Knowledge Organiser
Year 8 Term 3

Name:	Form group:	Masters of Recall Big Quiz:

Spellings & Times Tables

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Idiolect- an individually distinctive style of speaking; linking to word choices used. **Sociolect**- a variety of language associated with a particular social group. **Dialect**- a variety of language, marked by grammar and lexis, and used by speakers with a common regional and social background. **Gesticulation**- the act of making gestures. **Abbreviated**- shortened.	**Disfluencies**- any disruption in the flow of spoken language that is caused by the speaker. **Disparage**- regard or represent as being of little worth. **Perceive**- becoming aware or conscious; interpret or regard in a particular way. **Credibility**- quality of being trusted and believed in. **Spontaneous**- impulse and without premeditation.	**Condescending**- having or showing an attitude of patronising superiority. **Criticism**- the expression of disapproval of someone or something based on perceived faults or mistakes. **Ridicule**- to mock, scorn or jibe. **Linguistics**- the scientific study of language and its structure, including the study of grammar, syntax, and phonetics. **Incomprehensible**- not able to understand.	**Superior**- higher in ranking, status or quality. **Associated**- (of a person or thing) connected with something else. **Necessary**- needed to be done, achieved, or present; essential. **Syllable**- a unit pronunciation having one vowel sound, with or without surrounding consonants, forming the whole or part of a word; for example, there are two syllables in water. **Prosodic**- properties of syllables and larger units of speech: intonation, stress, and rhythm.	**Phenomenon**- a remarkable person or thing. Or something that is observed to exist or happen, especially without cause or explanation. **Ellipsis**- the omission from speech or writing of a word or words that are superfluous or able to be understood from contextual clues. **Phonetic**- relating to speech sounds. **Orthographic**- transcription method/ spelling. **Deviated**- depart from usually or accepted standards.	**Intonation**- the rise and fall of the voice in speaking. **Scenarios**- an outline or synopsis or sequence of events. **Auditory**- relating to hearing. **Fundamental**- forming a base or core; central importance. **Adjacency pairs**- expressions used in parallel- usually formulaic socially e.g., How are you? Fine thanks.
3 times table	**6 times table**	**9 times table**	**12 times table**	**4 times table**	**8 times table**

Look

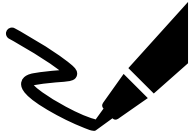Look at the information carefully.

Read it three times.

It may help to **say** it as you read it.

Cover

Cover it with your hand or a piece of paper.

Write

Write it out, from memory.

Check

Check what you have written matches the information exactly. Have you got it correct? If so, tick your work to show it is correct.

Correct

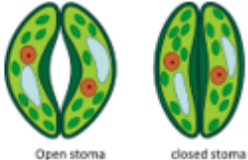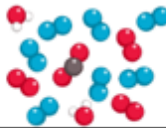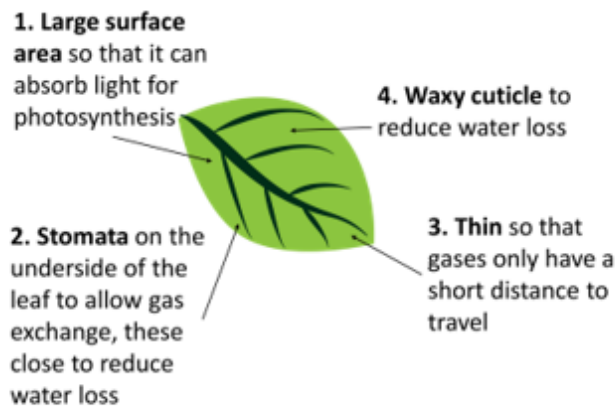If it **doesn't match exactly,** use your **purple pen to correct it**.

Repeat.

When you get it 100% correct, move on to the **next** piece of information.

English	Spoken Language Study	Year 8	Term 3

Week 1: Terminology 1

Accent: the way users of a language differ in how they pronounce certain sounds and words.

Dialect: the distinctive grammar and vocabulary used by a person in a specific region or social class. E.g., The word choice for a bread roll: cob, bread cake, sarnie.

Idiolect: an individually distinctive style of speaking. Usually, word choices used by the speaker for their own use. How you express yourself in your own style depending on influences e.g., family, travel, education, region, peer group, etc.

Standard English: the most formal variety of English which uses formal tone, regular spellings, and punctuation, and doesn't use any features of regional or non-standard dialect.

Week 2: Terminology 2

Adjacency pairs: expressions used in parallel- usually ritualistic and formulaic socially. E.g., 'How are you?' 'Fine thanks.'

Turn taking: a single participant speaks, within a typical, orderly arrangement in which participants speak with minimal overlap and gap between them.

Back-channel: used by a listener to give feedback to show the speaker that they are following and understand the conversation E.g. I see, oh, uh huh, really, yeah, hmm.

Discourse Markers: used to signal the relationship/ connection between utterances and to allow the listener to follow the conversation. E.g., first, on the other hand, what's more, so anyway…

Week 3: Terminology 3

Elision: the omission or slurring of one or more sounds or syllables. E.g., going to = gonna

Utterance: an utterance is a complete unit of talk; it begins and ends with a clear pause. E.g. Who/e/ver/does/not/love/does/not/know/God,/ bec/cause/God/is/love./We/ love/ be/cause/he/ first/ loved/ us.= 23 utterances

Prosodic features: uses stress, rhythm, pitch, tempo, and intonation. These features are used to mark out key meaning in a message; it focuses on how something is said.

Pause: this when the speaker is talking and takes a pause. (.) = micro-pause. (1)= the pause lasted for 1 second. (2)= the pause lasted for 2 seconds

Week 4: Terminology 4

False start: when the speak begins an utterance, then stops and either repeats or rephrases. E.g., She, uh, she asked me to leave.

Filler: to allow time to think, create a pause or to hold a turn in conversation. E.g., er, erm, um, ah.

Self-correction: an alteration that is suggested or made by a speaker, the listener, or audience in order to correct or clarify something previously said.

Paralinguistic features: related to body language- it is the use of gestures, facial expressions, and other non-verbal expressions.

Week 5: Terminology 5

Vague language: statements that sound imprecise and unassertive; essentially it is indefinite language. E.g., and so on, whatever, thungummy, whatsit.

Hedge: words or phrases which soften or weaken the force which something is said. E.g., perhaps, maybe, sort of, possibly, I think.

Tag question: strings of words normally added to a declarative sentence to turn the statement into a question. E.g., It's cold in here, isn't it? That's fancy, do you not think?

Week 6: Language Theory

Grice's Maxims: the four basic rules of conversation: quantity (don't say too much or too little); relevance (keep to the point); manner (speak clearly and in an orderly way); quality (be truthful).

Pragmatics: focuses less on structures and more contexts and purposes of people talking to each other. David Crystal said 'Pragmatics studies factors that govern our choice of language in social interaction and the effects of our choice on others'.

Maths	Probability and Algebra	Year 8	Term 3

Week 1: Core knowledge

Like terms: have the same variable and power

Reciprocal: multiplicative inverse.
A number and it's reciprocal have a product of 1.

Of: multiply

$$\frac{1}{2} of\ 20 = \frac{1}{2} \times 20 = 20 \div 2$$

$y = a$ is a horizontal line through 'a'

$x = a$ is a vertical line through 'a'

Week 2: Tables and probability

Systematic: a way of listing outcomes in an organised way with nothing missed or repeated.

Two-way table: a way to organise 2 categories of data.

A cat *and* a dog   A dog but no cat

	Has a cat	No cat
Has a dog	5	7
No dog	10	4

A cat but no dog   Neither a cat nor a dog

Outcome: the result of an experiment or event.

Sample: a random selection taken from a larger group or population.

Sample space: all the possible outcomes of an experiment. A **sample space diagram** organises these outcomes.

Week 3: Probability

Event: a possible outcome of a statistical trial.
Example: getting a 'tails' when a coin is tossed.

Probability: the likelihood of an event happening.
Probabilities are written as fractions, decimals or percentages.

P(event): means the probability of the event happening.

Fair: every outcome has an equally likely chance of happening.

Biased: every outcome does NOT have an equally likely chance of happening.

Week 4: Brackets and equations 1

Unknown: letter representing a value we don't know. The value is fixed and can be worked out.

Equation: states that 2 things are equal. It has an equals sign.

Solve: to find the value of the unknown.

Satisfy: to make something true or correct.
A solution will satisfy an equation if it is correct.

*E.g. 2y + 5 = 13 is an **equation** where y is an **unknown**. We **solve** the equation to find y.*
y = 4 is the solution.
*y = 4 **satisfies** the equation because 2 x **4** + 5 = 13*

Week 5: Brackets and equations 2

Expand: re-write without brackets by doing a multiplication.

factorising

$2(x+1)$ $2x + 2$

expanding

Factorise: re-write an expression with brackets by identifying a common factor.

Identity: an equation that is true for all values. The symbol ≡ is used to show an identity.

Check: complete a different calculation to see if your answer works. You do not need to re-do the question.

Week 6: Inequalities

Inequality: relationship between two expressions or values that are not equal.

larger ↕ **>** ↕ smaller

| **=** equal | **>** greater than | **≥** greater than or equal |
| **≠** not equal | **<** less than | **≤** less than or equal |

If y>7 then y could be 8, 9, 10, 11, …

If y≥7 then y could be 7, 8, 9, 10, 11, …

Week 1: Plant Structure

root	part of the plant which absorbs water and minerals from the soil; adapted for this by having a large surface area
root hair cell	increases the surface area of the root to increase water uptake
xylem	a vessel in plants that transports water and minerals from the root, up the stem, to the leaf.
photosynthesis	a chemical process in which plants make glucose. Takes place in the chloroplast of the leaf.
chloroplast	the organelle in plant cells which is the site of photosynthesis
phloem	a vessel in plants that transports sugars, produced during photosynthesis, around the plant.
estimate	an approximate calculation or judgement of the value or number of something

The word equation for photosynthesis

Carbon dioxide + water → glucose + oxygen

Balanced symbol equation for photosynthesis

$$6CO_2 + H_2O \rightarrow C_6H_{12}O_6 + O_2$$

Week 2: Adaptations of a Leaf

cuticle	a thin waxy layer on the outside of a leaf to reduce the water vapour lost from its surface
stomata	small openings on the underside of a leaf where gas exchange happens

Open stoma   closed stoma

guard cells	control the opening and closing of the stomata to minimise water loss
surface area	the amount of exposed area there is on the surface of the leaf to absorb sunlight

Adaptations of a Leaf

1. **Large surface area** so that it can absorb light for photosynthesis

4. **Waxy cuticle** to reduce water loss

2. **Stomata** on the underside of the leaf to allow gas exchange, these close to reduce water loss

3. **Thin** so that gases only have a short distance to travel

Week 3: Mixtures

element	a substance made from one type of atom
compound	two or more different types of element that are chemically bonded
mixture	two or more different types of substance that are not chemically bonded
pure	only containing one type of substance
impure	contains mixtures of different substances
solute	a substance that dissolves to make a solution
solvent	a substance that can dissolve other substances
solution	a liquid that is formed from mixing a solute and a solvent
dissolve	when a soluble solid and a solvent form a solution

Week 4: Separation Techniques

soluble	a type of substance that can dissolve
insoluble	a type of substance that cannot dissolve
chromatography	a method to separate soluble substances
chromatogram	the visible result of chromatography
filtration	a method to separate an insoluble solid from a liquid
crystallisation	a method to separate a soluble solid from a solution
distillation	a method to separate solutions of different boiling points

Interpreting chromatograms

Most soluble substances travel further up the chromatogram

Least soluble substances are lower down the chromatogram

A   B   C
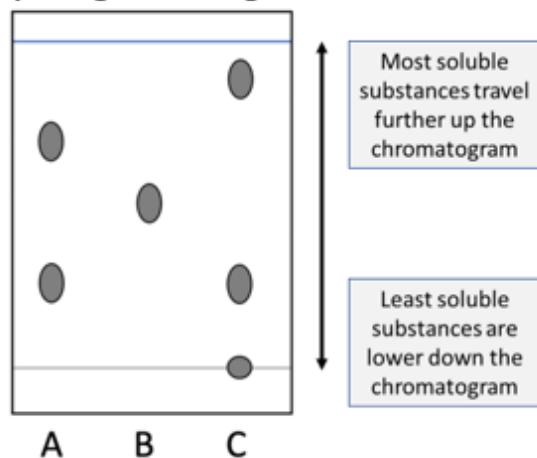
Week 5: States of Matter

particle	a small piece of matter such as an atom or a molecule.
chemical change	a chemical reaction in which a new substance is formed, usually irreversible
physical change	a change of state where no new substance is formed, usually reversible
observation	a comment based on something an individual has seen, heard, or noticed

Solid	Liquid	Gas
Regular arrangement	Irregular / randomly arranged	Irregular / randomly arranged
Particles are very close – all touching	Particles are close – mostly touching	Particles are far apart
Very strong forces of attraction between particles	Strong forces of attraction between particles	Weak forces of attraction between particles
Vibrate in a fixed position	Particles move around each other	Particles move quickly in all directions
High density	Dense	Low density
Fixed shape and volume	No fixed shape Fixed volume	No fixed shape or volume

Week 6: Conservation of Mass and Density

conservation of mass	matter cannot be created or destroyed, just transferred from one form to another
mass	the amount of matter in a given volume
volume	the quantity of three-dimensional space taken up by a substance
density	the mass per unit volume of a substance
compare	looking at the similarities _and_ difference
anomaly	a result that does not fit a pattern or trend

The Law of Conservation of Mass

01.7g   +   00.2g   =   01.9g
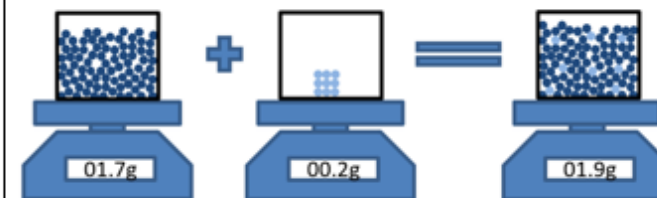
Look at the diagram above, notice how **the mass of the products is equal to the mass of the reactants.** During a chemical reaction, no atoms are gained or lost, they are rearranged. We call this the **law of conservation of mass.** We say:

'mass of reactants = mass of products'

French | Les fêtes 1 (Celebrations) | Year 8 | Term 3

Year 8 Phonics: en au ai ou tion ui é er
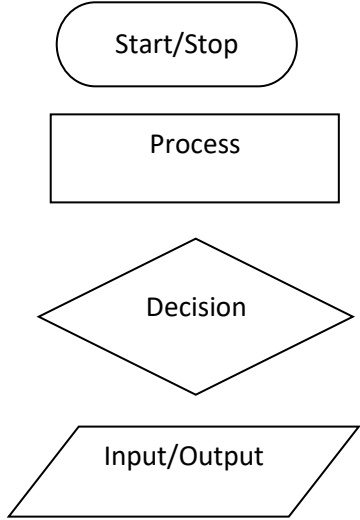
Week 1: Festivals

le Jour de l'An	New Year's Day	1er janvier
la fête des Rois	Epiphany	6 janvier
la Saint Valentin	Valentine's Day	14 février
Pâques	Easter	mars/avril
le poisson d'avril	April Fool's day	1er avril
la fête du travail	Labour day/May day	1er mai
la fête des mères	Mother's Day	juin
la fête nationale	Bastille Day	14 juillet
la Toussaint	All Saints' Day	1er nov
la veille de Noël	Christmas Eve	24 déc
le Noël	Christmas	25 déc
la Saint-Sylvestre	New Year's Eve	31 déc

Week 2: Food

le/un/du:

gâteau — cake
fromage — cheese
pain — bread
jambon — ham
poulet — chicken

la/une/de la:

galette — Festival of Kings cake
dinde — turkey
pomme — apple
salade — salad

les/des: huîtres — oysters
légumes — vegetables
pommes de terre — potatoes

Week 3: Manger – to eat

Je mange	I eat
Tu manges	You (singular/informal) eat
Il/elle mange	He/She eats
On mange	We eat
Nous mangeons	We eat
Vous mangez	You (plural/formal) eat
Ils mangent	They (masculine/mixed) eat
Elles mangent	They (feminine) eat

Week 4: Boire – to drink

Je bois	I drink
Tu bois	You (singular/informal) drink
Il/elle boit	He/She drinks
On boit	We drink
Nous buvons	We drink
Vous buvez	You (plural/formal) drink
Ils boivent	They (masculine/mixed) drink
Elles boivent	They (feminine) drink

Week 5: Drinks

le/un/du:

lait — milk   jus d'orange — orange juice
coca — Coca Cola   coca light — diet coke
jus de fruit — fruit juice
jus de pomme — apple juice

la/une/de la:

lemonade — lemonade   bière — beer

Week 6: The partitive article

The partitive article is used to mean **"some"**

Masculine singular	Feminine singular	Plural
du de l' (noun starts with a vowel)	de la de l' (noun starts with a vowel)	des

Je mange **du** pain et **de la** confiture.
         I eat (some) bread and jam.
Je bois du lait et **de l'**eau.
         I drink (some) milk and water.
Je mange **des** frites.   I eat (some) chips.

But: Je **ne** mange **pas de** pain.   I don't eat any bread.
*After a negative, the partitive article changes to **de** or **d'***

Geography	Rivers	Year 8	Term 3

Week 1: Water cycle

The water cycle: describes the continuous movement of water on or above the Earth.

Hydrological cycle: is another word for the water cycle.

Transpiration: water lost through leaves of plants.

Precipitation: rain, sleet, snow and hail

Infiltration: water absorbed into the soil from the ground.

Interception: vegetation prevents water reaching the ground

Surface runoff: water flowing over the surface of the land into rivers

Week 2: Features of a River

Source: the start of the river.

Mouth: the end of the river, where it flows into the sea.

Channel: the physical confines of a river including the banks and bed of a river.

Meander: a curve or bend in the river.

Bank: the side of a river.

Tributary: a small river that flows into a larger river.

Confluence: where two rivers meet.

Watershed: the boarder between two river basins.

Estuary: the tidal section of the river near the mouth.

Week 3: Movement of the river

Rivers begin in upland areas.

When rain falls on high ground and begins to flow downhill. They always flow downhill because of gravity.

They then flow across the land - meandering - or going around objects such as hills or large rocks. They flow until they reach another body of water.

As rivers flow, they erode - or wear away - the land. Over a long period of time rivers create valleys.

They take the sediment - bits of soil and rock - and carry it along with them.

Week 4: Erosion

Erosion: is the process that wears away the river bed and banks. Erosion also breaks up the rocks that are carried by the river.

There are four types of erosion:

Hydraulic action: This is the sheer power of the water as it smashes against the riverbanks. Air becomes trapped in the cracks of the riverbank and bed, and causes the rock to break apart

Abrasion: When pebbles grind along the river bank and bed in a sand-papering effect

Attrition: When rocks that the river is carrying knock against each other. They break apart to become smaller and more rounded

Solution: When the water dissolves certain types of rocks, eg limestone.

Week 5: Transportation

The river picks up sediment and carries it downstream in different ways, this is called **Transportation**

There are four types of transportation:

Traction - large, heavy pebbles are rolled along the river bed. This is most common near the source of a river, as here the load is larger.

Saltation - pebbles are bounced along the river bed, most commonly near the source.

Suspension - lighter sediment is suspended (carried) within the water, most commonly near the mouth of the river.

Solution - the transport of dissolved chemicals. This varies along the river depending on the presence of soluble rocks.

Week 6: Flooding

Prolonged rainfall: if it rains for a long time, the land around a river can become saturated.

Heavy rainfall: if there is heavy rainfall there is less chance of it being soaked up by the soil so it runs off into the river. The faster the water reaches the river, the more likely it will flood.

Relief: a steep valley is more likely to flood than a flatter valley

Vegetation: lots of vegetation reduces flood risk.

Urban land use: when an area surrounding a river is built on, it increases the amount of tarmac and concrete, which are impermeable surfaces.

History	Russian Revolution and WW1	Year 8	Term 3

Week 1: Empire	Week 2: Empire	Week 3: Causes of WW1
Benin: The Oba (King) of Benin is the supreme ruler. Initially resisted the slave trade and traded cloth. **Asante:** the gold trade was central to economic life. The Kings of Asante used profit from the gold trade to build huge armies, and used them constantly to fight and take land. **Transatlantic Slave Trade:** created by Europeans, who took huge numbers of African slaves to force them to work in places such as America and the West Indies. They worked on plantations for crops such as sugar or tobacco. **Tight Pack:** method involving packing as many slaves into the hold of a ship as possible **Revolt:** take violent action against an established government or ruler; rebel.	**Scramble for Africa:** where European countries divided control of Africa following the Berlin Conference 1884-5 **Asante Wars:** series of 5 wars between the English and Asante people from 1823-1900 over who should have the power in the area Britain controlled land in the West Indies (where a lot of sugar was processed by slaves). They also controlled land in the East Indies which included India. **Jewel in the crown of the British Empire**: India was one of the wealthiest parts of the British Empire and this was how it was referred to.Koh-i-Noor diamond, set in the British crown, taken from India in 1849.	**The Balkans:** an area of the south-eastern Europe. **Empire:** groups of countries that are governed by one country. **Independence:** the freedom to make laws/decisions without being governed by another country. **Nationalism**: a feeling of strong loyalty of devotion towards your country, sometimes with negative impact on other countries. **Treaty:** an agreement between two or more countries.

Week 4: Causes of WW1	Week 5: Russian Revolution		Week 6: Russian Civil War
Alliance: a partnership between two or more countries. Often the leaders promise to defend each-other, if they are attacked. **Dreadnought**: a type of battleship that was introduced in 1905. It was larger, faster and more powerful than any that had come before it. **Imperialism**: the policy of extending a country's influence (power) by taking over colonies, normally by using force. **Militarism:** the building up of weapons and armed forces.	**Bolsheviks:** a communist party led by Lenin. They take control of Russia in October, 1917. **Communism:** a left wing political ideology. **Provincial Government**: the Government that ran Russia between February and October, 1917. It was made up of Russian nobles.	**Mutiny**: to go against orders and rise up against your superior officers, in the military. **Protest**: to resist (stand up against) something that has happened. **Abdicate**: to give up the throne. **Assassinate:** murder for a political reason	**Cheka:** Russian Secret Police. **Civil War:** a conflict which takes place between two or more sides inside of one country. **Greens**: armed peasant groups who fought in the Civil War. **Nationalisation:** when the Government takes control of the public services. **Reds**: the Bolsheviks who fought in the Civil War. **Whites**: the Tsarist forces who fought in the Civil War.

ACADEMIC EXCELLENCE, AMAZING EXPERIENCE

Religious Studies	Evil and Suffering	Year 8 Term 3

Week 1: responses to suffering- Christianity	**Week 2**: inconsistent triad	**Week 3**: the causes of suffering- Hinduism
Parable: a simple story used to illustrate a moral or spiritual lesson, as told by Jesus in the Gospels. **The parable of the sheep and the goats:** In this parable, Jesus returns to reward all those who have fed the hungry, clothed the naked, visited those in prison and cared for the sick. **Message of the parable:** the message here is that by ignoring a sick or hungry person, a Christian would be ignoring Jesus himself. The parable teaches Christians to care for those who are suffering.	**Inconsistent triad:** As there is clear evidence of evil in the world, either God is not all-powerful (i.e. He cannot stop evil) or God is not loving and good (i.e. He does not love us or care enough to stop evil). 	Most Hindus believe that God does not impose evil on people. Evil is a natural part of life – it happens because of the law of karma. **Karma:** the sum of a person's actions in this and previous states of existence, viewed as deciding their fate in future existences. Most Hindus believe that much of the suffering they endure is a result of their own actions. Previous motives and actions need to be made up for. Many would add that this is not about 'deserving' suffering, but about taking the opportunity to learn from it.

Week 4: Caste system	**Week 5**: Gandhi	**Week 6**: responses to suffering- Hinduism
Caste system: The system which divides society into strict groups based on their karma. India's caste system is among the world's oldest forms of surviving social stratification. **Social stratification:** refers to a ranking of people or groups of people within a society. 	**Discrimination:** the unjust or prejudicial treatment of different categories of people, especially on the grounds of race, age, sex, religion or disability. Gandhi campaigned so the poorest people could associate with people from other Castes. Mixed castes were not allowed to worship in the same temples because the poor (Dalits) were thought unclean. **Dalits:** (in the traditional Indian caste system) a member of the lowest caste.	**How do Hindus respond to evil and suffering?** Most Hindus respond to natural evil by trying to help those affected. Examples of natural evil include: • Illness • Natural disasters **Natural evil:** anything beyond human control that results in suffering, for example: earthquakes, floods and tsunamis. **Ahimsa:** the Buddhist, Hindu and Sikh principle of total non-violence, in thoughts, words and actions.

Computing	Binary and Algorithms	Year 8	Term 3

Week 1: Storage capacity and file size

Storage capacities and file sizes are measured in:

(from lowest to highest)

BIT	BINARY DIGIT
4 BITS	NIBBLE
8 BITS	BYTE
1024 BYTE	KILOBYTE
1024 KILOBYTE	MEGABYTE
1024 MEGABYTE	GIGABYTE
1024 GIGABYTE	TERABYTE
1024 TERABYE	PETABYTE
1024 PETABYTE	HEXABYTE
1024 HEXABYTE	ZEETABYTE

Week 2: Binary and denary

Humans use the denary number system. This is the base 10 system. The denary system has ten symbols 0, 1, 2, 3, 4, 5, 6, 7, 8 and 9.

Computers work in the binary number system, which is base 2. Denary numbers must be converted into their binary equivalent before a computer can use them.

The first eight binary place values are:

128	64	32	16	8	4	2	1

In binary, each place value can only be represented by 1 or a 0.

Week 3: Conversions

Convert denary number 8 into binary

128	64	32	16	8	4	2	1
0	0	0	0	1	0	0	0

Convert denary number 244 into binary

128	64	32	16	8	4	2	1
1	1	1	1	1	1	1	1

Convert binary number 01000010

128	64	32	16	8	4	2	1
0	1	0	0	0	0	1	0

64+2=64

Week 4: Four corner stones of computer science

Abstraction: is the process of filtering out – ignoring - the characteristics of patterns that we don't need in order to concentrate on those that we do.

Algorithm: is a plan, a set of step-by-step instructions to solve a problem.

Decomposition: The breaking down of a system into smaller parts that are easier to understand, program and maintain.

Pattern recognition: involves finding the similarities or patterns among small, decomposed problems that can help us solve more complex problems more efficiently.

Week 5: Computational thinking

Computational thinking: a problem-solving method using computer science techniques, where possible solutions are developed and presented in a way that can be understood by humans and computers.

Flowchart: A diagram that shows a process, made up of boxes representing steps, decision, inputs and outputs.

Pseudocode: A method of writing a set of instructions for a computer program using plain English. This is a good way of planning a program before coding.

Week 6: Flow chart symbols

Start/Stop

Process

Decision

Input/Output

PSHE	Crime and Punishment	Year 8	Term 3

Week 1: why does society need laws?

Why do we need laws?
- To protect business owners against stealing and loss of profits.
- To give people rules and boundaries so they know what is expected of them in society.
- To ensure that Society feels safe.
- To protect the weak and vulnerable.
- To ensure that society is structured and has order.

Week 2: crime in the UK

Anti-social behaviour: behaviour by a person which causes, or is likely to cause, harassment, alarm or distress to other people not in the same household.

Burglary: illegal entry of a building with intent to commit a crime, especially theft.

Assault: any action in which a person intentionally or recklessly causes another to suffer or any action of violence.

Week 3: illegal drugs and the law

Classification: when something is sorted into different categories, these can be different depending on the severity or seriousness e.g. drug use.

Possession: to have or to own something e.g. to own or have drugs on your body

Supply: selling or distributing drugs for money or other goods.

Week 4: prescription drugs

Prescription-only medicines: a treatment that must be prescribed by a doctor and is not licensed for sale to the general public.

Pharmacy medicines: is a medicine that can only be bought from a pharmacy either online or in-store.

Legal high: a mood-altering or stimulant substance whose sale is not banned by current legislation.

Week 5: tobacco and the law

Vaping: the action or practice of inhaling and exhaling vapour containing nicotine and flavouring produced by a device designed for this purpose.

British law on tobacco:
- You must be over 18 to buy cigarettes in the UK.
- If you're under 16 the police have the right to confiscate your cigarettes.
- Smoking is illegal in any enclosed public spaces in the UK.

Week 6: alcohol and the law

Alcohol: a chemical substance found in drinks such as beer, wine, and liquor.

Unit of alcohol: alcohol units are a simple way of understanding the quantity of pure alcohol in a drink. One unit is 10ml (millilitres) or 8g (grams) of pure alcohol.

British law on alcohol:
- It is illegal for under-18s to buy alcohol anywhere in the UK.
- It is illegal for an adult to buy or try to buy alcohol for anyone under 18.
- Local councils can put measures in place to stop drinking in certain areas where they believe alcohol could contribute to anti-social behaviour.

ADT	Food Technology: Macronutrients	YEAR 8	Term 3

Week 1: What Are Macronutrients?

Macronutrients are nutrients that are needed in large amounts by the body – protein, fat and carbohydrate.

MACRONUTRIENTS

CARBS   PROTEIN   FATS

Week 2: Proteins

The body needs protein for several reasons:

1) for growth, during pregnancy and adolescence
2) to repair body cells and tissues, including recovery after illness or injury
3) to produce enzymes needed for digestion
4) to produce hormones that control body functions
5) protein provides a secondary source of energy

Week 3: Carbohydrate

There are two types of carbohydrate.

- Sugars – also known as simple carbohydrates.
- Starches – also known as complex carbohydrates.

Functions
The body needs carbohydrate for several reasons:

1) for energy – 1g of carbohydrate gives the body 3.75kcal of energy
2) wholegrain varieties of carbohydrate provide the body with fibre
3) carbohydrate has a protein-sparing effect, allowing protein to be used for its primary function of growth and repair

Week 4: Fats

There are two types of fat – **Saturated Fat** and **Unsaturated Fat**.

Unsaturated fat can be either **Monounsaturated Fat** or **Polyunsaturated Fat.**

Functions
The body needs fat for several reasons:

1) for energy – 1g of fat gives the body 9kcal of energy
2) to protect the vital organs
3) to provide an insulating layer which helps the body to maintain a constant temperature
4) fat is a source of the fat-soluble vitamins A, D, E and K.
5) fat is an excellent source of the essential fatty acids omega 3 and omega 6

Week 5: Fats (Continued)

Saturated Fat

We can get **saturated fat** from the following sources:

- red meat – for example, steak and minced beef
- dairy products – for example, butter and milk

Unsaturated Fat

We can get **unsaturated fat** from the following sources:

- **polyunsaturated fat** is in margarine, vegetable oil and oily fish (e.g., mackerel)
- **monounsaturated fat** is in nuts, nut oil, avocado, olives and olive oil

Week 6: Why Do We Need Macronutrients?

Your body needs these nutrients in larger amounts to function properly as macro means large. In addition, all these nutrients provide your body with energy measured in the form of calories or kcals. There are three types of macronutrients: carbohydrates, proteins, and fats.

1) Carbohydrates contain 4 kcal per gram
2) Proteins contain 4 kcal per gram
3) Fats contain 9 kcal per gram (this is roughly double the amount found in the other two macros)

Along with energy, all these macronutrients have specific roles in your body that allows you to function properly.

Knowledge Recall Questions

Step 1 – learn the knowledge using your recall book and look, cover, write, check, correct.

Step 2 – from **memory**, complete the weekly recall questions. These are mandatory. Use family and friends to test you ☺.

Step 3 – any question you cannot confidently answer, go back and learn the knowledge again.

Week 1: Core knowledge	Week 2: Tables and probability	Week 3: Probability

Week 1: Core knowledge

1. Are the following terms like or unlike?

   a) 6y and 7y

   b) -2g and 1.7g

   c) 4k and 4p

   d) 2t and t²

2. What is the reciprocal of each number?

   a) The reciprocal of 4 is …

   b) The reciprocal of $\frac{1}{3}$ is …

   c) The reciprocal of $\frac{2}{3}$ is …

   $\frac{1}{2} of\ 50 = \underline{\ \ } \times \underline{\ \ } = \underline{\ \ } \div \underline{\ \ }$

   $\frac{1}{5} of\ 20 = \underline{\ \ } \times \underline{\ \ } = \underline{\ \ } \div \underline{\ \ }$

3. Highlight the correct answer.

   a) The line y=5 is horizontal/vertical?

   b) The line x=-4 is horizontal/vertical?

Week 2: Tables and probability

1. Use the table to answer the following

	Baseball	Basketball	Football	Total
Male	13	15	20	48
Female	23	16	13	52
Total	36	31	33	100

   questions.

   a) How many females played football?

   b) How many people played baseball?

   c) How many males are there?

2. What are the outcomes when rolling a normal 6-sided dice?

3. What are the outcomes when flipping a coin?

Week 3: Probability

1. Which of the following could represent a probability?

   0.5

   ½

   82%

   0.12

   1.9

   110%

2. P(rolling a 4) =1/6 means 'the probability of _____ is _____.

3. P(rolling an even number) =1/2 means 'the probability of _____ is _____.

4. If every outcome has an equally likely chance of happening is called ….

Maths	Probability and Algebra	Year 8	Term 3

Week 4: Brackets and equations 1

4y + 8 = 20

1. Complete the following sentences about this equation.

   _____ is the equation

   _____ is the unknown

   y = 3 is the _____

2. Check whether y = 3 satisfies the equation 5y - 12 = 8

3. Check whether t = 10 satisfies the equation 100 – t = 90

Week 5: Brackets and equations 2

1. Complete the following sentences.

   a. Expand means to ….

   b. The symbol used to show an identity is ….

   c. Factorise means to ….

2. On each arrow write whether the expression is being factorised or expanded.

   $5(t + 2)$ $\longrightarrow$ $5t + 10$

   $4y + 10$ $\longrightarrow$ $2(2y + 5)$

Week 6: Inequalities

1. Write an inequality < or > to make the statement correct

   4   10

   2.6   2.06

   102938   192039

2. If t is an integer and t < 10, what could t be?

3. If a is an integer and a ≥ 5, what could a be?

4. True of false?

   0.5 ≠ 50%

   $\frac{2}{3} = 2.3$

Science — Photosynthesis, Separating Mixtures & Reactions — Year 8 — Term 3

Week 1: Plant Structure

1. Which organelle is the site of photosynthesis?
2. Name the process in plants that produces glucose
3. Write the word equation for photosynthesis.
4. Write a balanced symbol equation for photosynthesis.

Week 2: Adaptations of Leaves

1. What is defined as small openings on the underside of a leaf where gas exchange occurs?
2. Which part of a plant is thin and waxy to reduce water lost from the plant?
3. What is the function of guard cells?
4. What are stomata?

Week 3: Mixtures

1. Define compound.
2. Which word describes mixtures containing different substances?
3. Define element.
4. Define solute

Week 4: Separation Techniques

1. What is chromatography?
2. What name can be given to a substance that can dissolve?
3. Name a method that can be used to separate solutions with different boiling points.
4. Name a method that can be used to separate soluble substances.

Week 5: States of Matter

1. Which type of reaction cannot be reversed?
2. Define particle.
3. Which state of matter has strong forces of attraction between particles?
4. Which state of matter has the lowest density?

Week 6: Conservation of Mass and Density

1. Which word means the quantity of three-dimensional space taken up by a substance?
2. Which word means the mass per unit volume of a substance?
3. What is the law of conservation of mass?
4. What is an anomaly?

Week 1:Festivals	**Week 2**: Food	**Week 3**: Manger – to eat

Week 1:Festivals

Write the French name for each festival next to the correct date.

1er janvier _____

6 janvier _____

14 février _____

mars/avril _____

1er avril _____

1er mai _____

juin _____

14 juillet _____

1er novembre _____

24 décembre _____

25 décembre _____

31 décembre _____

Week 2: Food

Translate & then choose which gender the nouns are.

gâteau _____
fromage _____
pain _____
jambon _____
poulet _____
riz _____
poisson _____
miel _____
These food items are all masculine/feminine/plural

galette _____
dinde _____
pomme _____
salade _____
crêpe _____
confiture _____
viande _____
dinde _____
pomme _____
salade _____
crêpe _____
confiture _____
viande _____
These food items are all masculine/feminine/plural

légumes _____
pommes de terre _____
frites _____
These food items are all masculine/feminine/plural

Week 3: Manger – to eat

Complete the grid.

Je _____	I eat
Tu _____	You (singular/informal) eat
Il/elle mang**e**	He/She eats
On _____	We eat
Nous _____	We eat
Vous _____	You (plural/formal) eat
Ils mang**ent**	They (_____) eat
Elles _____	They (feminine) eat

Week 4: Boire – to drink

Complete the grid.

Je _____	I drink
Tu boi**s**	You (singular/informal) drink
Il/elle _____	He/She drinks
On _____	_____drink
Nous _____	We drink
Vous bu**vez**	You (plural/formal) drink
Ils _____	They (masculine/mixed) drink
Elles boi**vent**	They (_____) drink

Week 5: Drinks

Translate & then choose which gender the nouns are.

lait _____

jus d'orange _____

coca _____

coca light _____

jus de fruit _____

jus de pomme _____

café _____

thé _____

vin _____

These drink items are all: masculine/feminine/plural

They use the articles la/une/de la OR le/un/du OR de l'

lemonade _____ bière _____

These drink items are all: masculine/feminine/plural

They use the articles la/une/de la OR le/un/du OR de l'

eau _____

eau minérale _____

These drink items are all: masculine/feminine/plural

They use the articles la/une/de la OR le/un/du OR de l'

Week 6: The partitive article

The partitive article translates as
"_____"

Complete the grid by adding the correct heading for each column.

du **de l' (noun starts with a vowel)**	**de la** **de l' (noun starts with a vowel)**	**des**

Translate :

Je mange du pain.

_____

Elle boit du café.

_____

Nous mangeons de la viande.

_____

Tu bois du jus de pomme.

_____

Je ne mange pas de jambon.

_____

Computing	Binary and Algorithms	Year 8	Term 3

Week 1: Storage capacity and file size	**Week 2**: Binary and denary	**Week 3**: Conversions
1. What is the name of the smallest storage capacity?	1. Name the number system commonly used by humans.	1. Convert 00000111 into denary.
2. How many bytes are there in a kilobyte?	2. Name the number system used by computers.	2. Convert 10000000 into denary.
3. Which is bigger, a nibble or a byte?	3. Draw the first 8 binary place values in a table.	3. Convert this denary number into binary 16
4. What makes up a petabyte?	4. State the 2 ways a bit can be represented.	4. Convert this denary number into binary 128
5. Which is smaller, a bit or a byte?		

Computing	**Binary and Algorithms**	**Year 8**	**Term 3**

Week 4: Four corner stones of computer science	**Week 5**: Computational thinking	**Week 6**: Flow chart symbols
1. Write an algorithm to make beans on toast.	1. Give the language used to write pseudocode. 2. Is a flowchart created using shapes or code?	1. Draw the shape used for a decision in a flowchart. 2. Draw the shape used for a process in a flowchart. 3. Draw the shape used for a input/output in a flowchart. 4. Draw the shape used for a stop/start in a flowchart.

RS	Evil and Suffering	Year 8	Term 3

Week 1: responses to suffering- Christianity	Week 2: inconsistent triad	Week 3: the causes of suffering- Hinduism
1. What is a parable Explain in 20 words or less. 2. What is the meaning of the parable of the sheep and the goats write a summary below.	1. What are the three key parts to the inconsistent triad? 2. Create a summary explaining the inconsistent triad. How does this explain evil and God existing in the same world?	1. What is the most common Hindu belief on evil? 2. Define the word karma in 20 words or less. 3. Name one reason why Hindus believe suffering happens.

Week 4: Caste system	Week 5: Gandhi	Week 6: responses to suffering- Hinduism
1. Define the key term caste system in 20 words or less. 2. Define the key term social stratification in 20 words or less. 3. Name two groups from the caste system.	1. Define the key term discrimination in 20 words or less. 2. Name three types of discrimination. 3. Define the key term Dalits in 20 words or less.	1. How do Hindus respond to evil and suffering? Name and explain one example. 2. Define the key term natural evil in 20 words or less. 3. Define the key term ahimsa in 20 words or less.

ADT	Food Technology: Macronutrients	YEAR 8	Term 3

Week 1: What Are

What are the Three Macronutrients?

1 ....

2 ....

3 ....

Week 2: Proteins

What are the **5 reasons** for protein?

1 ....

2 ....

3 ....

4 ....

5 ....

Week 3: Carbohydrate

What are the **two types of carbohydrate?**

1...

2...

Why does the body need carbohydrate?

1...

2...

3...

Week 4: Fats

What are the two types of **fat?**

1...

2...

Why does the body need **fats?**

1...

2...

3...

4...

5...

Week 5: Fats (Continued)

Where would you find **Saturated Fat?**

Where would you find un**Saturated Fat?**

Week 6: Why Do We Need Macronutrients?

Why Do We Need Macronutrients?