Knowledge Organiser

Year 7 Autumn 2 2026

"There is no end to education. It is not that you read a book, pass an examination, and finish with education. The whole of life, from the moment you are born to the moment you die, is a process of learning."

Jiddu Krishnamurti



YEAR 7 KNOWLEDGE ORGANISER: THE HOUSE WITH CHICKEN LEGS

CHARACTERS

Marinka – A young girl who lives with her grandmother Baba. Baba is the guardian of the gate and tells Marinka it is her destiny to follow in her footsteps.	**Baba - Marinka's grandmother. She is a guardian which means she guides the dead through the gate to the stars.**
Jack - A tame bird who is Marinka's pet and her closest friend.	**Benjamin - A living boy who enjoys speaking to Marinka when she is staying near his village.**
Benji – A lamb who Marinka looks after for Benjamin.	**Nina – A girl who should pass through the gate but does not.**
Serina – Nina's sister who passes through the gate.	**The House – A walking house with chicken legs which interacts with the people who live there: Baba and Marinka.**

THEMES AND CONTEXT

Russian Folklore: **Russian folklore often features talking animals, enchanted forests and moral lessons.** **Stories usually involve a hero's journey, often with a test of their bravery, honour or wisdom.**	**Baba Yaga:** **Baba Yaga is a mysterious figure in Russian folklore.** **She is often shown as an old, powerful witch.** **She lives in a walking house that has chicken legs and is often shown as flying about on a giant pestle and mortar.**	**Themes:** **Grief and Death:** The "afterlife" is treated as a beautiful, natural transition rather than something scary. **Identity:** Marinka struggles to accept the heritage she was born into. **Belonging:** The story explores the tension between wanting to fit in with normal people and embracing your unique family.

VOCABULARY:

Ethereal – Delicate and otherworldly, often used to describe spirits or magical settings.	**Melancholy** – A deep sadness or sorrow.	**Genre** – A type of film, novel or music, for example rock or science-fiction.
Destiny – The idea of fate or an unavoidable path.	**Defiance** – Open resistance.	**Hesitant** – Unsure or reluctant.
Personification – When a writer gives human qualities to non-human things.	**Vibrant** – Full of life and energy, describing settings or emotions.	**Analyse** – to break a text down into smaller pieces—like characters, words, or settings—to learn *how* and *why* the author put it together.
Simile – When a writer makes a comparison between two things using “like a” or “as a”	**Transient** – Temporary or not lasting long.	**Characterisation** – the way an author or a playwright describes or shows what a character is like.
Metaphor – When a writer makes a direct comparison between two things.	**Apprehensive** – Feeling anxious or uneasy about something.	**Impetuous** - Acting quickly without thinking, often recklessly.

MATHS KNOWLEDGE ORGANISER – YEAR 7 TERM 2

	Topic	Information	Examples
1	Factor	A number that **divides exactly** into another number without a remainder.	The factors of 18 are: $1, 2, 3, 6, 9, 18$
2	Multiple	The result of multiplying a number by an integer. The **times tables** of a number.	The first five multiples of 7 are: $7, 14, 21, 28, 35$
3	Highest Common Factor (HCF)	The **biggest** number that **divides exactly** into two or more numbers.	The HCF of 6 and 9 is 3 because it is the biggest number that divides into 6 and 9 exactly.
4	Lowest Common Multiple (LCM)	The **smallest** number that is in the **times tables** of each of the numbers given.	The LCM of 3, 4 and 5 is 60 because it is the smallest number in the 3, 4 and 5 times tables
5	Square Number	The number you get when you **multiply a number by itself**	**1, 4, 9, 16, 25, 36, 49, 64, 81, 100, 121, 144, 169, 196, 225…** $9^2 = 9 \times 9 = 81$
6	Square Root	The **number you multiply by itself** to get another number. The reverse process of squaring a number	$\sqrt{36} = 6$ because $6 \times 6 = 36$
7	Prime Number	A number with **exactly two factors**. A number that can only be divided by itself and one.	The first ten prime numbers are: $2, 3, 5, 7, 11, 13, 17, 19, 23, 29$
8	Fraction of an amount	**Divide** by the **denominator**, **times** by the **Numerator**	Find $\frac{2}{5}$ of £60 $60 \div 5 = 12 \quad 12 \times 2 = 2$
9	Equivalent Fractions	Fractions which represent the **same value**.	$\frac{2}{5} = \frac{4}{10} = \frac{20}{50} = \frac{60}{150}$ $etc.$
10	Simplifying Fractions	Divide the numerator and denominator by the **highest common factor**.	$\frac{20}{45} = \frac{4}{9}$

Science Y7 Cells and Organisation Term 1

'Multi' means many; 'uni' means one.
Multicellular organisms contain many cells; **unicellular** organisms are made of only one or a single cell.

Organelles are parts of cells that have specific functions (jobs).

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Cells are the building blocks of living things.

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Groups of similar cells form a **tissue**.

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Different tissues work together to make up an **organ**.

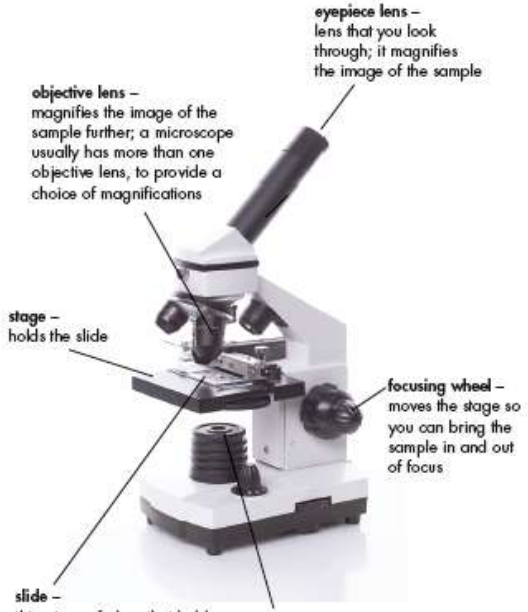
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Organs work together to make an **organ system**.

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Organ systems work together to form **organisms**.

A **light microscope** is used to **magnify** objects that are too small to see with the unaided eye. With a light microscope, we can observe microscopic organisms, such as bacteria, and inside cells to see the cell parts and organelles.



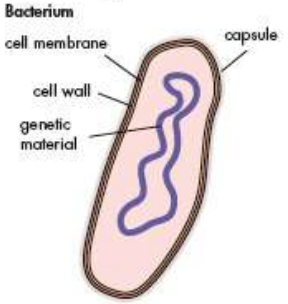
Electron microscopes allow much greater magnification than light microscopes. They are bigger and more expensive than light microscopes. They use a beam of electrons to form a very detailed image of a sample.

Organisms can be classed into two groups based on how their genetic material is stored.

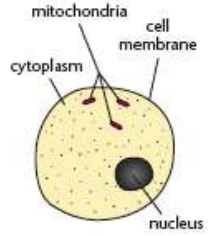
Prokaryotes:
- thought to be the first organisms on Earth
- all are unicellular
- don't have a nucleus
- have very few organelles
- example: bacteria.

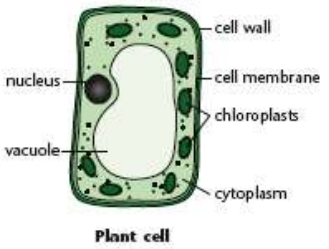
Eukaryotes:
- usually bigger and more complex than prokaryotes
- some are unicellular, most are multicellular
- genetic material is stored in a nucleus
- have other organelles, such as mitochondria
- examples: animals, plants, fungi, amoeba.

Unicellular organisms are simply a cell with organelles working together. Unicellular organisms are adapted in different ways. Examples are:
- **bacteria** – there are many types of bacteria but all have no nucleus
- **algae** – these are plant-like and contain chloroplasts to make their own food
- **yeasts** – these are fungus-like and absorb nutrients from their surroundings.



Animal cells and plant cells have some cell parts or organelles in common but some differences too. This is because the cells have different functions.





Key vocabulary	
algae	a unicellular organism that has a nucleus and contains chloroplasts for photosynthesis
bacterium	a simple unicellular organism; some bacteria can cause illness
capsule	structure that covers the outer layer of the cell wall of a bacterium
cell	the 'building block' that all living things are made from
cell membrane	the layer around a cell that controls substances entering and leaving the cell
cell wall	the tough outer layer of a plant cell
chloroplast	a structure in plant cells where photosynthesis takes place
cytoplasm	the main component of a cell; the place where reactions take place
electron microscope	an instrument that produces a magnified, detailed image of a sample using a beam of electrons
eukaryote	an organism whose cells store genetic material in a nucleus
genetic material	material that transmits information from one generation to the next during reproduction
light microscope	an optical device used to see magnified images of tiny objects and structures
magnify	to make something look bigger
mitochondria	the structures in a cell that produce energy (by respiration)
multicellular	made of many cells
nucleus	the part of a cell that contains the genetic material
organ	a collection of tissues that work together to perform a function
organelle	a structure in a cell with a specific function (job)
organism	a living thing
organ system	organs that coordinate with one another in body processes
prokaryote	a unicellular organism that has no nucleus
tissue	a collection of body cells that work together to carry out a task
unicellular	made of one cell
vacuole	a bubble of water and nutrients in a plant cell
yeast	a unicellular fungus

Science Y7 Cells and Organisation Term 1

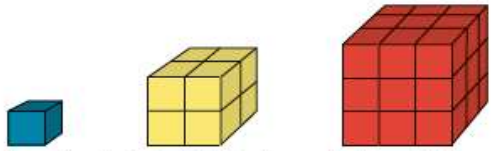
Cells in any organism start out exactly the same: these are called **stem cells**. These cells then grow and change their structure to adapt to a certain function. We say the cells become **adapted** and **specialised**.

Movement of substances in and out of cells:

- controlled by the cell membrane
- substances such as glucose and oxygen pass into cells
- waste products such as carbon dioxide and urea pass out of cells
- only some substances allowed through the cell membrane, so it is a **semi-permeable membrane**.

How quickly diffusion happens depends on several factors or **variables**:

- temperature – the higher the temperature, the faster the rate of diffusion
- concentration of particles – the greater the difference in concentration between the two sides of the cell membrane, the faster the rate of diffusion
- **surface area**-to-**volume** ratio – the higher the ratio for a cell, the faster the rate of diffusion.



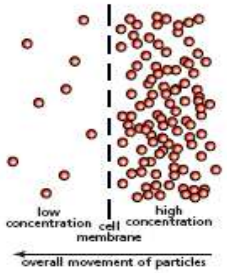
The smaller cube has the highest surface area-to-volume ratio; this means that diffusion can happen at a faster rate across smaller cells than larger cells.

surface area of a cube = area of one side × number of faces

volume of a cube = length × breadth × height

surface area-to-volume ratio = surface area ÷ volume

Diffusion is the movement of substances (in the form of liquid or gas particles) from an area of high **concentration** to an area of lower concentration, until the concentration is equal throughout. For cells, diffusion occurs across the cell membrane when the concentration of a substance inside the cell is different to the concentration of that substance outside the cell.



Specialised animal cells include **sperm cells**, **muscle cells**, **nerve cells**, **red blood cells** and **egg cells**. All these cells have a nucleus, cell membrane and cytoplasm, but they look very different.

Sperm cells have a tail to move them and a large head containing a nucleus (this contains the genetic material).



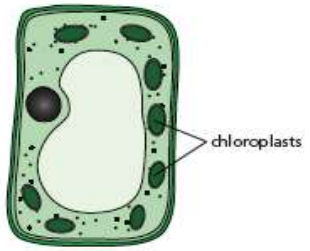
Nerve cells have long extensions of cytoplasm that allow them to transmit impulses around the whole body.



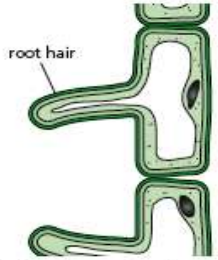
Muscle cells are made of protein fibres that can expand and contract and have lots of mitochondria to provide energy for movement.



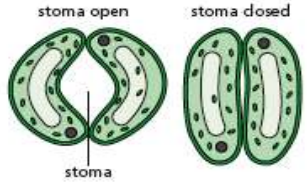
Specialised plant cells include upper **leaf cells**, **root hair cells** and **guard cells**. Each is adapted to its function (job).



Leaf cells contain chloroplasts to absorb energy transferred from sunlight for photosynthesis.



Root hair cells have long extensions, called root hairs, that absorb water into the roots. They do not have chloroplasts, because chloroplasts are needed to absorb energy transferred from sunlight and these cells are not exposed to sunlight.



Guard cells can change shape to open a space to allow gas to pass into and out of the leaf.

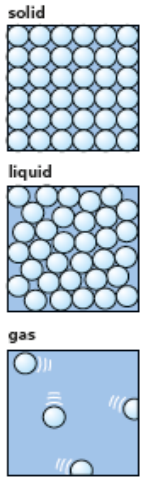
Key vocabulary	
adapted	having special features that help with a specific function (job)
concentration	the amount of something per unit volume, for example, sugar dissolved in water
diffusion	particle movement that causes particles in a liquid or gas to spread out
egg cell	the female sex cell in animals
guard cell	a specialised leaf cell, found on either side of a stoma (pore), that controls the opening and closing of the stoma
leaf cell	a specialised cell within a leaf; some are specialised for photosynthesis, for example
muscle cell	a specialised body cell that makes up muscle tissue
nerve cell	a specialised body cell that transmits information around the body in the nervous system
red blood cell	a specialised cell in the blood that carries oxygen
root hair cell	a specialised plant cell found on plant roots
semi-permeable membrane	a membrane that allows some, but not all, particles to pass through
specialised cell	a cell that has features that help with a specific function (job)
sperm cell	the male reproductive cell of an animal
stem cell	an unspecialised body cell that can develop into another, specialised cell
stoma	the pores on the underside of a leaf, surrounded by guard cells
surface area	area of the outer surface of an object
variable	something that increases or decreases over time or has a different value in different situations
volume	amount of space an object takes up

Science Y7 The particulate nature of matter Term 1

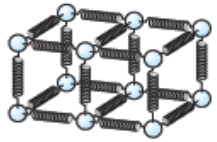
All **matter** is made from **particles**, which are arranged in the different **states of matter**.

- In solids, the particles vibrate in their fixed positions.
- In liquids, the particles move randomly from their positions, but are always in contact with other particles.
- In gases, the particles move about randomly and very quickly, widely separated but colliding with other particles.

Temperature affects how quickly the particles move. At higher temperatures, particles in a solid vibrate faster, while in liquids and gases particles move around faster.



The particles in a solid have very strong, attractive forces between them, which hold the particles in their positions.

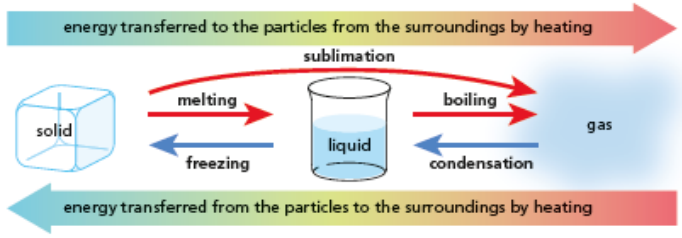


The forces between the particles in liquids are still strong, but not as strong as in solids. Gases have the weakest forces between particles.

When gas particles or liquid particles move, they collide with other particles and also with the sides of the container they are in. **Pressure** is a measure of the average force of these collisions over the area of the container's sides. The standard units of pressure are **kilopascals (kPa)**.

State of matter	solids	liquids	gases
Shape	fixed shape and cannot flow because the particles cannot move from their fixed positions	flow and take the shape of their container because the particles can move past each other	flow and fill their container because the particles can move around quickly in any direction
Compression	cannot be **compressed** as the particles are close together in a fixed position	cannot be compressed because their particles are close together and there are no spaces for them to move into	can be compressed because the particles are far apart with space between them for particles to move into

The change from a solid to a liquid or a gas, and from a liquid to a gas, are reversible changes. They are called **physical changes**. When materials are heated or cooled, they may change from one state to another. Water freezes to become ice at 0 °C and boils to become a gas at 100 °C.



Boiling only happens at the **boiling point**, and the whole liquid turns into a gas. The particles gain enough energy to leave the liquid.

Evaporation occurs at any temperature between the melting point of a liquid and its boiling point. It only happens at the surface of the liquid. Some of the particles gain enough energy to leave the surrounding particles and become a vapour.

Atoms are the smallest parts of all substances. We can represent an atom by writing its element name, writing a symbol, or drawing a simple circular particle. John Dalton was the first person to propose using particles to represent atoms.



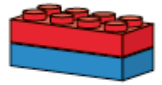
Some atoms can chemically bond together to form **molecules**. Here is a molecule of hydrogen and a molecule of oxygen.



Elements contain only one type of atom. Most elements are metals. Each element is identified by a unique symbol, which always begins with a capital letter.

Compounds are made from the atoms of more than one element, chemically bonded together. Compounds have different properties from the original elements.

We use the chemical symbols of the elements to write the **chemical formula** of the compound, which represents the **ratio** of atoms in each unit of the compound.



1 red brick and 1 blue brick, the ratio is 1:1
This model could represent one unit of the compound copper oxide, CuO



2 red bricks and 1 green brick, the ratio is 2:1
This model could represent one molecule of the compound carbon dioxide, CO_2

Key vocabulary

atom	the basic 'building block' of an element; it cannot be chemically broken down
boiling	the process that happens when a liquid changes state and turns into a gas, by reaching its boiling point
boiling point	the temperature at which a liquid changes state to a gas (or at which a gaseous substance condenses)
chemical formula	chemical symbols and numbers that show which elements, and how many atoms of each, a compound is made up of
collision	when objects hit each other with force
compound	atoms of more than one element chemically bonded together
compress	to make smaller by squashing or pushing together
condensation	the process that happens when a gas changes into a liquid when the temperature drops to the boiling point; for example, when water vapour condenses to form liquid water
element	a substance made of only one type of atom
evaporation	the process that happens when a liquid changes to a gas at the surface of the liquid; for example, when water evaporates to form water vapour
freezing	the process in which a liquid turns into a solid by being cooled to its melting point; for example, when water freezes to form ice
kilopascal (kPa)	unit of pressure
matter	anything that takes up space and has mass
melting	the process in which a solid turns into a liquid by being heated to its melting point; for example, when ice melts to form water
molecule	two or more atoms held together by strong chemical bonds
particle	a very small part of a material, such as an atom or a molecule
particle model	a scientific model in which all matter is made of a large number of very small particles; used to explain the properties of solids, liquids and gases
physical change	physical changes are reversible and include dissolving and changes from one state (solid, liquid or gas) to another
pressure	the average force on a certain area
ratio	a link between two values; for example, if the first value is twice the second value, the ratio is 2:1
state of matter	solid, liquid or gas
sublimation	the process that happens when a solid turns into a gas when heated, without becoming a liquid first
temperature	a measure of how hot an object is; the unit is normally degrees Celsius (°C)
viscosity	the resistance to flow

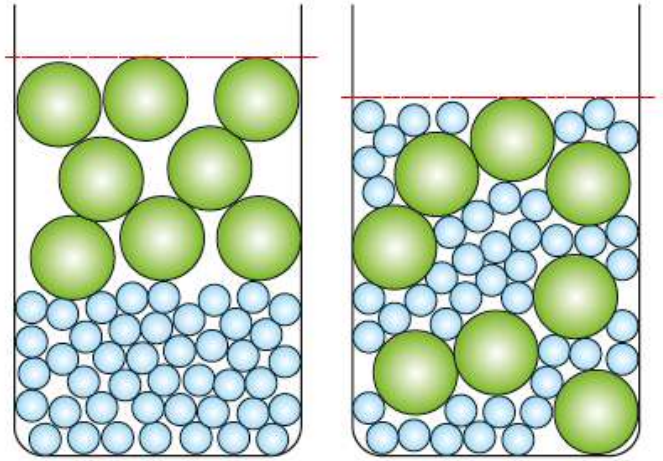
Science Y7 The particulate nature of matter Term 1

The law of **conservation of mass** means that matter cannot be destroyed or created, only transformed. This means that when a reaction takes place, the mass of the reactants always equals the mass of the products. This is also true when substances change state, when solutions are mixed together, or if a solute is dissolved in a solvent to form a solution.

Sometimes there appears to be a change in mass during a physical or **chemical change**. This change in mass can usually be explained because one of the reactants or products is a gas.

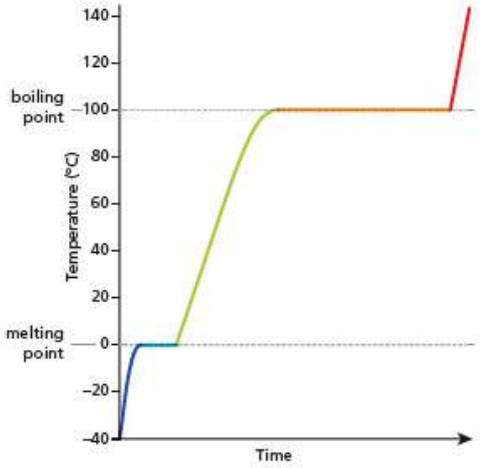
In a chemical reaction, the mass of the products may be less than expected because one of the products is a gas that has escaped into the surrounding air. If the mass of the products is more than expected, then one of the reactants is a gas. The gas atoms have chemically bonded to one of the other reactants.

When alcohol and water are mixed the volume is less, but the mass stays the same. This is because there are the same number of particles, but the mixture takes up less room



When a solid is heated, its temperature increases until it reaches its **melting point**. At the melting point, all the **energy transferred** by heating is used to overcome the forces between the particles, until the solid changes state. The temperature remains constant until all the solid has changed state. This 'extra heat' needed for the change of state is called **latent heat**.

This graph shows what happens to the temperature as an ice cube is heated. At the melting point, 0 °C, the temperature remains constant until all the substance has changed state from a solid to a liquid. The temperature also remains constant at the boiling point of 100 °C, until all the water has changed state from a liquid to a gas.



Heating causes solids, liquids and gases to **expand**. This is called **thermal expansion**. It means they take up more space when they are hot compared to when they are cold. Gases expand more than solids and liquids.

Diffusion is the movement of particles from an area of high **concentration** to an area of low concentration, until the concentration is equal throughout.



Diffusion happens because of the movement of particles in a gas or a liquid. There is hardly any diffusion in solids because the particles cannot move freely. Gas particles move faster and further than liquid particles, so diffusion in gases occurs faster than in liquids.

Key vocabulary	
accurate	an accurate measurement is one that is close to the true value
chemical change	an irreversible change caused when one substance combines with another to form a new substance, or one substance breaks down to form two or more others
concentration	a measure of the number of particles in a certain volume or space
concentration gradient	the difference in concentration between two areas
conservation of mass	matter cannot be destroyed or created, only transformed; this means the total mass does not change during physical changes or chemical reactions
diffusion	the movement of particles from a higher concentration to a lower concentration
energy transfer	the passing on of energy from one energy store to another
expand	get bigger
latent heat	the heat needed to change the state of a substance
melting point	the temperature at which a solid changes state to a liquid (or a liquid substance freezes)
precise	measurements are precise if they are clustered together around the mean
repeatable	measurements are repeatable when the same person carries out the same experiment under the same conditions and gets similar results
thermal expansion	when particles in a solid or liquid gain enough energy to occupy more space
true value	the actual value that a measurement should be

Science Y7 Forces Term 1

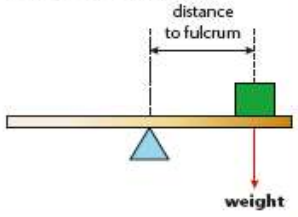
A force applied to an object can stretch, **compress**, twist or try to snap it, or cause it to speed up, slow down or change its direction of motion.

Forces can be **contact** forces, such as water or **air resistance**, or **non-contact forces**, such as gravity.

Forces can be shown by arrows. The direction of the arrow shows the direction of the force and the length of the arrow indicates the size of the force.

Hooke's Law says that if an object is loaded then the **extension** will be proportional to the **load** as long as the **elastic limit** is not exceeded.

The **moment** of a force is its turning effect. Its size is the force multiplied by the distance from the turning point.

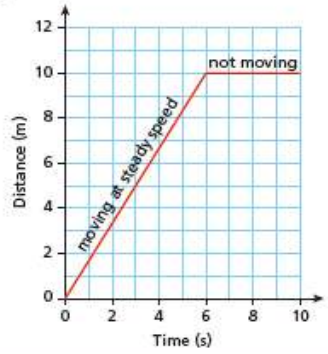


Speed is calculated using the equation:

speed = distance ÷ time

The average (mean) speed for a journey is the total distance divided by the total time.

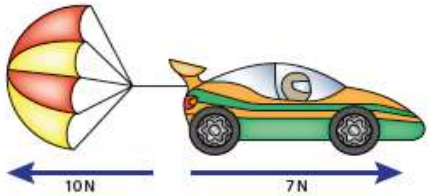
A journey can be displayed on a **distance–time graph**, with distance on the vertical axis and time on the horizontal axis. The gradient of the line shows the speed.



Key vocabulary

air resistance	frictional resistance when something moves through the air
elastic behaviour	when a material returns to its original shape and size after a stretching or compressing force is removed
effort	the force applied when using a machine
elastic limit	the maximum force that can be applied for a material to remain elastic; if this limit is exceeded the extension will no longer be proportional to the force
extension	the amount by which an elastic material has got longer
friction	a force that opposes movement
fulcrum	the point about which something turns; also called a pivot
lever	a machine that either increases the size of a force or the distance over which the force acts; this is done by using the turning effect of a force around a fulcrum (pivot)
moment	size of turning effect of a force around a fulcrum (pivot) – the direction of the moment can be clockwise or anticlockwise
newtonmeter	a device that uses the stretching of a spring to measure force
normal contact force	the force that acts when an object touches a surface; it is at right angles (90°) to the surface
relative speed	movement of one moving object in relation to another object
speed	how fast something travels; measured in metres per second (m/s)
weight	the force of gravity acting on an object

An **unbalanced force** is needed to get an object to move, to stop it from moving, to change its speed or alter its direction. This change will depend on the size and direction of the different forces.



If all the forces are **balanced**, a moving object will continue at the same speed and in the same direction.

Objects float because of balanced forces. The weight of the object is balanced by the **upthrust** provided by the water.



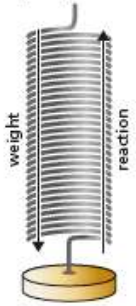
Pressure is calculated using the equation

pressure = force ÷ area

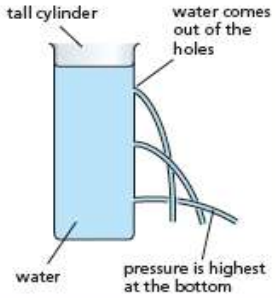
If the force is measured in **newtons** and the area in square metres the pressure will be in newtons per square metre (N/m²).

The higher in the atmosphere, the lower the **atmospheric pressure** on a surface. This is because the pressure is caused by the weight of the air above that surface.

If opposing forces act on an object they may hold it in **equilibrium**. An example of this is a weight suspended on a spring.



The deeper down in a liquid, the greater the pressure becomes, because there is more liquid above that point.



Key vocabulary

atmospheric pressure	the pressure on a surface exerted by the weight of air above that point
balanced forces	forces on an object that act in opposite directions and where the total force in one direction is equal in size to the total force in the opposite direction
equilibrium	a state of rest or balance due to opposite forces being equal
gravitational force	the force that pulls masses towards one another
newton (N)	the standard unit of force
pressure	the force acting divided by the area over which the force acts; measured in N/m²
unbalanced forces	forces acting on an object where the total force acting in one direction is not equal in size to the total force acting in the opposite direction
upthrust	the upward force that a fluid exerts on an object in it
work done	energy transferred by a force moving a load, measured in joules (J)

Science Y7 Energy Term 2

Stored **energy** is called **potential energy**. Energy can be stored in several different ways:

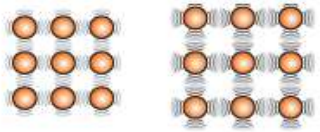
- **chemical potential energy** (for example, in **fuels** and food)
- **elastic potential energy** (for example, in a stretched or compressed spring)
- **gravitational potential energy** (for example, an apple on a tree)
- **kinetic energy** (for example, a moving car)
- **thermal energy** (for example, a hot cup of tea) – it is responsible for the temperature of an object.

Energy transfer is the passing on of energy from one store to another. Energy can be transferred between stores in various ways including heating, doing mechanical work, by an electrical current or by waves.

We measure energy in **joules (J)** or **kilojoules (kJ)**.

Power is the rate at which energy is transferred. It is measured in **watts (W)** and **kilowatts (kW)**.

Different **foods** contain different amounts of energy per gram.



Thermal (heat) energy is transferred through a material by **conduction**. The vibrating particles within the material transfer energy by colliding with their neighbours. A material that conducts heat is called a **thermal conductor**, a material that does not is called a **thermal insulator**.

Electricity can be generated using **renewable energy** sources, such as the wind, or **non-renewable energy** sources, such as gas.

Gas and electricity companies calculate the cost of home energy use using the unit **kilowatt-hours (kW h)**.



The cost of using an electrical appliance can be calculated using the equation:

cost = power (kW) × time (hours) × price (per kWh)

Key vocabulary

conduction	the transfer of energy by passing on energy to nearby particles
energy	the potential to do work or produce heat
energy transfer	the passing on of energy from one energy store to another
food	a substance that provides living things with nutrients and energy
fuel	a material that is burned to release its stored energy
joule (J), kilojoule (kJ)	unit of energy; 1000 J = 1 kJ
kilowatt-hour (kW h)	the energy transferred in 1 h by an electrical appliance with a power rating of 1 kW
non-renewable energy	energy from a source, such as a fossil fuel, that will run out because it cannot be replaced quickly enough
power	amount of energy that something transfers each second; measured in watts (W)
radiation	energy given out in the form of a wave; it can pass through a vacuum
renewable energy	energy from a source that will not run out, such as the sun or wind
temperature	the measure of how hot or cold an object is; unit is degrees Celsius (°C)
thermal conductor	a material that allows energy to pass through it quickly by the process of thermal conduction
thermal insulator	a material that does not allow energy to pass through it quickly by the process of thermal conduction
watt (W), kilowatt (kW)	unit of power; 1000 W = 1 kW; 1 W is equal to a joule per second (1 J/s)

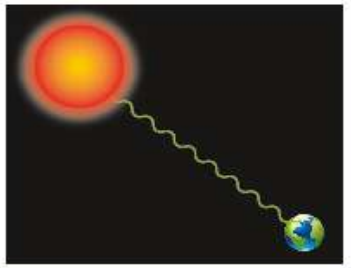
When energy is transferred, not all of the energy is useful for the intended purpose. We say that any energy transferred to a store where we cannot use it is **wasted energy**. This can happen, for example, when friction heats up two surfaces that rub together, or when a hot object heats up the air around it.



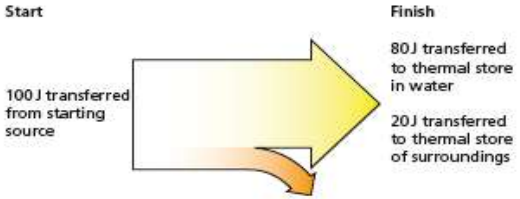
When energy is being transferred, we can keep track of the increase or decrease in the amounts of energy in each store by drawing an **energy transfer diagram**.

Whenever energy is transferred no energy is ever 'lost' or 'used up'. The quantity of energy stored before the change is the same as the quantity stored after the change. This is called the **law of conservation of energy**.

Thermal (heat) energy can be transferred from a hotter object to a cooler one by thermal **radiation**. The energy is transferred as a wave, and does not require the presence of particles to travel through.



The energy supplied to and the energy outputs from a system can be represented on a **Sankey diagram**. This shows which of the outputs are useful. The width of each arrow represents how much energy is transferred, so the diagram also shows the proportion of the input energy that is useful and that the total amount of energy is conserved.



Key vocabulary

chemical potential energy	the energy store that is emptied during chemical reactions
elastic potential energy	the energy store of an elastic object when it is stretched or compressed
energy transfer diagram	a diagram with arrows showing how energy is transferred between energy stores
gravitational potential energy	the energy store of an object because of its height above the ground
kinetic energy	the energy stored in a moving object
law of conservation of energy	energy cannot be created or destroyed, only stored or transferred; this means that the total energy is the same before and after a change
Sankey diagram	an energy transfer diagram that shows what proportion of the input energy is transferred as useful or as wasted output
thermal energy	the energy store filled when an object is warmed up

Year 7 Geography Half Term 2 – Industry and Development– Knowledge Organiser

WEEK 1: Sort the jobs below into each sector that they belong to. You can do this by making the table below in your Homework Books

Primary	Secondary	Tertiary	Quaternary

- Miner
- Waiter
- Shopkeeper
- Doctor
- Scientist
- Delivery driver
- Teacher
- Builder
- Computer game coding
- Farmer
- Factory worker
- TV host

WEEK 2: Research and create a mind map on **Thailand**. Information you should include is below. Use the internet to help.

- Where is the country?
- What is their flag?
- What is their GNI?
- Are they a HIC/NEE/LIC?
- What is quality of life like?
- Why do people go there?
- What jobs do people do?
- Would you live there and why?

WEEK 3: Write a PEEL paragraph for the opportunities and challenges **Nike** gives people.

How to PEEL!

Point – make your point and keep it brief!

Evidence – give some supporting examples (facts and figures).

Explain – explain why is this an opportunity or challenge?

Link – back to your point or the question.

Opportunities with Nike:

Provides jobs to thousands of people all year round.

People are able to buy food, water and shelter with their wages.

The skills that people gain from working there can be used in lots of other jobs.

The factories help to make the country richer by providing income and tax.

Challenges with Nike:

The people that work there are not paid a very high wage.

Working conditions are bad; it is dirty and unsafe in the factories.

Most of the money from Nike sales goes to the CEO and not the workers.

The shoes are made in a way that is not good for the environment.

WEEK 4: Use the information below to decide if the country is or is not developed. Make sure to use data and information in your answer.

REMEMBER: low birth and death rate is better

I think China **is / is not** well developed.

I think this because the GNI is _____. This shows that they are a **HIC / LIC.**
This is **good / bad** because…

Another reason is that they have a **high / low** literacy rate, this means that…

China development data	
GNI	$24,360 per person per year
BIRTH RATE	1.2 per 1000 women
DEATH RATE	7.8 per 1,000
LIFE EXPECTANCY	78
LITERACY RATE	97%

WEEK 5: Sort the information below into the correct column. Is each a **physical** or **human** cause of uneven development?

Physical	Human

- Colonisation
- Earthquake
- Tsunami
- War
- Flood
- Bad government
- Poor trade links
- Can't grow crops
- Overpopulation
- Drought
- Landlocked
- Low employment rate

WEEK 6: Create a fact file page about a charity of your choice that supports the development of LICs in the world. The box below helps you with what to include.

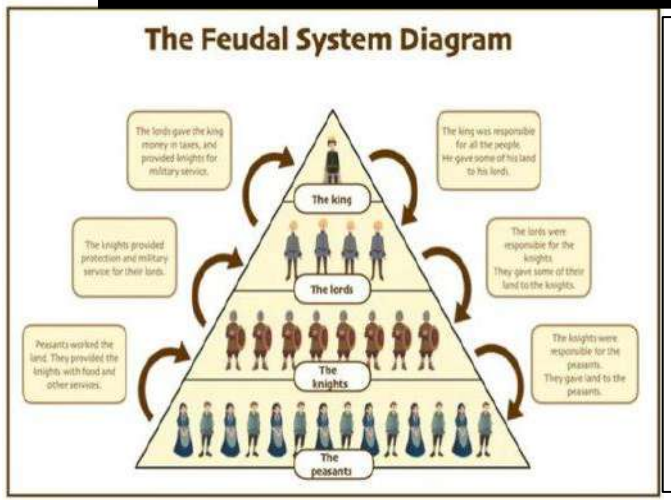
- Charity name
- What do they do?
- How do they help people?
- Where are they based?
- Why did it start?
- How much money have they recently raised?
- How do they raise money?
- Are any celebrities linked with the charity?
- What is their logo?
- Why did you pick this charity?

Year 7- Did the Normans bring a 'truckload of trouble'? Knowledge Organiser

1: Key words

Word	Meaning
Norman Conquest	William of Normandy's takeover of England in 1066
Feudal System	A system where land was exchanged for loyalty and military service
Baron	A Norman noble who received land from the king
Motte and Bailey	A wooden Norman castle
Rebellion	A revolt against those in power
Harrying of the North	William's campaign of destruction in northern England
Domesday Book	Survey of England completed in 1086
Aristocracy	Wealthy nobles at the top of society
Peasantry	Ordinary people who farmed the land
Resistance	Opposition to Norman rule

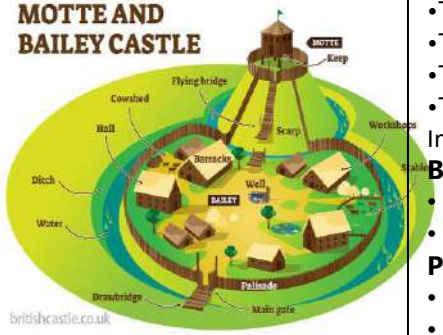
2. The Feudal System



Change or Continuity?

Change
•Norman barons replaced many Anglo-Saxon earls.
•William claimed ownership of all land.
Continuity
•Society remained hierarchical.
•Peasants continued farming.

3. Castles



Why were castles built?
•To control England.
•To defend Norman rule.
•To act as military bases.
•To discourage rebellion.
Impact
Benefits
- Improved defence
- Protected local areas

Problems
- Symbol of Norman control
- Built on Anglo-Saxon land
- Intimidated local people

4. Resistance to Norman rule

Resistance to Norman Rule
Edwin and Morcar (1068)
•Anglo-Saxon earls rebelled.
•William responded by building castles.
•Rebellion collapsed.
Edgar Aethling
•Supported rebellions in the North.
•Continued resistance to William.
Hereward the Wake (1070–71)
•Led resistance at Ely.
•Eventually defeated.

5. How much did England change under the Normans?

Change	Continuity
All land in England now belonged to the king. After 1066, barons could not dominate huge areas of land and swore fealty to the king. Slavery no longer existed. Thegns and earls replaced with about 200 barons or bishops.	Both thegns and knights both promised to offer military service. There were some free men but the majority were bound to a lord. Peasants working on the land still had to pay their lord a tax of their produce. The King and the Church owned most of the land. Under both systems there was a hierarchy - what was expected of individuals was based on their status, and what they needed to do for the people above them and below them in the system.

6. Arguments For and Against Schama

For	Against
• Anglo-Saxon nobles lost land. • Castles symbolised Norman control. • Harrying of the North caused suffering. • New laws were harsh. • Norman barons dominated England.	• Most peasants continued farming. • Villages survived. • Existing systems were adapted. • Some Anglo-Saxon practices continued. • England remained largely agricultural. .

French Knowledge Organiser – Year 7 - Half Term 2

Homework 1	
aujourd'hui	*today*
c'est	*it is*
non	*no*
demain	*tomorrow*
mon anniversaire	*my birthday*
janvier	*January*
février	*February*
mars	*March*
avril	*April*
mai	*May*
juin	*June*
juillet	*July*
août	*August*
septembre	*September*
octobre	*October*
novembre	*November*
décembre	*December*
le premier	*the first*

Homework 2	
Je suis…	*I am…*
bavard(e)	*chatty*
fort(e)	*strong*
intelligent(e)	*intelligent*
patient(e)	*patient*
sportif / sportive	*sporty*
créatif / créative	*creative*
drôle	*funny*
sympa	*kind*
timide	*shy*
positif / positive	*positive*
actif / active	*active*
amusant(e)	*funny*
différent(e)	*different*
négatif / négative	*negative*
intéressant(e)	*interesting*

Homework 3	
J'ai les yeux…	*I have … eyes.*
bleu(s)	*blue*
marron	*brown*
vert(s)	*green*
gris	*grey*
noir(s)	*black*
J'ai les cheveux…	*I have … hair.*
blond(s)	*blonde*
brun(s)	*brown*
roux	*red / auburn*
court(s)	*short*
mi-long(s)	*mid-length*
long(s)	*long*
frisé(s)	*curly*
tressé(s)	*braided*
raide(s)	*straight*

Homework 4	
Singer	Le chanteur / La chanteuse
Musician	Le/la musicien(ne)
Footballer	Le footballeur / la footballeuse
Welsh	Gallois(e)
British	Britannique
Swiss	Suisse
Algerian	Algérien(ne)
Canadian	Canadien(ne)
Moroccan	Marocain(e)
Belgian	Belge
Senegalese	Sénégalais(e)
Italian	Italien(ne)

Homework 5	
A / An	Un (m.) / Une (f.)
Some	Des
I have	J'ai
A cat	Un chat
A dog	Un chien
A rabbit	Un lapin
A fish	Un poisson
A bird	Un oiseau
A guinea pig	Un cochon d'Inde
A mouse	Une souris
A spider	Une araignée
Who is called	Qui s'appelle
I would like	Je voudrais
I don't have any pets	Je n'ai pas d'animal

Homework 6	
In my family	Dans ma famille
There is/are	Il y a
My	Mon/ma/mes
(Step-)father	Le (beau-) père
(Step-)mother	La (belle-)mère
Grandfather	Le grand-père
Grandmother	La grand-mère
Grandparents	Les grands-parents
Uncle	L'oncle (m.)
Aunt	La tante
Cousin	Le/la cousin(e)
(Half-/step-) brother	Le (demi-) frère
(Half-/step-) sister	La (demi-) sœur

GERMAN YEAR 7
HT2 into HT3

Homework 1:

1. "Can you put THE, MY or A in front of the word = a noun = a capital letter at the start of the word !!
2. Many questions start with a question word. Here are the German question words starting with W:
Wer? Who?/ **Wann?** When?/ **Wie?** How?/ **Wie viele?** How many?/ **Was?** What?/
Wo? Where?
3. If you're not using a **W** question word, you can ask a question by putting the verb first e.g. Findest du deine Schwester freundlich? i.e. verb (1st) + subject (2nd) + rest of sentence (3rd)
4. Ich habe eine Schwester = I have a sister BUT Ich habe **k**eine Schwester = I **do not** have a sister
5. Ich habe einen Bruder – Ich habe **zwei** Br**ü**der
6. Ich habe eine Schwester – Ich habe **zwei** Schwester**n**

Homework 2:

1. **haben to have**		8. **sein**	**to be**
2. ich habe	I have	9. ich bin	I am
3. du hast	you have	10. du bist	you are
4. er hat	he has	11. er ist	he is
5. sie hat	she has	12. sie ist	she is
6. wir haben	we have	13. wir sind	we are
7. sie haben	they have	14. sie sind	they are

Homework 3:

Die Farben **Colours**

1. schwarz	**black**	8. grün	**green**
2. weiß	**white**	9. blau	**blue**
3. grau	**grey**	10. indigoblau	**indigo**
4. braun	**brown**	11. violet	**violet**
5. rot	**red**	12. lila	**purple**
6. orange	**orange**	13. rosa	**pink**
7. gelb	**yellow**	14. bunt	**colourful**
		15. hellblau / dunkelblau	**light blue / dark blue**

Homework 4:

1. **Plural** means more than one of something, such as dogs, cats etc.
2. To form the **plurals** of German words:

add **-e** to end of word	Hund**e**
add **-n**, **-en** or **-nen** to end of word	Katze**n**, Frau**en**, Partnerin**nen**
add **-s** to end of word	Kuli**s**
add an umlaut to the last **a**, **o** or **u** + **nothing**, **-e** or **-er** to the end of the word	**Ä**pfel, St**ü**hl**e**, B**ü**c**her**
add nothing to end of word	Mädchen

Homework 5:

Die Zahlen 20–100 **Numbers 20-100**

1. zwanzig	**twenty**	6. siebzig	**seventy**
2. dreißig	**thirty**	7. achtzig	**eighty**
3. vierzig	**forty**	8. neunzig	**ninety**
4. fünfzig	**fifty**	9. hundert	**hundred**
5. sechzig	sixty	10. einundzwanzig	**twenty-one**
		11. zweiundzwanzig	**twenty-two**

Homework 6:

Nominative: The subject of the sentence

	M	**F**	**N**	**PL**
a	ein	eine	ein	-
my	mein	meine	mein	meine
your	dein	deine	dein	deine
his/ its	sein	seine	sein	seine
her/ its	ihr	ihre	ihr	ihre

Homework 7:

Accusative: The direct object of the sentence

1. After ich habe you need to use einen (masculine), eine (feminine) or ein (neuter) – this is known as the accusative
2. Masculine adjective ending: Ich habe einEN lautEN Bruder.
3. Feminine adjective ending: Ich habe einE schönE Schwester.
4. Neuter adjective ending: Ich habe EIN süßES Kaninchen.

	M	**F**	**N**	**PL**
a	einen	eine	ein	-
my	meinen	meine	mein	meine
your	deinen	deine	dein	deine
his/ its	seinen	seine	sein	seine
her/ its	ihren	ihre	ihr	ihre

Homework 8:

Oft benutzte Wörter	**High-frequency words**
und	**and**
aber	**but**
oder	**or**
ziemlich	**fairly, quite**
sehr	**very**

Knowledge Organiser – Term 2

Spanish

HOMEWORK 1	
En clase	**Classroom**
El/la alumno/a	student
Los deberes	homework
El ejercicio	exercise
La mesa	table
La mesa del profesor / de la profesora	Teacher's desk
La silla	chair
La ventana	window
La puerta	door
La pizarra	board
El ordenador	computer
El proyector	projector
El libro	Book
El cuaderno	Exercise book

Alphabet soNG www.youtube.com/watch?v=9LT9ltzFJTQ

HOMEWORK 3



HOMEWORK 4	
Los países	**Countries**
Australia	Australia
Escocia	Scotland
España	Spain
Estados Unidos	United States
Gales	Wales
Irlanda	Ireland
Inglaterra	England
México	Mexico
Nigeria	Nigeria
Paquistán	Pakistan

HOMEWORK 2	
En mi mochila	**In my school bag**
Tengo …	I have…
No tengo…	I don't have…
un bolígrafo	a pen
un libro	a textbook
un sacapuntas	a pencil sharpener
un cuaderno	an exercise book
un diccionario	a dictionary
un estuche	a pencil case
un lápiz	a pencil
una agenda	a diary /planner
una goma	a rubber
una pluma	a fountain pen
una regla	a ruler

Present tense formation:

1. Take the **infinitive** form of the verb which ends in **-ar, -er or –ir,**
2. **Chop off** the infinitive – **ar, -er or –ir** and
3. **Choose the correct verb ending for the** appropriate subject pronoun: I, you, he, she, we or they.

Spanish verbs have different endings according to who is doing the action.

HOMEWORK 6	
To speak	**HABLAR**
I speak	Habl**o**
You (s) speak	Habl**as**
He/She speaks	Habl**a**
We speak	Habl**amos**
You (pl) speak	Habl**áis**
They speak	Habl**an**

HOMEWORK 5	
La nacionalidad	**Nationality**
¿Cuál es tu nacionalidad?	What nationality are you?
Soy …	I am …
argentino/a	Argentinian
australiano/a	Australian
jamaicano/a	Jamaican
mexicano/a	Mexican
nigeriano/a	Nigerian
español/a	Spanish
irlandés/irlandesa	Irish
inglés/inglesa	English
escocés/escocesa	Scottish
galés/galesa	Welsh
paquistaní	Pakistani
estadounidense	American

YEAR 7 FOOD TECHNOLOGY
KNOWLEDGE ORGANISER

WEEK 1
PERSONAL HYGIENE & FOOD SAFETY

PERSONAL HYGIENE – Keep yourself safe!

1. Wash your hands with warm water and soap for 20 seconds.
2. Wear a clean apean.
3. Tie long hair back.
4. Remove jewellery (no rings or wetches).
5. Cover cuts with a blue waterpreof plaster.
6. Do not cook if you are unwell.

FOOD SAFETY – Keep feed safe!

CONTAMINATION

- Green beand = Fruit and salad
- Brown bound = Root vegetables, (o.g. panions, carrots, sweed, sweteot)
- Yellow boond = Cooked meat
- Red heart and poultry

ALWAYS REMEMBER

- Keep work surfaces clean.
- Keep raw meat away from other fredh.
- Store food in the fridge.
- Cook food thoroughly.

WEEK 2
NUTRITION – EAT A BALANCED DIET

We need different nutrients from the foods we eat to keep our bodies healthy and give us energy.



Carbohydrates	Give us energy.
Protein	Growth and repair of the body.
Fat	Energy, insulation and protects our orgars.
Vitamins	Keep us healthy, help our inumune system and fight infections.
Minerals	Keep us healthy, Examples – calcium (strong bones), nom (healthy blood).

Star tip: Try to eat a variety from all the food groups every day!

WEEK 3
CONDITIONS FOR BACTERIA GROWTH

Bacteria grow best when they have:

WARMTH
Bacteria grow fastest batween 5°C and 63°C. (Danger Zonc)

MOISTURE
Bacteria need moisture to grow.

FOOD
Bacteria need food to grow.

TIME
The larger fert it let out, of more bacteria grow.

NEUTRAL pH
Bacteria grow best in neutral conditions.

- Keep in fridge.
- Cook thoroughly.
- Chill quickly.
- Keep surfaces clean.

WEEK 4
KEY TEMPERATURES

Fridge	0 - 5°C Store food in fridge to keep it safe.
Freezer	-18°C or below Stops stopas growing.
Danger Zone	5 - 63°C Bacteria grow quickly in this range.
Cooking temperature	75°C or above Cook food thoroughly (especially meat, poultny)

WEEK 5
WHAT IS FOOD PROVENANCE?

Food Provenance is knowing, produced and how it gets to our plates.



GROWN	PRODUCED	TRANSPORTED	SOLD	CONSUMED
Where the food is grown or greeed.	Where the food is made or processed.	Where the food is transported to shops.	Where the food is sold.	Where wher we the food at exath.

WHY IS IT IMPORTANT?

- Supports local farmers and busineses.
- Helps environment (lower food miles).
- Helps make healthy choices.

KEY MESSAGE: Good hygiene, safe food, balanced nutrition and where food const from, helps us stay healthy, make better choices, ollles and the planet!

Engineering & Technology – Knowledge Organiser

Year 7 Electronic Product

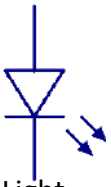
Hwk 1 Identify circuit symbols:


Battery


Resistor


Light Dependent Resistor (LDR)


Diode

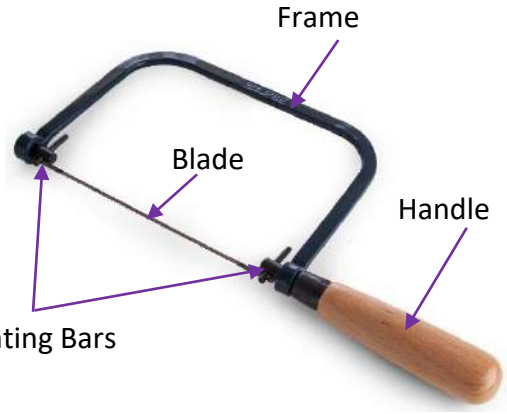

Light Emitting Diode (LED)


Single Pole Single Throw (SPST) Switch


NPN Transistor

Hwk 2

Identify the parts of the coping saw:



Hwk 3

Identify workshop tools & equipment:


Half Round File


Flat File


Round File

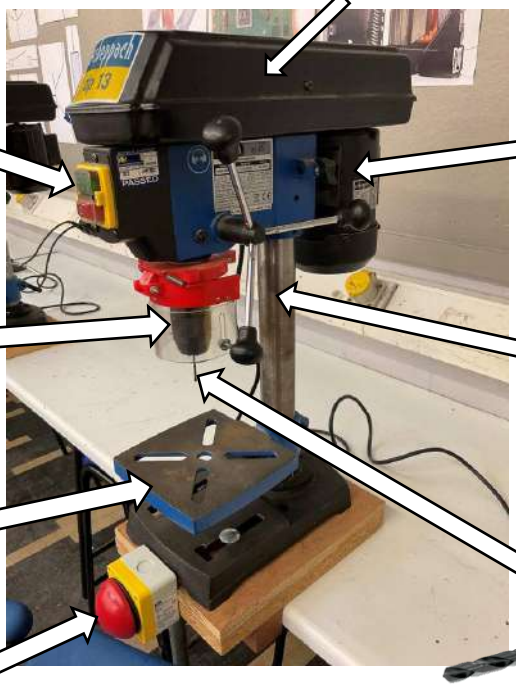

Machine Vice


Wet & Dry

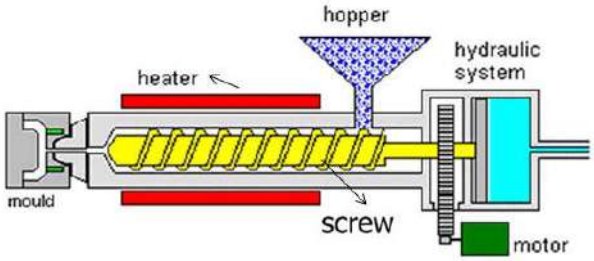

Needle Files

Hwk 4

Identify the parts of the pillar drill:



Hwk 5 Injection Moulding Machine



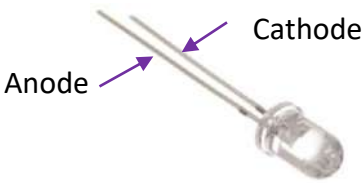
Name the parts of the machine

Watch & LEARN

https://www.youtube.com/watch?v=C3oiy9eekzk


High Impact Polystyrene (Hips)


Acrylic



EXCELLENCE IN EVERYTHING

Engineering & Technology - Knowledge Organiser

Year 7 Graphic Products (Inclusive Design)

Hwk 1 - Learn these terms

Context	The situation we investigate, in order to recognise and understand a problem that needs to be solved
Client	The person or organisation that is paying for your services (rather than a Customer who is buying your product)
Analysis	Investigation of a context or product, to understand its strengths and weaknesses, and recognise areas for improvement
Needs	The fundamental features a product needs in order to function
Wants	The extra features which make the product more appealing
Design Brief	Description of the problem that needs solving, including the key requirements of the solution

Hwk 2 - Investigate these examples of Inclusive Design

Velcro shoe fastening



Automatic doors



Ramp stairs



Braille handrail



All gender toilets



Tactile paving



Big grip cutlery



Adaptive controller



Hwk 3 - Learn and practice these techniques

Isometric	3D drawing style with lines at 30^{O} or vertical (for square shapes)
Crating	A technique of constructing complex shapes from simple boxes or 'crates'
Tonal shading	Shading with different tones of the same colour to indicate the direction of the light source
Rendering	Shading with texture to suggest the material used

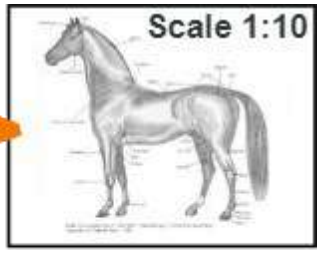
Hwk 4 - Understand how to Draw to Scale

When drawing small or large objects, we often need to change the scale to fit them on a piece of paper. The scale of a drawing is written as a ratio, for example…

- for a small item 4:1 (drawn : real world) means it is drawn 4 times larger
- For a large item 1:20 means it is drawn 20 times smaller ($^{1}/_{20}$th)

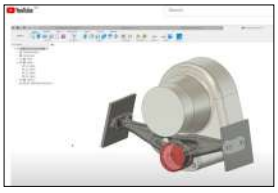


Real Horse
1500 mm high
2000 mm long



Drawn Horse
150 mm high
200 mm long

Hwk 5 - Investigate CAD



Watch & LEARN

CAD (Computer Aided Design)
https://youtu.be/7p_selYYFdE?si=o6g8aB06kBMLGrtc

ExCELLENCE IN EVERYTHING

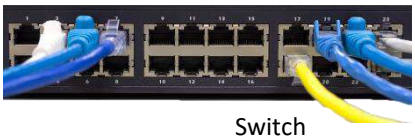
Computing, Engineering Technologies and Nutrition

Computing

Year 7 COMP1

	Key Term	Definition	Examples	
Digital Literacy	Hardware	Physical components of a computer	Keyboard, Mouse, Monitor, Processor.	Homework 1
	Software	The programs that run on the computer.	Word processor, Games.	
	Network	Two or more computers and other devices that are connected together to communicate.	The school network. Star, Bus topologies.	
	Internet	Hardware. A global network of networks.	Servers, Routers, Satellites	
	World Wide Web	Connected web pages accessed on the internet.	BBC web pages.	
E-Safety	Cyberbullying	Bullying other people using electronic devices.	Offensive emails or text messages.	Homework 2
	Digital footprint	The digital trail you leave behind when you have been online. Includes Facebook posts, Instagram pictures, what web sites you have been on.	What comments you have made online.	
	Consequence	The results of an action you have taken – if you work hard you will get good marks!	Achievement Point for great work, X for bad behaviour.	
	Reliability	How trustworthy is the information, is it biased?	The BBC is considered a reliable source for news.	
	Validity	How correct or up to date is the information?	Met Office weather forecast.	
Scratch	Algorithm	A sequence of instructions to perform a particular task.	Input name Output name	Homework 3
	Sequence	Instructions are executed in the order they are written in.	1) Wake up 2) Get dressed	
	Selection	There is a choice in the code of what code to run next.	If Speed > 50 Take picture	
	Iteration	Repeating a set of instructions.	For 10 times, Repeat until score =10	
	Variable	A value that can change.	Age, Shoe Size.	

Homework 4 (identify the following network components)



Switch



Network Interface Card (NIC)

Router





Ethernet cable



Servers

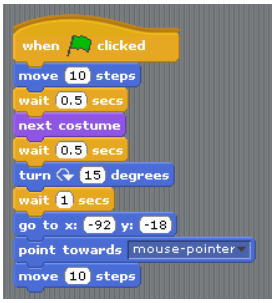


Wireless NIC

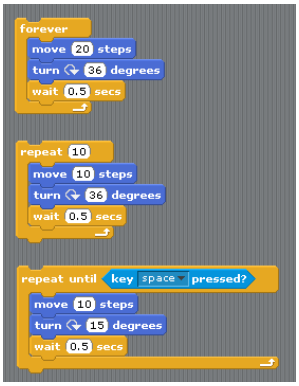
Homework 5
(be able to explain and use the following coding constructs)

SSI in Scratch

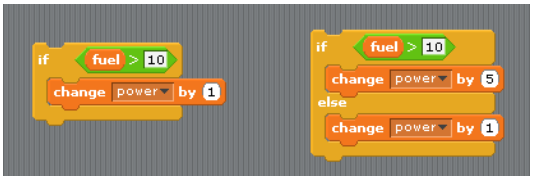
Sequence



Iteration



Selection



Year 7- Birds 2

Mark making

Mark making is a term used to describe the different lines, patterns, and textures we create in a piece of art. It applies to any art material on any surface, not only paint on canvas or pencil on paper.



Art terms

Composition: The way in which different visual elements are arranged in an artwork.

Media: The material used to make an art work.

Technique: The way tools and media are used to create artwork

Colour theory

The 3 primary colours are: red, blue, yellow.

Secondary colours are orange, green and purple and are mixed from 2 primaries.

Tertiary colours are combinations of primary and secondary colours. For example a redder orange or a yellower orange

Complementary colour: Colours that are on the opposite side of the colour wheel and make each other more vibrant.
Blue-Orange, Green-Red, Yellow-Purple

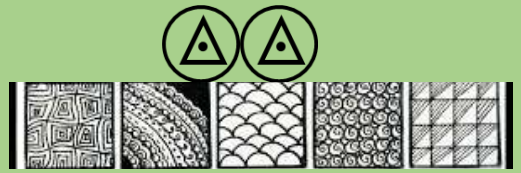
Harmonious colours: sit next to each other on the colour wheel e.g. yellow orange and red

Tint: a mixture of a color with white

Shade: a mixture of a colour with black

Create a complex pattern

Pattern is a repeated set of shapes, forms, lines or colours.
Complex patterns come from combining simple shapes, forms lines or colours.



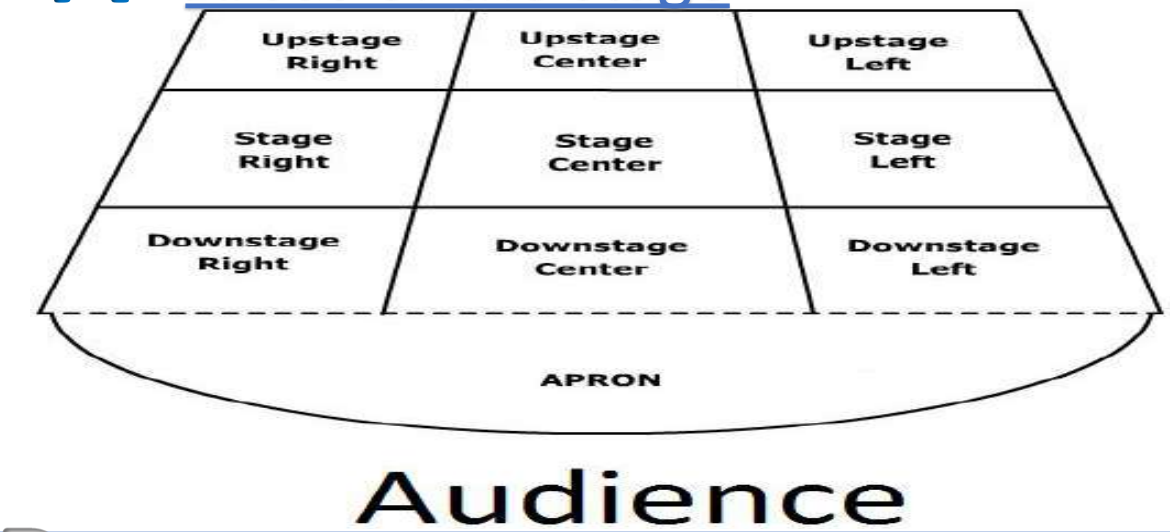
Clare Youngs is an illustrator and artist.
She has loved making handcrafted objects since childhood. She studied graphic design and has worked in product design, illustration and book jacket design before deciding to turn her attentions to craft full-time.





Drama: Year7 HT2- Exploring Drama- Matilda/ The Grinch

A Areas of the stage



B Explorative strategies

Internal Narrator	A character within the performance tells the audience the story from their perspective.
External Narrator	A character outside of the performance tells the audience the story. This is useful if you want to get every aspect of the story.
Marking the moment	A specific moment in time is highlighted on stage, often this is done using slow motion or a repetitive action.

C Physical skills

Facial Expressions	Considering every part of your face and how you can show what character you are through things such as your eyes and mouth.
Body Language	Is your body language going to be open or closed? Are you portraying a strong character who is outwardly focused or a nervous inward character?
Gesture	Make sure when performing you consider what you are doing with your hands, will it help the audience understand more about your character?
Proxemics	Where is your character stood on stage in relation to other characters on the stage? Make sure the audience can see you fully.

D Vocal Skills

Volume	How loud or quietly someone speaks on stage.
Pace	How slowly or quickly someone speaks on stage.
Pause	A moment of silence that could be used at a variety of points throughout a performance.
Pitch	How high or low your voice is when you are speaking.
Accent	Consider where your character is from and how this is going to alter the way you talk.





E Characters

Mr Wormwood	Matilda's father. He is a large man who is arrogant. He is a used car salesman who likes to cheat people out of their money.
Mrs Trunchbull	The headmistress of Matilda's school. She is known for being very aggressive in her discipline and will often be very mean to students. She is very large and very strong.
Matilda	A very intelligent little girl who is able to deal with many adult problems. She is often mistaken for being weak by Mrs Trunchbull.
Lavender	Matilda's friend who is very confident. Lavender and Matilda spend a lot of time chatting to one another about what is happening at their school.
The Grinch	A mean character who likes to play tricks on people and cause them harm. Used to be part of the community but has separated himself from them.
Cindy Lou	A very cheerful little girl who is questioning the purpose of Christmas.

YEAR 7 | MUSIC | HT2 - SAMBA

HOMEWORK 1 - SAMBA MUSIC - *What is Samba?*

Samba	A traditional style of rhythmic music from Brazil
Brazil	A large country in the continent of South America.
Carnival	A public celebration including parades, street parties and other entertainment
Bateria	An ensemble (group) that plays Samba music.
Rhythm	The recurrence of notes (of different lengths) and rests (silences) in time.

HOMEWORK 2 - RHYTHMIC NOTATION

Symbol	Note Name	Note Value
𝅝	Semibreve	4 Beats
𝅗𝅥	Minim	2 Beats
♩	Crotchet	1 beat
♪	Quaver	1/2 beat
♫	Pair of quavers	1 beat
𝅘𝅥𝅯	Semiquaver	1/4 beat
𝅘𝅥𝅯𝅘𝅥𝅯𝅘𝅥𝅯𝅘𝅥𝅯	4 semiquavers	1 beat






HOMEWORK 3 - IMPORTANT FEATURES - *Key words to remember!*

Pulse	A regular beat that is felt throughout much music
Call & Response	One person plays (or sings) a musical phrase which is then responded to by a group. They may copy the call or perform a different phrase, like a musical conversation.
Polyrhythm	A number of different rhythms layered over the top of each other.
Syncopation	When the music is 'off-beat' and goes against the pulse.
Ostinato	A continually repeated pattern.
Groove	The main ostinato that is heard most of the way through a piece of samba music.

HOMEWORK 4 - SAMBA INSTRUMENTS



Surdo
The 'Heartbeat' of the Bateria. Often plays the Pulse



Repinique
Played by the leader



Tamborim
Plays shorter notes, often in call & response with the Agogo bells.



Agogo Bells
Plays shorter notes, often in call & response with the Tamborim.

For section 4, you will need to neatly sketch out (and label) the instruments into your Homework book.



Apito
Played by the leader to indicate a change of section.



Ganza
An instrument that is played by shaking

John Port Spencer Academy PE Department Knowledge Organiser

Activity: Football

Year: 7

Key Skills:

- Controlling the ball – using different parts of the body – this could be the feet or thigh. Remember to cushion the ball.
- Passing – there are 3 types of passes. Side foot pass, driven pass with the laces and a lofted pass. Using the side of the foot allows you to pass accurately over a short distance, a driven pass allows you to pass the ball on the floor, but a greater distance. Finally, a lofted pass allows you to lift the ball in the air over players and change direction. Remember to keep your standing foot next to the ball when you make the pass.
- Dribbling – dribbling allows you to move the ball quickly around the pitch using the inside and outside of your feet and keeping the ball close to your feet and your head up.
- Turning with the ball and outwitting a defender – turning with the ball allows you to change direction using different techniques, such as dragging the ball back with the sole of your boot. Outwitting and opponent allows you to beat a defender using different techniques such as a step over.
- Shooting – there are different types of shots that allows you to score goals. You instep can be used to control and place the ball into the goal. If you use your laces then this allows more power to be produced.
- Heading – you can use an attacker header, a defensive header or a controlled header, which might be passing the ball back to someone with your head.
- Attacking – keeping possession – making a number of passes allows your team to keep possession and advance up the field.
- Tackling techniques – tackling, jockeying and forcing the player onto their weaker foot.



Basic Rules

1. Game is started by kicking the ball from the centre spot.
2. The U12 game has 9 players – goalkeepers, defender, midfielders and attackers.
3. Referee and two assistants with officiate the game.
4. If a ball goes over a touch line a throw in is taken (kick in on the astro-turf). If an attacker kicks over the goal line it is goal kick and if a defender kicks it over the goal line it is a corner.
5. To score the ball must cross the opposition's goal line.
6. The offside rule also applies where an attacker is in front of all opposing defenders when the ball is kicked.

Stretch and Challenge Task:

- How do you keep the ball low when passing and shooting?
- What technique would you use to tackle a player?
- Why is jockeying important?
- Research the different types of formations (pictured) and positions.

Key Content and Terms to learn:

Passing, dribbling, shooting, heading, attacking, defending, possession, width and depth

John Port Spencer Academy PE Department Knowledge Organiser
YR 7 BADMINTON

Key Skills:

READY POSITION – balanced position, side on, racket up and ready, on toes.

GRIP- shake hands with the racket sideways on. Wrap fingers round the tape.

SERVE –There are several types of serve – short/backhand, long ,flick. A backhand serve should land close to the service line on your opponents side of the net. The racket head must start from below the waist.

UNDERARM CLEAR (long serve) **–** This shot is played high to the back of your opponents court. Start sideways on and use a whip action with the wrist to create power.

OVERHEAD CLEAR – Played to the back of your opponents' court and is a defensive shot. Start sideways on, racket up and behind you, focus on making contact with the shuttle in front of you.

DROP SHOT- a shot played with finesse to land the shuttle as close as possible to the net on your opponent's side. Disguised initially as an overhead clear.

TACTICS -
- Hitting into space – moving your opponent around the court
- Shot selection – selecting the correct shot for the situation
- Targeting opponent's weaknesses
- Playing to your opponent's non-dominant hand

Rules

Game starts with a diagonal serve- right hand side to right hand side

Serve must land over the service line

Play to 21 points – but must win by 2 clear points up to 30. 29-29 next point wins

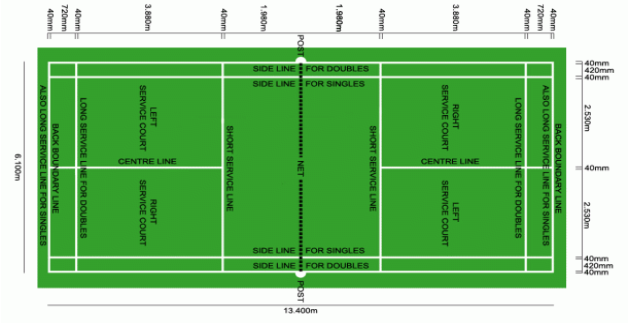
A point is won every rally

Whoever wins the point serves next

When the score is even, serve from right. When the score is odd, serve from left

Court is long and thin for singles, short and wide for doubles

You cannot hit the net with your racket or touch it with any body body part



Stretch and Challenge Task:

-Draw a badminton court in your knowledge book and label it correctly with the lines that are in/out for both singles and doubles.

-Find out who our best players in the country are for men's and ladies doubles, singles and mixed www.badmintonengland.co.uk is a good website to use.

Key Terms to learn:

-Grip -Ready position

-Drop shot -Rally

-Overarm clear -Underarm clear

-Serve –backhand/short, long, flick

John Port Spencer Academy PE Department Knowledge Organiser

Activity: Rugby

Year: 7

Key Skills:

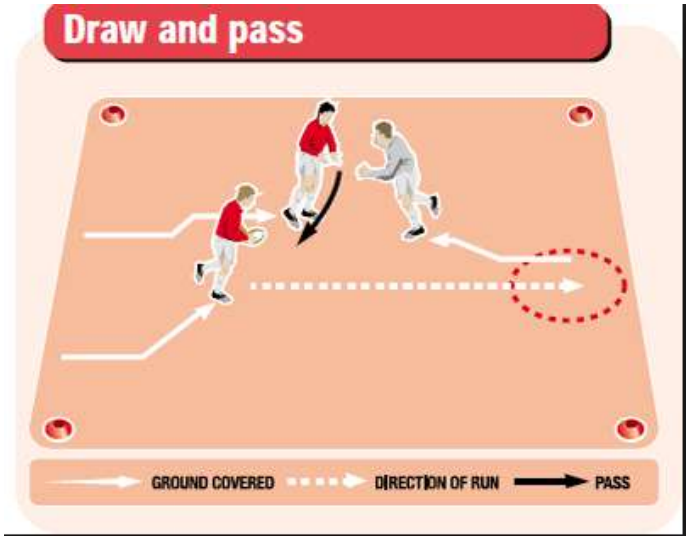
Passing- a skill used to move the ball from player to player. There are a variety of passes depending on position, game situation and area of pitch.

Tackling- a skill used to try to stop an opponent who has the ball by bringing them down to the ground. There are different types of tackles and safe tackling technique is extremely important.

Positioning- this is the position a player takes on the field. This is very important to abide by the laws of the game and also to score tries. Incorrect positioning on the pitch can lead to being penalised.

Carrying- a skill used to gain territory and score tries. This is where a player keeps the ball as they progress down the pitch.

Handling- a skill used to catch and throw the ball. Very important to move the ball effectively and to open up space.



Stretch and Challenge Task:

- Watch a premiership or international rugby game with focus on the different positions on the pitch. What different positions are there and what role do the different players take up on the pitch?

Key Content and Terms to learn:

- Knock-on
- Forward pass
- Try