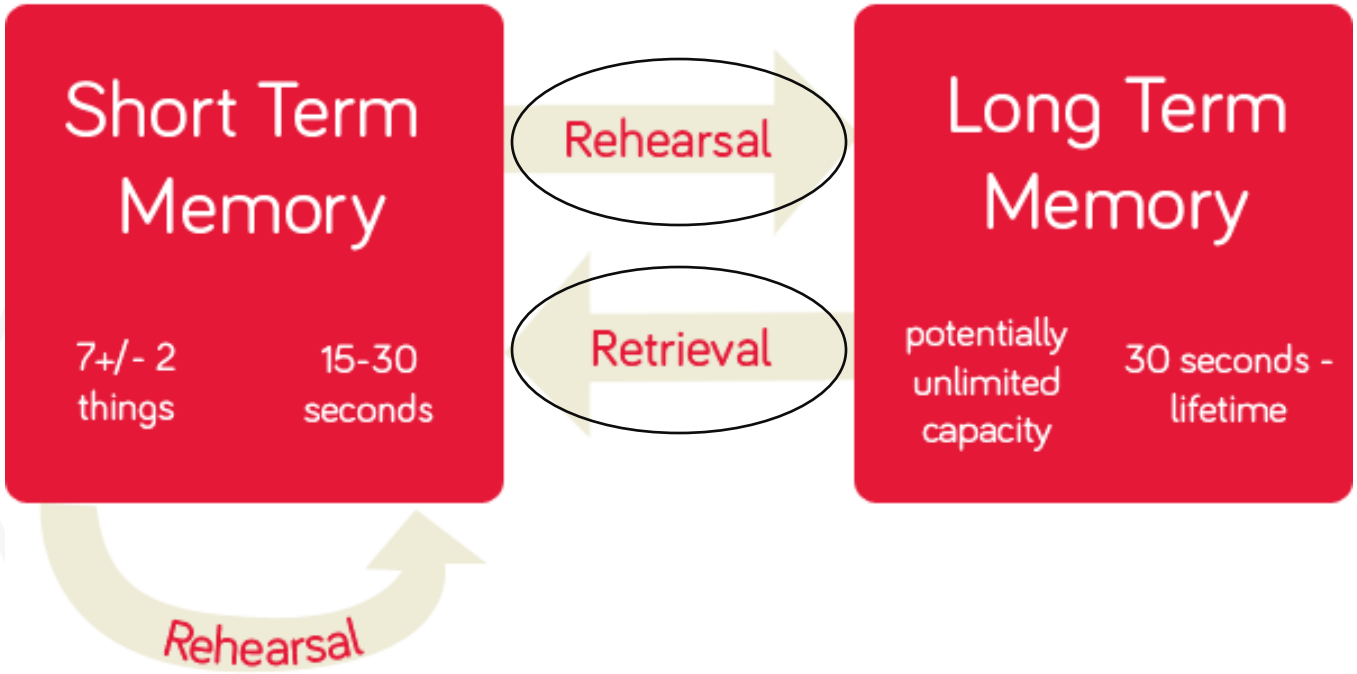
Why do we revise?



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Little and often >> cramming for 10 hours the day before!

C.R.A.V.E

1. **Creativity** – The more creative your strategies the better and more enjoyable.
2. **Repetition** – You will need to cover content multiple times before you can remember it. Organisation is key to this so you use your time efficiently.
3. **Activity** – Try and make your learning as active as possible. Friends and family working with you can be even better.
4. **Visual** – Use visual aids (pictures) to link with key words.
5. **Environment** – Quiet and organised with all the equipment you need. No smart phones when working. Manageable chunks of time (25 min work, 5 min rest 'Pomodoro Technique' www.mindtools.com) Also get some quality sleep & rest!

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Revision techniques – learning

See hand out.

Key techniques:

1. Flash cards
2. Quizzes and Challenges
3. Creating information tables
4. Trial runs
5. Teaching others

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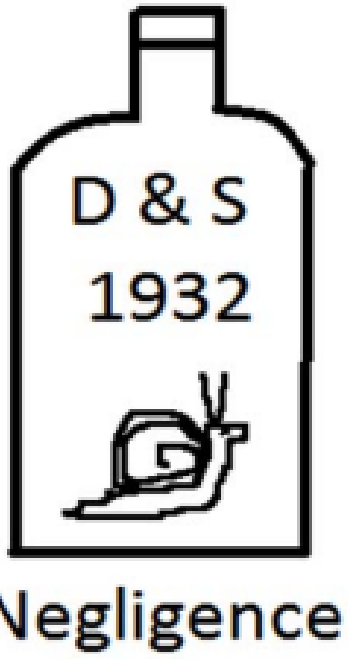
Revision techniques – learning



- All of the techniques discussed used the principle of **visualisation**
- **Visualisation** (sometime called Dual coding) is a very powerful way of improving memory re-call.
- This technique involves linking pictures to key words or concepts so that you can help remember them when asked to re-call the information.

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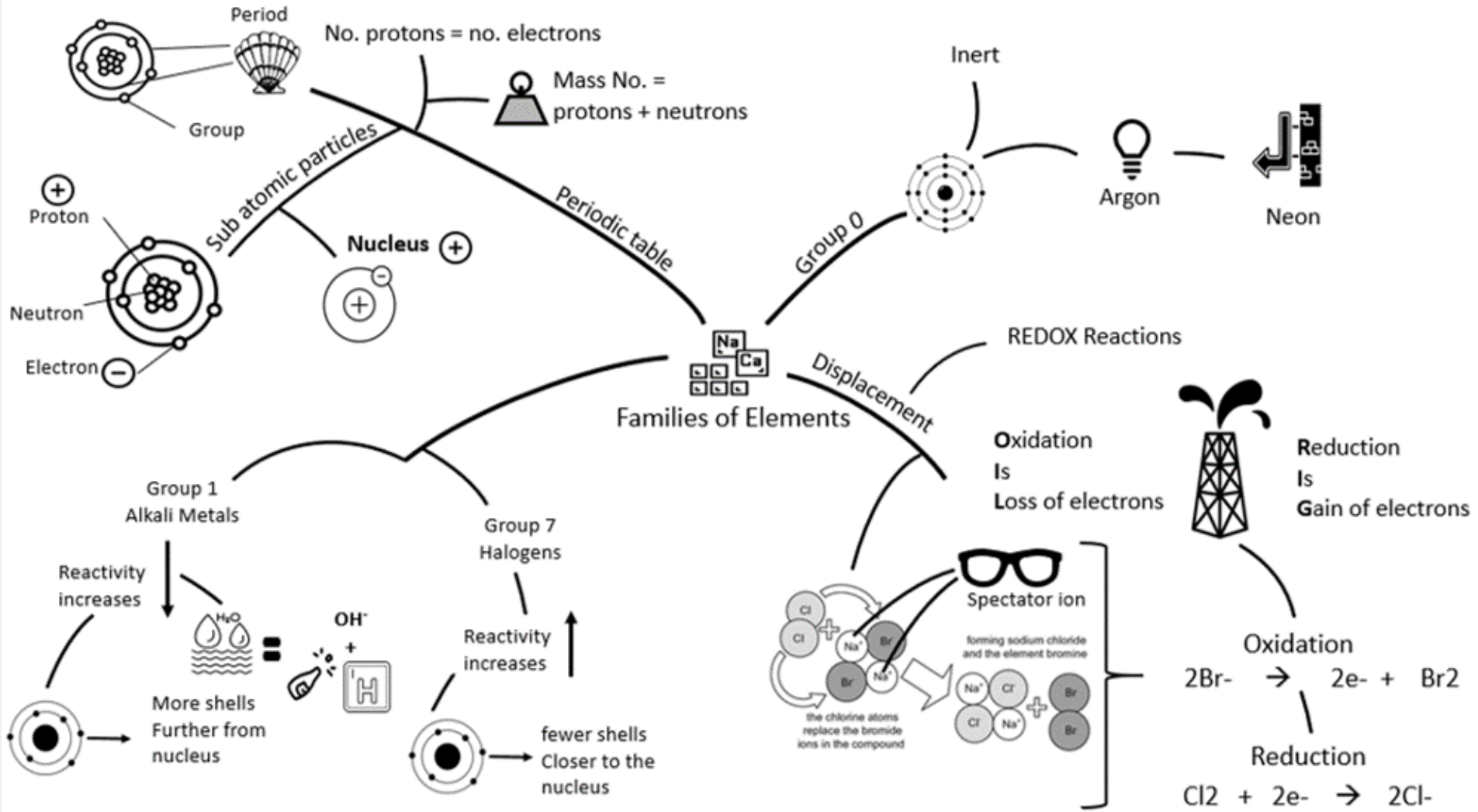

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Algebra Knowledge Grid 1

1. Algebra key words

Variable	A symbol (usually a letter such as x, y, z) that may take any value from a given range of values.	
Constant	A value that does not change. The opposite of a variable.	
Operator	The symbol used to show which operation is to be done.	
Coefficient	A constant attached to the front of a variable or group of variables.	In $3x$ $7xy$ Ax^2y y^2 the coefficients are 3, 7, A and 1

2. Types of algebraic notation

Expression	A term or collection of terms which can contain variables and numbers.	$2a$ $-5y + 1$ $-9f^3gh^7$ $4x + 5$ $3x^3y$ $9f^3gh^7 + 2 + x$ $7x - 5$ $-8agh$ $x^2 + 2ab - y^7$
Equation	A statement linking two expressions as equal.	$2x + 7 = 13$ $x^2 + 4 = -110$ $2(a + 5) = -4$ $2a^{11} = 2 - a$
Formula (pl. formulae)	A statement, often written as an equation, that shows the exact relationship between different variables.	$F = ma$ $v = u + at$ $e = mc^2$ $v^2 = u^2 + 2as$ Area of circle $= \pi r^2$ $s = \frac{1}{2}(u + v)t$
Identity	An equation which is true for all possible values of the variable.	$3(x + 5) \equiv 3x + 15$ $x + 1 \equiv 1 + x$
Conditional equation	An equation which is only true for a particular value, or number of values, of the variable. The opposite of an identity.	$2x + 7 = 15$ is only true when $x = 4$ $x^2 = 4$ is only true when $x = 2$ or $x = -2$

a	a or a^1
a x a =	a^2
a x a x a =	a^3
a x a x a x a =	a^4
a x a x a x a x a =	a^5

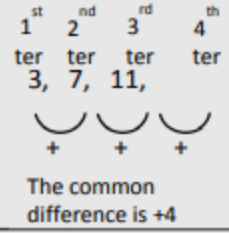
b	b =	b
b + b =	2 x b =	2b
b + b + b =	3 x b =	3b
b + b + b + b =	4 x b =	4b
b + b + b + b + b =	5 x b =	5b

3. Terms and degrees

Term	The quantities in an algebraic expression that are linked to each other by means of + or – signs.	
Like term	Terms that are completely identical in respect of their variables.	a $2a$ $100a$ $-7a$ $-a$ are like terms xy $5xy$ $-11xy$ $-xy$ are like terms a^2b $6a^2b$ $-3a^2b$ $0.5a^2b$ are like terms
Unlike term	Terms that are not completely identical in respect to their variables.	$2a$ $5b$ $-4ab$ $2a^2b$ are unlike terms $2xy$ $-x^4y$ $10x^2y^3$ $2xy^2$ are unlike terms $2f^3gh$ $2f^2g^6h^3$ $2fg^3h^2$ are unlike terms
Degree of a term	The value found by adding together all the power of the variables in a term.	$2x^3$ has a degree of 3 $4x^3y^2$ has a degree of 5 $3xy$ has a degree of 2
Degree of an expression	The highest value found among the degrees of all terms in an expression.	$b^2 + 2$ is an expression of degree 2 $x^4 + 4x^3y^2 + 6y^2$ is an expression of degree 5 (the middle term)
Linear equation	An equation involving only expressions of degree 1.	$y = 3x + 2$ $x + y = -2$ $4 - a = b$ $y = 4$ $a = -1$ $1 + b = 2 - a$ $x = 3y - 5$ $x + y + z = 10$ $e + w = s - t$
Non-linear equation	An equation where one or more expression have degrees other than 1.	$y = 2x^2$ $2ab = 5$ $a^2 + b^2$ $y = 2x^2 + 5$ $3xy = 0$ $a^3 = 2b + 1$ $3g^4 = 2b + 1$
Quadratic equation	An equation where the highest degree of a variable is 2.	$x^2 + 3x - 5 = 0$ $3(x + 1)^2 = 0$ $4x^2 - 3x + 4 = 0$

4. Linear sequences

Sequence	A list of numbers following a certain pattern.
Common difference	The difference between any two consecutive terms in a linear sequence.
Term	The numbers in a sequence.
General rule (nth term)	An algebraic expression giving the rule to find any number in a sequence.



xy =	xy =	xy
$xy + xy$ =	2 x xy =	$2xy$
$xy + xy + xy$ =	3 x xy =	$3xy$
$xy + xy + xy + xy$ =	4 x xy =	$4xy$
$xy + xy + xy + xy + xy$ =	5 x xy =	$5xy$

5. Instructions

Simplifying	Gathering all like terms together in a single term.	$2x + 3y + x$ simplifies to $3x + 3y$ $2a - b - a + 5b$ simplifies to $a + 4b$
Expansion	Making an expression as much as possible into a collection of terms connected only by + and – signs.	$3(x + 2)$ expands to $3x + 6$ $-(y + 3)$ expands to $3 - y$ $x(x + 3)$ expands to $x^2 + 3x$
Substitution	Replacing variables with numbers.	What is the value of $y = x + 5$ if $x = 2$? Answer: $y = (2) + 5 = 7$
Evaluating	Finding the value of an expression when the variables take on certain values.	Evaluate $2x + 5$ when $x = 3$: Answer: $2(3) + 5 = 6 + 5 = 11$
Changing the subject	Isolating a variable on one side of an equation.	Make x the subject of $y = 2x + 1$ Answer: $x = 0.5(y - 1)$
Generalise	To make a statement that is true is all cases.	All even numbers have a final digit of 0, 2, 4, 6 or 8.
Factorising	The operation of resolving a quantity into factors.	$3a + 6$ factorises to $3(a + 2)$ $15 - 10b$ factorises to $5(3 - 2b)$ $8c^2 + 12c$ factorises to $4c(2c + 3)$

a^{-1}	$\frac{1}{a^1}$
a^{-2}	$\frac{1}{a^2}$
a^{-3}	$\frac{1}{a^3}$
a^{-4}	$\frac{1}{a^4}$
a^{-5}	$\frac{1}{a^5}$

$b^{\frac{1}{2}}$	$\sqrt{b}$
$b^{\frac{1}{3}}$	$\sqrt[3]{b}$
$b^{\frac{1}{4}}$	$\sqrt[4]{b}$
$b^{\frac{1}{5}}$	$\sqrt[5]{b}$
$b^{\frac{1}{6}}$	$\sqrt[6]{b}$

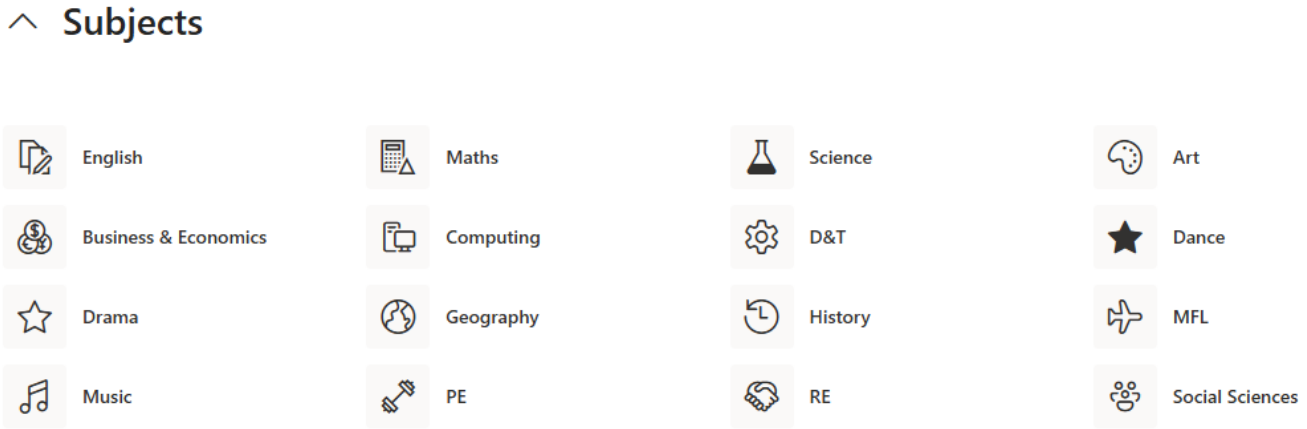
Revision techniques practicing

No way round this bits… lots of practice questions!

[AQA | Resources | Past Papers & AQA Mark Schemes]

[Past papers materials finder - OCR]

[Past papers | Past exam papers | Pearson qualifications]



Sparx Maths

Useful Apps Quizlet

- Free Homework & Revision for A Level, GCSE, KS3 & KS2
- Download the BBC Bitesize app for GCSE 2025 revision flashcards - BBC Bitesize
- Sparx Maths - Home
- Digital Flashcards & Revision Cards for Students | Quizlet

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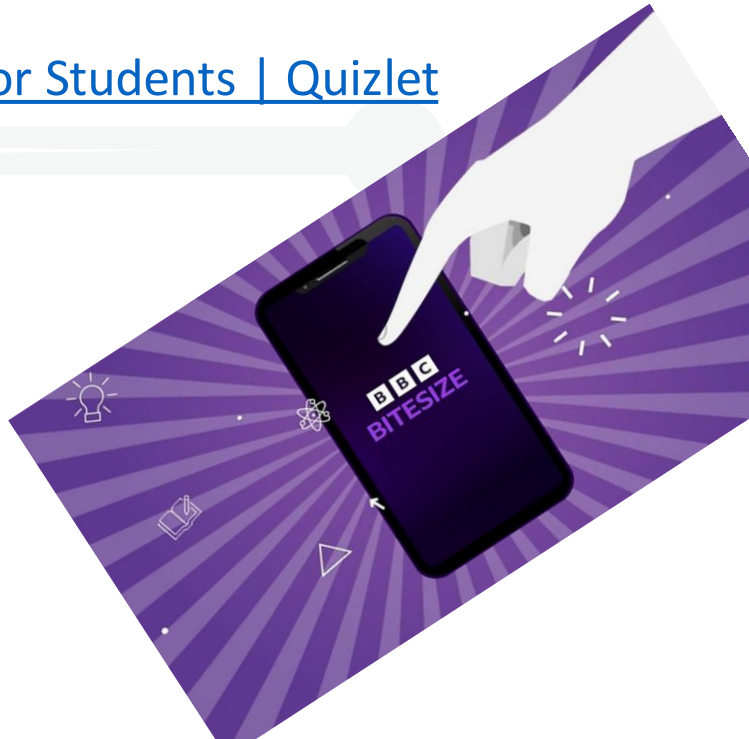
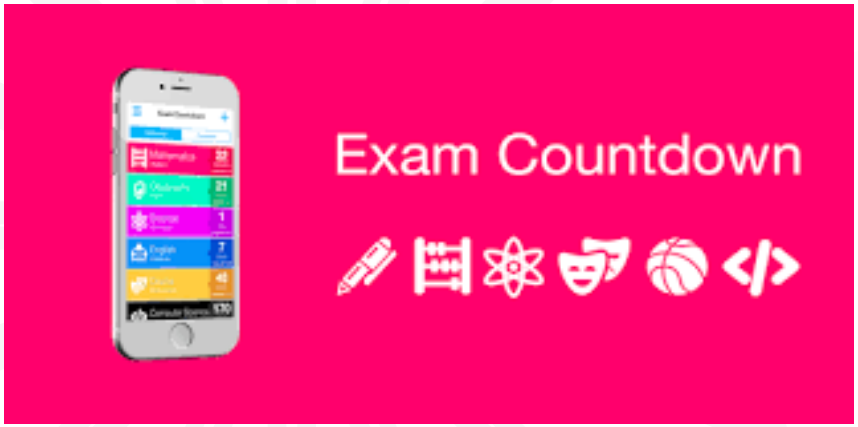
SENECA
Free interactive content to keep students engaged



Staying focused

- Forest - Stay focused, be present
- Exam Countdown app to keep track of exam dates.



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Feedback for Y11 Examination Information Evening

We would really appreciate it if you could fill out the below form to give us some feedback on the new format of the event. Thank you in advance!

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Thank you

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