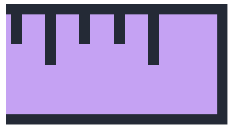


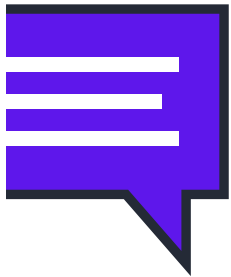
# HOME-LEARNING KNOWLEDGE ORGANISERS



## YEAR 7



# HALF TERM 3



"AN INVESTMENT IN KNOWLEDGE PAYS THE BEST  
INTEREST."

BENJAMIN FRANKLIN



## **Core Values**

Our school community is built on three important values which underpin all we do. We believe that great learning comes from:

### **Politeness**

- We treat every person and thing as we want to be treated
- We are respectful, polite and courteous at all times
- We help others at all times

### **Hard-work**

- We never give up
- We remain positive so that we have the strength to persevere with even the hardest work
- We do what it takes, for as long as it takes

### **Honesty**

- We are true to ourselves and others and we do not make excuses
- We look to ourselves to see what needs to be done.

## What is learning?

A big part of learning is about getting knowledge to go into your long-term memory and then using this knowledge. Our brains will only remember knowledge in the long term if we think really hard about it. Just reading, or highlighting does not make our brains work hard enough. We must **practise** remembering things – this will feel difficult at the time but worth it in the end.

## What is a knowledge organiser?

A knowledge organiser is a document that contains key facts and information. A knowledge organiser will not include every possible fact on a topic; it will include facts needed to understand the main points. Knowledge organisers make knowledge clear. So, even if a learner misses a lesson, they have a constant point of reference.

## Why are knowledge organisers good for learning?

Research shows that our brains remember things more efficiently when we know the ‘bigger picture’ and can see the way that ‘nuggets’ of knowledge link. Making links helps information move into our long-term memory. A knowledge organiser shows linked facts on a single topic.

Knowledge organisers can be used for retrieval practice (practising remembering things). Regular retrieval of knowledge helps us remember more effectively with our long-term memory. Developing our long-term memory is a vital first step. Without knowledge we have nothing to work with, nothing to think about! Retaining knowledge over time is essential.

To help us understand learning better, Gateacre students and staff have created a series of videos that explain how memory works and what we can do to make it stronger. Follow the QR code or the [Learning to Learn](#) link to view them.



## How can you best use your knowledge organiser?

There are many ways you can use a knowledge organiser. The most important thing to say, however, is ‘use it’. Owning one does not make you remember facts... **you must practise** if you are to improve at anything! There will be mistakes – this is how you learn. Ultimately, the best way to remember things is to try and remember facts that you can’t quite remember instantly... practice, practice and practice.

Here are some ways you could try to improve your **long-term memory** – they are all based on making you **think**, getting you to **test your memory**. That way your memory will get stronger:

### Hide and seek

Read through a small section of your knowledge organiser (three or four key words), cover the facts and try to write out as much as you can remember. Check your answers and correct them if needed. Then choose your next words or check ones you have already done again.

### Quiz

Test your memory by asking someone to quiz you on facts from your knowledge organiser. Write down your answers and see how many you get right. Correct any facts you get wrong.

### Teach it!

Teach and explain to someone your key facts – you could even test them!

### Back to front

Write down a fact from memory and then compose a question that would lead to that answer.

### Sketch it

Draw pictures /diagrams to represent each of the facts or dates (time lines, flow diagrams, or labelled pictures are great ways of remembering parts of a system or orders of events).

### Repackage it (from memory)

Create a mind map that brings different facts together under one title. Check that your key words are spelt correctly... or, take a key word and create a sentence that uses it.

Take pride in how you present your work. Each page should be clearly labelled with an underlined date. There should be at least one page of work.

Always check your answers and correct anything you got wrong.... You are allowed to get things wrong... That is how you learn! Getting yourself to think is the key!

Do not just copy a knowledge organiser out – that would not help learning and would only waste your time! Make sure you are having to think!

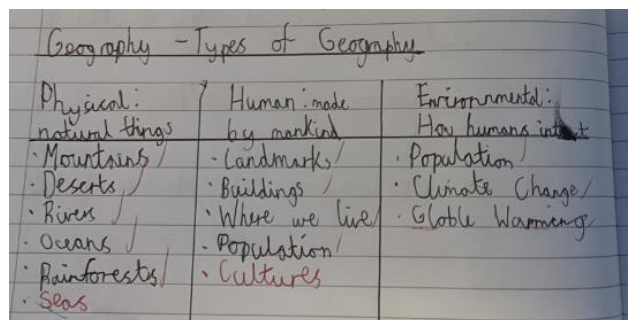
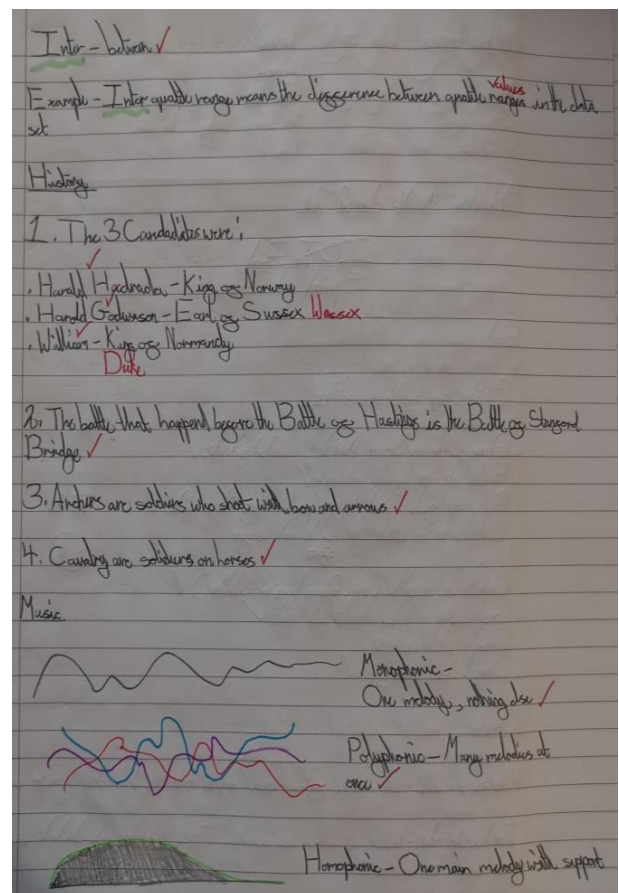
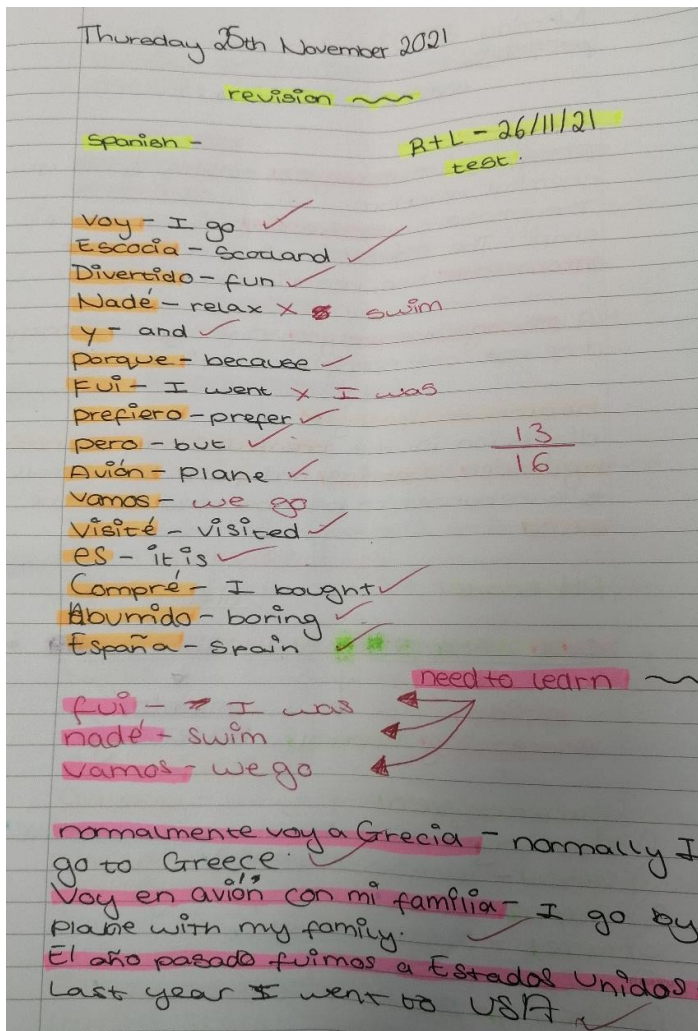


# What does effective home-learning look like?

Here are some essential points to remember and some examples to see.

- Long term memories are created when you have to **think**. Simply copying does not help you remember. Testing yourself will make you **think** and remember
- The process of reflection and self-assessment is important if you are to fix mistakes. Do not worry about getting things wrong as long as you check, fix it and try again

All these learners have **read, thought, tested themselves** and then **checked** their work. They will start to develop long term memory which they can then use in the future.



MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Maths	ICT	English	Art	
History	Drama	Geography	Science [Knowledge Organisers]	
Music	Spanish	RS	Active Lifestyles	
← Science: Tassomai On-Line (complete one daily goal each day) →				

Where subjects share a slot it is for you to decide which one you know less about - which one should you revise? You decide which one to do.

Science: Remember, you should do a **Tassomai daily goal each day** to help your science learning.

Literacy: Do take time to engage with the **Listening Project**. Developing our vocabulary is immensely important if we are to develop as learners. The **listening project** is an opportunity to listen to interesting ideas, facts and make our vocabulary better. You can do this short activity at any point within the week.

**Remember, you can always do more. Challenge yourself to be the best you can be!**

# How to use the 'Listen' Project

## Start Here

Being read to is a vital part of learning - hearing words that we are unfamiliar with, ideas that we don't understand yet and thoughts we haven't had a chance to think.

Even simple stories create links from one idea to the next. The fairy tales we heard when we were babies give us the first step to understanding the adventure stories we read in school.

**Take time out and listen...**

**Step 1 - Click the link and listen.**

You can follow the text as you are read to or just listen.



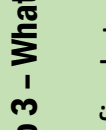
**Step 2 - Check the text.**

Have a look at the texts. There are three pieces of writing.

The first piece may appear to be very simple, maybe even too young for you. These stories are some of the first we hear and often start our journey to understanding more complicated ideas.

The second text may be something you recognise or have read yourself. Is there a link to the first story?

The third is the most complex and may even leave you with a lot of questions.



**Step 3 - What's the connection?**

The final step is to think about what links these texts and stories together?

Where have you thought about these ideas before?

Do you think about any of these ideas in school?

You can go back and listen to the texts being read as many times as you like.



*SCAN ME*



## Dogs

Hairy Maclary from Donaldson's Dairy

Out of the gate

And off for a walk

Went Hairy Maclary

From Donaldson's Dairy

And Hercules Morse

As big as a horse

With Hairy Maclary

From Donaldson's Dairy.

Bottomley Potts

Covered in spots,

Hercules Morse

As big as a horse

And Hairy Maclary

From Donaldson's Dairy.

Muffin McLay

Like a bundle of hay,

Bottomley Potts

Covered in spots,

Hercules Morse

As big as a horse

and Hairy Maclary

From Donaldson's Dairy.....

## Humph.....

In the beginning of years, when the world was so new and all, and the Animals were just beginning to work for Man, there was a Camel, and he lived in the middle of a Howling Desert because he did not want to work, and besides, he was a Howler himself. So he ate sticks and thorns and tamarisks and milkweed and prickles, most 'scruciating idle; and when anybody spoke to him he said 'Humph!' Just 'Humph!' and no more.

Presently the Horse came to him on Monday morning, with a saddle on his back and a bit in his mouth, and said, 'Camel, O Camel, come out and trot like the rest of us.'

'Humph!' said the Camel; and the Horse went away and told the Man.

Presently the Dog came to him, with a stick in his mouth, and said, 'Camel, O Camel, come and fetch and carry like the rest of us.'

'Humph!' said the Camel; and the Dog went away and told the Man.

Presently the Ox came to him, with the yoke on his neck and said, 'Camel, O Camel, come and plough like the rest of us.'

'Humph!' said the Camel; and the Ox went away and told the Man.

At the end of the day the Man called the Horse and the Dog and the Ox together, and said, 'Three, O Three, I'm very sorry for you (with the world so new-and-all); but that Humph-thing in the Desert can't work, or he would have been here by now, so I am going to leave him alone, and you must work double-time to make up for it.'

That made the Three very angry (with the world so new-and-all), and they held a palaver, and an indaba, and a punchayet, and a pow-wow on the edge of the Desert; and the Camel came chewing on milkweed most 'scruciating idle, and laughed at them. Then he said 'Humph!' and went away again.

## Man's Best Friend

This man (Thornton) had saved his life, which was something; but further, he was the ideal master. Other men saw to their dogs' welfare from a sense of duty; he saw to the welfare of his as if they were his own children. He had a way of taking Buck's head between his hands and resting his own head upon Buck's, and of shaking him back and forth. Buck knew no greater joy than that rough embrace. It seemed that his heart would be shaken out of his body.

When Thornton's two partners, Hans and Pete, arrived, Buck refused to notice them until he learned they were close to Thornton; after that he tolerated them in a passive sort of way.

For Thornton, however, Buck's love seemed to grow and grow. In the fall of the year, he saved John Thornton's life.

The three men were lining a boat down a stretch of rapids. Hans and Pete moved along the bank, snubbing with a rope from tree to tree, while Thornton remained in the boat, helping its descent by means of a pole.

At a spot, where a ledge of barely submerged rocks jutted out into the river, Hans cast off the rope, and Thornton poled the boat out into the stream. The boat snubbed into the bank bottom up, while Thornton, flung sheer out of it, was carried downstream toward the worst part of the rapids, a stretch of wild water in which no swimmer could live.

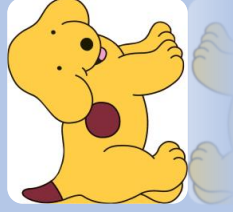
Buck sprung in; and at the end of 300 yards, amid a mad swirl of water, he overtook Thornton. When he felt him grasp his tail, Buck headed for the bank. But from below came the fatal roaring where the wild current went wilder. Thornton scraped furiously over a rock, bruised across a second, and struck a third with crushing force. He clutched its slippery top with both hands, releasing Buck, and shouted: "Go, Buck! Go!"



## Dogs

Animals play an enormous role in many of the texts that we read. From our youngest years, we read about **Spot the Dog** and **Meg and Mog**. Humans and animals have existed together for thousands of years and the relationship between pets and their owners can be very powerful.

Animal stories are not always simple or heart-warming. We can learn valuable lessons about the natural world from the stories we tell.



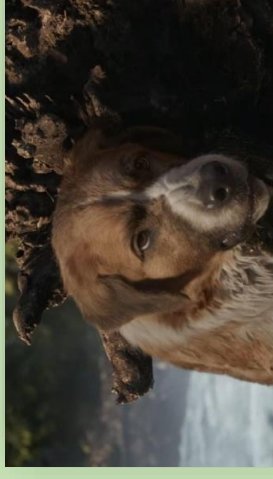
## Humph...



Authors use animals to tell bigger, more valuable stories. We often call simple stories that try to tell bigger truths **allegories**. Rudyard Kipling wrote a series of short stories that explain how various animals came to be the way they are, both in terms of their character like the grumpy camel and the way they look. **Aesop's fables** also use animals to explain why things are the way they are or to teach valuable lessons.

## Man's Best Friend

The story of Buck is told in **Jack London's *Call of the Wild***. The story is told from the perspective of Buck the dog and details his adventures in the Alaskan wilderness during the gold rush. Although the story is told from the animal's perspective, **London** works hard to retain **realism**. The short novel details just how tough the world can be for humans and animals alike and bond that can be created between them.

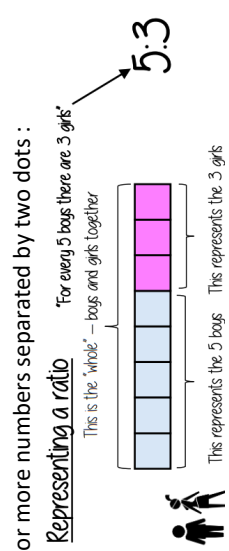

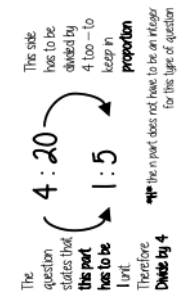






# Mathematics

Your Maths Home Learning has two parts:

Part 1 is: Copy the definition of the key word and diagrams into your Home Learning Book, then use these to complete the task

Part 2 is: Scan the Corbett Code (or look up the video number) for extra practice.

Week	Key Word	Definition	Task	Corbett Code
1	Ratio	<p>Two or more numbers separated by two dots :</p> <p><u>Representing a ratio</u></p> <p>This is the 'whole' — boys and girls together</p>  <p>For every 5 boys there are 3 girls</p> <p>5:3</p>	<p>In your home learning book, draw ratio boxes for:</p> <ul style="list-style-type: none"> <li>• 5 boys and 3 girls</li> <li>• 3 boys and 6 girls</li> <li>• 2 boys and 4 girls</li> </ul>	 Scan here <b>269</b>
2	Unit Ratio	<p>A ratio compared to one</p> <p>This is asking you to cancel down until the part indicated represents 1</p> <p>Show the ratio 4:20 in the ratio of 1n</p>  <p>The question states that the part has to be 1 unit. Therefore Divide by 4</p> <p>4 : 20 → 1 : 5</p> <p>This one has to be divided by 4, 100 — to keep in proportion</p>	<p>In your Home Learning book, simplify</p> <ul style="list-style-type: none"> <li>• 4:40</li> <li>• 3:21</li> <li>• 2:7</li> </ul>	 Scan here <b>271C</b>
3	Sequence	<p>Pattern of numbers which follow a rule</p> <p>3, 5, 7, 9,..... So the rule is plus 2</p> <p>2, 4, 8, 16, 32 So the rule is multiply by 2</p>	<p>In your Home Learning book, find the rule for:</p> <ul style="list-style-type: none"> <li>• 4, 7, 10, 13, 1</li> <li>• 1, 3, 9, 27</li> <li>• 20, 10, 5, 2.5</li> </ul>	 Scan here <b>286</b>
4	Linear Sequence	<p>Pattern of numbers going up or down by the same amount</p> <p>4, 7, 10, 13, 16 ..... is a linear sequence (+3)</p> <p>2, 4, 8, 16, 32 ..... is NOT a linear sequence (x2)</p>	<p>In your Home Learning Book:</p> <ul style="list-style-type: none"> <li>• Create three sequences by writing a rule and then giving the first 5 terms of the sequence</li> </ul>	 Scan here
5	Significant Figure	<p>A number not zero</p> <p>680000 has two significant figures</p> <p>543564 rounded to one significant figure is 500000</p>	<p>In your Home Learning book:</p> <ul style="list-style-type: none"> <li>• State how many significant figures in each               <ul style="list-style-type: none"> <li>• 500, 600, 650, 82400</li> </ul> </li> </ul>	 Scan here <b>279a</b>



### MEDIEVAL LIFE

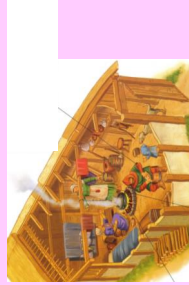
#### Peasants

Life for medieval peasants (villeins) was tough. They worked outside in the fields from sunrise to sunset whenever there was work to do. Most of the land was owned by someone else (the Lord of the Manor) who was usually a knight or a baron. The lord let peasants live on his land in return for obedience (doing as they were told), a payment and several days of work a week.

Peasant families lived in wooden huts that they would build themselves. Each had a small garden where they grew vegetables and fruit.

Peasants had a variety of jobs within the village, what occupation you showed how important you were to the village. These jobs included:

- Blacksmith
- Miller
- Farmer



#### Town

About 90% of people lived in small villages in the countryside. After 1066, towns began to grow. Some villages grew in size and became towns. If you saved up you could buy your freedom and land. A town charter gave people the chance to run the town themselves. There were advantages and disadvantages to Medieval town life, take a look at the table below:

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>- If a serf ran away to a town and remained free for a year and a day, he would become a 'freeman'</li> <li>- People in towns had more freedoms, they could marry who they like for example</li> </ul>	<ul style="list-style-type: none"> <li>- Very short life expectancy due to illness and disease</li> <li>- Town were dirty and smelly places to live. With no sewer system in place, human waste was often thrown into the streets!</li> </ul>

#### Medieval Hygiene

People in the Middle Ages were a lot less fussy about hygiene. A lack of understanding mixed with the lack of resources to tackle any smelly issues they may have had, led to quite interesting sights and smells during this period.

The People - It was very rare for people to bathe during this period. Even then the soap was made from animal fat and wood ash!

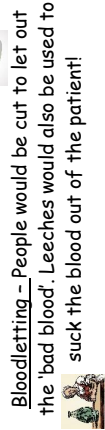
The Home - Peasants lived without floorboards or carpets in their home. They would live with their animals and would almost certainly always smell of smoke from the fire!

Waste - With no toilets, waste was thrown directly onto the streets!



### MEDIEVAL BELIEFS AND TREATMENTS

Medical Beliefs	Medical Treatment
<p><b>Miasma</b> - The belief that bad air caused disease... e.g a smelly swamp caused illness in a nearby village.</p> <p><b>Astrology</b> - The alignment of the planets caused people to become ill.</p> <p><b>The Four Humours</b> - The idea that fluids in the body were out of balance. They were black bile, yellow bile, blood and phlegm.</p> <p><b>God</b> - Medieval England was a highly religious society. Disease and illness, was thought by many, to be a punishment for sins.</p>	<p><b>Barber Surgeons</b> - As well as cutting hair, barber surgeons would also perform surgeries. From trepanning (cutting a hole in your skull) to cutting off limbs, they would also pull out your teeth!</p> <p><b>Apothecaries</b> - They would mix ingredients to create medicines.</p> <p><b>Bloodletting</b> - People would be cut to let out the 'bad blood'. Leeches would also be used to suck the blood out of the patient!</p> <p><b>Physician</b> - These were trained professionals, only the rich could afford this treatment.</p>



### The Peasants' Revolt (1381)

#### Causes

- The King introduced a hated tax - the Poll Tax
- Peasants had to complete Work Service for their lords for free - if not they could be fined
- Peasants wages were kept low by the King and parliament
- The war with France cost a lot of money
- The Black Death made people question God/society
- Some preached about making lives fairer for peasants (e.g. John Ball)



#### Events

In 1381 the revolt began in Essex. Wat Tyler was chosen to lead the peasants. The peasants marched to London to confront the King - there were over 60,000 and they were armed. They rioted in London. King Richard II agreed to meet them at Mile End - he promised to make their lives fairer so many returned home. Some remained so the King met them the next day. At this meeting Wat Tyler was killed - but the King promised to keep his word and improve peasants' lives. The other leaders of the revolt were rounded up and killed. King Richard II went back on many of his promises.

#### Impact

- King Richard II broke many of his promises to the peasants
- The poll tax was removed
- As time went on peasants were allowed to demand and receive higher wages
- Peasants were still controlled by the landowners
- Rebel leaders were rounded up and executed
- Parliament stopped controlling peasants' wages
- Different groups had fought together for one cause
- Within 100 years all villeins were technically free
- The system of peasants being tied to the land remained in place



**Blacksmiths:** Someone who creates items out of metal. These items can range from fine swords to a common farming tool.

**Freemen:** Someone who is not tied down to the land like a Villein or Serf. To be a Freeman might sound good, but in practice you will have a lot less security.

**Lord of the Manor:** The owner of large estates of land, often given power by the King.

**Miasma:** The belief that bad smells caused illness.

**Miller:** The title given to the person who would operate the mill. Mills would be used to grind the grain for the village, this would eventually be turned into bread.

**Pillory:** Wooden board with holes for legs— a type of medieval punishment.

**Sins:** Breaking religious rules. People of Medieval England believed they would go to hell if they sinned.

**Serfs:** A peasant from the countryside who worked for the Lord of the manor.

**Stocks:** Wooden board with holes for arms and head – a type of medieval punishment.

**Symptoms:** Something that you can link to a disease. Symptoms of a cold include sneezing and a fever.

**The Four Humours:** A common medical belief. These, we believed, were four liquids in the human body – blood, yellow bile, black bile and phlegm (pronounced 'flem') – which needed to be in balance for you to be healthy.

**Villeins:** Peasants (farmers) who worked for and were controlled by the Lord of the Manor. They worked the land to grow food and did services in return for land.

### Task 1

Look at the "Medieval Life" section on the page above. Create your own travel brochure for the Middle Ages. Things to include:

- Life of a peasant
- Life in a town
- Hygiene

### Task 2

Look at the 'MEDIEVAL TREATMENTS' section, which treatment do you think is the most effective? Explain your answer.

### Task 3

EXTRA EXTRA, READ ALL ABOUT IT! Read through the CAUSES and EVENTS of the PEASANTS REVOLT and write a short newspaper article about what happened.

### Task 4

Using the 'Medieval Beliefs and Causes' section, create a diagram showing the 2 sides.



### Task 5

Create a 10 question quiz based on your knowledge organiser. Use this quiz to test someone you know. If they don't know the answer, teach them!

### Task 6

Read through the BBC Bitesize – The Peasants' Revolt topic and complete the quiz at the end.

[The Peasants' Revolt - The Peasants' Revolt - KS3 History - homework help for year 7, 8 and 9. - BBC Bitesize](https://www.bbc.co.uk/bitesize/topics/z93tbbk/articles/zyb77vg)

<https://www.bbc.co.uk/bitesize/topics/z93tbbk/articles/zyb77vg>



# THE GUITAR

## Guitar Key Technical Words:

**Chord:** playing many notes at once (often all six strings)

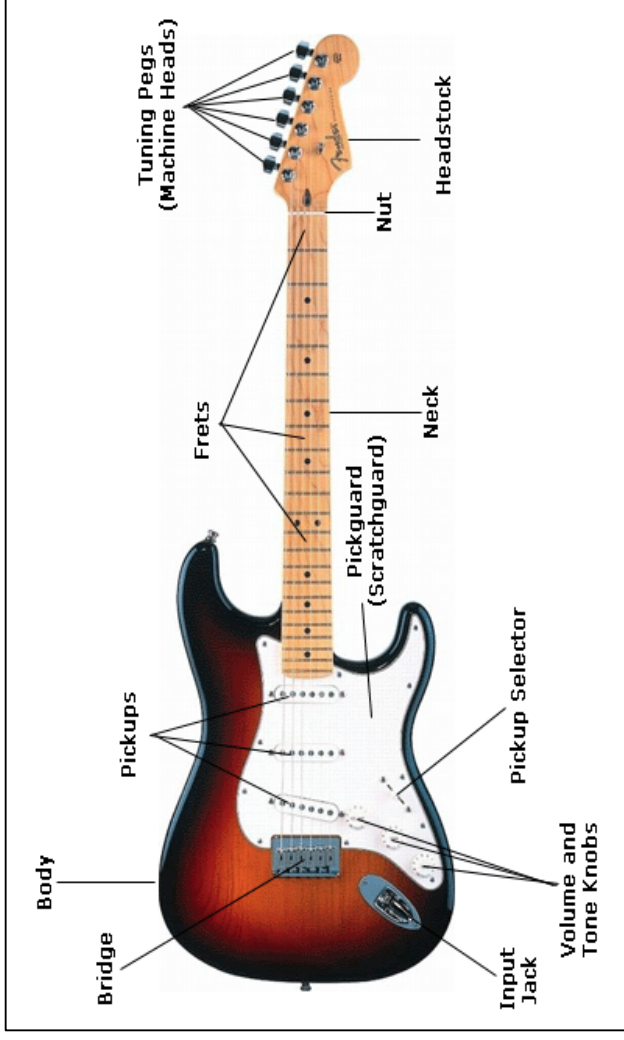
**Strumming:** Playing all required strings in one go

**Picking:** Plucking the individual strings

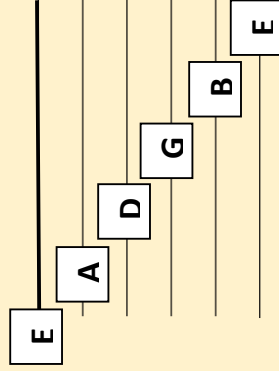
**Fret:** The spaces on the neck where you press your fingers down

**Acoustic:** a guitar that does not need an amplifier to be heard

**Jack Lead:** The cable that connects a guitar to the amplifier



## Tuning the open strings:



## Other Guitar-like String Instruments:

Ukulele	Hawaii (USA)
Lute	'Old' European
Banjo	Africa/America
Sitar	India



Task 1 link.

<https://www.youtube.com/watch?v=KoVvstkrMME>

**Task 1:** Learn the names of the open strings on guitar and watch the clip on the QR code or Youtube link.

**Task 2:** Learn the key technical words.

**Task 3:** Revise Tasks 1 and 2, then Learn the instrument names of other guitar-like instruments, and which country they come from.

**Task 4:** Draw a diagram of the guitar **without the labels**. After revising these labels, complete the diagram **from memory – no peeking!** Add any gaps in **red pen**.

**Task 5:** Create a 10 mark quiz based on the guitar. Get someone to test you!

**Task 6:** Listen to some famous guitarists on Youtube.

For example, Jimi Hendrix, Eric Clapton, B. B. King, John Williams.

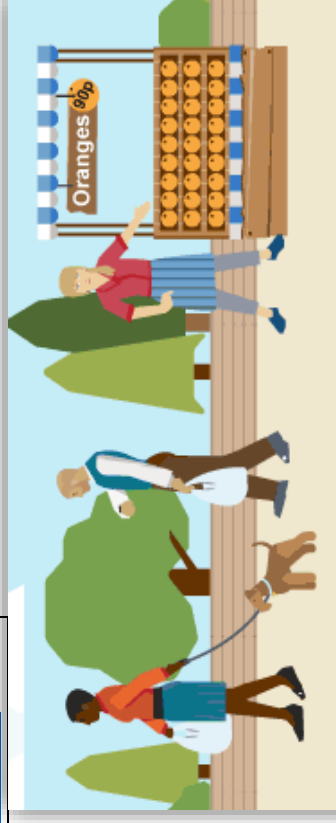




## Computing Department Knowledge Organiser: Year 7 Spreadsheets

### Why do we use Spreadsheets?

- Spreadsheets are used to store information and data.
- Once we have our information in a spreadsheet we can run powerful calculations, make graphs and charts and analyse patterns/trends.
- Charts/Graphs can be used to clearly display the information in a spreadsheet
- How to use spreadsheets. Use this QR code to learn and test yourself on the BBC Bitesize website [www.bbc.co.uk/bitesize/guides/zdydmp3/revision/1](http://www.bbc.co.uk/bitesize/guides/zdydmp3/revision/1)



### How spreadsheets work – what software do we need?

- The most popular spreadsheet program is Microsoft Office Excel.
- You can use the online version of Excel for free or download it for free with your Gateacre school log in at: [www.office365.com](http://www.office365.com)

### What can spreadsheets be used for?

- Spreadsheets are used by many businesses around the world. Some examples:
- Budget tracker e.g. working out the costs for a school prom
- Stock tracking of a business such as a market stall selling fruit and vegetables (see example image on the right)
- A teacher may also use it to keep a record of grades.

	A	B	C	D	E
1	Produce	Unit	Number sold	Price	Sales
2	Apples	kg	7	£0.70	£4.90
3	Potatoes	25kg	8	£6.00	£48.00
4	Oranges	kg	6	£0.90	£5.40
5	Carrots	25kg	8	£8.50	£68.00
6	Sprouts	kg	4	£1.40	£5.60
7	Cabbage	kg	6	£0.70	£4.20
8	Onions	kg	9	£0.56	£5.04
9				Total	£141.14



## Computing Department Knowledge Organiser: Year 7 Spreadsheets

### What if?

- Modelling gives you the chance to test certain scenarios out before they happen.
- These are commonly known as 'what if' questions. Look at the examples for ticket sales on the right, you can work out your overall costs and prize fund.
- You can use the BBC Bitesize website to revise and test yourself on 'What if?'
- [www.bbc.co.uk/bitesize/guides/zdydmp3/revision/1](http://www.bbc.co.uk/bitesize/guides/zdydmp3/revision/1)



### Modelling with spreadsheets

- In computing, modelling is used to look at large amounts of data to help with scientific or engineering projects. A computer model is a representation of a real-life system or situation.
- Simple models can be built in a spreadsheet. A spreadsheet model could be used to plan a school prom. To make sure it came in on budget the spending on food, drinks, entertainment, and the price of tickets could be varied.

### Spreadsheets Key words

<b>Axis labels on charts</b>	A label for a chart or graph's horizontal or vertical axis that explains what the value relates to.
<b>Cell</b>	An individual spreadsheet box where you enter data.
<b>Cell reference</b>	Names of individual cells (B3 for example).
<b>Column</b>	Cells that go down the spreadsheet page.
<b>Computer model</b>	Predicts and investigates how real-life devices might behave in different situations.
<b>Data</b>	Values, typically letters or numbers.
<b>Formatting cells</b>	The appearance of a document, including the fonts, colours, size and rotation.
<b>Formula</b>	Makes automatic calculations that update when the data does.
<b>Function</b>	Makes more complex calculations.
<b>Row</b>	Cells that go across the spreadsheet page.
<b>Sort / Filter</b>	Sorting data organises it alphabetically or numerically. Filtering data makes it easy for us to find a piece of data.





## Computing Department Knowledge Organiser: Year 7 Spreadsheets

Formulas	Functions
<b>Formulas and functions are extremely useful features. They make automatic calculations that update when the data changes.</b>	
<ul style="list-style-type: none"><li>Formulas are usually simple calculations, e.g. adding two or more numbers together.</li><li>They always start with an equals sign (=).</li><li>There are a number of symbols used in formulas or calculations.</li><li>These are the most common ones:<ul style="list-style-type: none"><li>'+' add</li><li>'-' subtract</li><li>'*' multiply</li><li>'/' divide</li></ul></li></ul>	<ul style="list-style-type: none"><li>Functions make more complex calculations.</li><li>Like formulas, all functions start with an equals sign (=) followed by the function's name, e.g. =SUM, =MIN, =MAX, etc.</li><li>Simple and regularly used functions include:<ul style="list-style-type: none"><li>SUM – adds values in selected cells</li><li>MIN – finds smallest value</li><li>MAX – finds largest value</li><li>AVERAGE – finds the average value</li><li>COUNT – counts how many of the selected cells have numbers in them</li></ul></li></ul>
<b>Advanced functions</b>	
<ul style="list-style-type: none"><li>IF – change the value of a cell if something is true, e.g. if a customer's total bill is over £100, deduct 10% from their bill.</li><li>COUNTIF – adds up cells that meet a certain rule, e.g. count the number of students that achieved level 6.</li></ul>	
<b>Tasks</b>	
<ul style="list-style-type: none"><li><b>Task 1</b> - Why do we use Spreadsheets?</li><li><b>Task 2</b> - What software do you need to create a spreadsheet?</li><li><b>Task 3</b> - What can spreadsheets be used for? Give some examples in your answer.</li><li><b>Task 4</b> - Describe what 'what if' means in spreadsheet?</li><li><b>Task 5</b> - What does 'modelling with spreadsheets' mean? Give some examples.</li><li><b>Task 6</b> - What does a formula do? Give some examples of the most common formula used in your answer.</li><li><b>Task 7</b> – What does a function do? Give some examples of different functions in your answer.</li><li><b>Task 8</b> - Identify and describe two advanced functions?</li></ul>	

# Stage Positioning



## New Skill/Technique

## Retrieval

The next scheme we are exploring is:

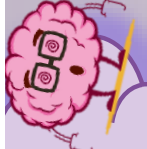
Ernie's incredible illucinations / ap1



Scan the QR codes to learn the history of theatre! Take notes!



The History Of Theatre



This may be important for your AP1! \*WINK\*

1200BC-500AD



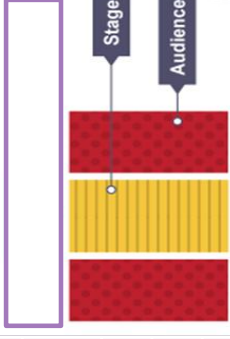
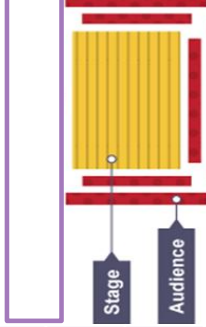
### Knowledge/ skill

### Definition

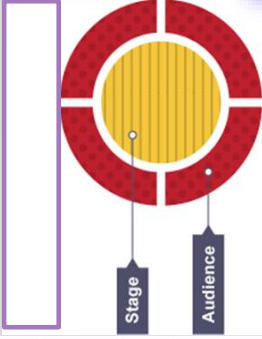
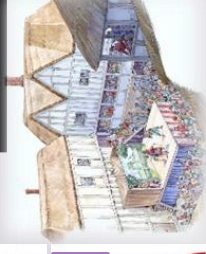
<b>Stimuli</b>	The starting point, idea or inspiration for your devised <b>drama</b> . It is what you base your <b>drama</b> around.
<b>Hot seating</b>	A character is questioned by the group about his or her background, behaviour and motivation.
<b>Still Image or Freeze frame</b>	This is where the action freezes as if someone has taken a picture midway through a performance. Conveys meaning and highlights the current scene.
<b>Body as Prop</b>	A genre (type) of drama that tells a story using over exaggerated movement: and physicality. Body as Prop Using your body to create props and objects on stage.
<b>Teacher in role</b>	The teacher plays a role. They may ask questions of the students, perhaps putting them into role as well.
<b>Transition</b>	This is the process in which something changes from one state to another
<b>Movement</b>	Where we move to on and around the stage avoiding the blocking another actor.
<b>Flashback</b>	A scene that takes the narrative back in time from the current point in the story.
<b>Characterisation</b>	Developing and portraying a personality through voice and movement.
<b>Promenade theatre</b>	In promenade theatre there is no formal stage, both the audience and the actors are placed in the same space.
<b>Narration</b>	A commentary delivered to accompany a performance.
<b>Monologue</b>	A long speech by one actor in a play
<b>Soundscape</b>	A collection of sounds created either by the actors themselves or by other means like cd/computer.
<b>Slow Motion</b>	Where our movements are more exaggerated and are at a slower pace to create a dramatic effect
<b>Thought Track</b>	A technique where the actor says what the character is thinking at a particular moment in the action.
<b>Marking the Moment</b>	Doing something specific i.e. still image, slow motion, thought track to make a particular moment stand out in the play.

## Stage Types

500 - 1500



1550-1650



Medieval Theatre

Greek Theatre

Elizabethan &

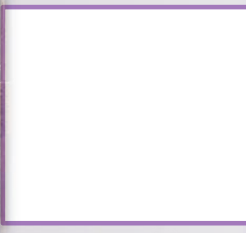
Jacobean

Theatre

Commedia

Dell'Arte

1500-1700





# GREEK THEATRE

1200BC - 500AD

- The word drama comes from the Ancient Greek word 'dram' meaning 'to do'.
- The Greeks created three types of plays: **Comedies**, **Tragedies** and **Satyr**s. Performances were held in open-air amphitheatres that were capable of holding large audiences.
- Greek plays involved three actors and a chorus. The chorus commented on the story, sang, danced and wore masks to help portray their character.
- Greek plays were later adapted and translated to suit the Romans.

Playwrights include: Sophocles (*Oedipus Rex*) and Aristophanes (*Lysistrata*).

## Theatre Roles And Responsibilities

<b>Playwright</b>	This is the name given to the person who writes the play.
<b>Performer</b>	A performer is an actor or entertainer who realises a role or performance in front of an audience.
<b>Understudy</b>	An actor who studies another's role so that they can take over when needed.
<b>Lighting designer</b>	The lighting designer is responsible for designing the lighting states and, if required, special lighting effects for a performance. The final design will result in a lighting plot which is a list of the lighting states and their cues.
<b>Set designer</b>	The set designer is responsible for the design of the set for a performance. They will work closely with the director and other designers so that there is unity between all the designs and the needs of the performance.
<b>Costume designer</b>	The person who designs the costumes for a performance. The costume department of a theatre is often called the wardrobe.

### Week 1 & 2

Let's do some preparation for our AP1! Here are some tasks:

- On the first page of the Knowledge Organiser you will see a 'History of Theatre' timeline - there are blank boxes, using the theatre type titles provided – fill the blanks and complete the History of Theatre timeline!
- What stage position are our Drama faces cheekily covering?
- Create a Roles and Responsibilities quiz and quiz whoever you can get involved!
- Fill in the blank stage types titles – the titles you need to fill in is:

- Theatre in the Round**
- Thrust stage**
- Proscenium Theatre**
- Traverse Theatre**

# COMEDIA DELL'ARTE

1500 - 1700

- Commedia dell'Arte began in Italy.
- Skilled comic performers improvised stories that mocked human failings.
- The characters were always the same and included: **Pantalone** - a money grabbing old man, **Il Dottore** a 'know it all' doctor and **Arlecchino** (**Harlequin**) a devious servant.
- Commedia troops did not use scripts. They improvised scenes and built in comic devices and practical jokes.

Playwrights include: Carlo Goldoni (*The Servant of Two Masters*).

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Playwrights include: Carlo Goldoni (*The Servant of Two Masters*).

You have learnt so much this year so far!

# Elizabethan & Jacobean

1550 - 1650

- In 1576, James Burbage - a carpenter and actor, built 'The Theatre'. By 1600 there were at least 4 other theatres in London, including 'The Globe'.
- William Shakespeare lived and wrote during this period. His plays were popular with all classes, from 'groundlings' (the poor) to Queen Elizabeth I.
- When Elizabeth I died in 1603, James I became king and people were anxious and afraid. Plays became darker and increasingly violent.
- In 1642, the Puritans came to power and closed theatres to stop the plague spreading.

Playwrights include: John Webster (*The Duchess of Malifi*).

### Week 3

Draw a stage design for the boxing granny scene of Ernie's Incredible Illucinations!

### Week 4

Write down a list of the skills you have so far explored this term.

### Week 5

Watch the History of Theatre videos and create your own History of Theatre Poster

Don't forget to give AP1 your best shot! Stay calm – you've got this!



# Spanish - Key verbs and vocab

## Key phrases

1. **Tengo el pelo largo y ondulado** - I have long and wavy hair
2. **Tengo los ojos azules** - I have blue eyes
3. **Tengo dos perros blancos** - I have two white dogs
4. **Mi gato es muy divertido** - My cat is really fun
5. **Me encanta leer** - I love reading
6. **No me gusta navegar por internet** - I don't like browsing the internet
7. **Siempre toco la guitarra** - I always play the guitar
8. **Nunca canto karaoke** - I never sing karaoke
9. **Cuando hace sol juego al fútbol** - When it's sunny I play football
10. **Cuando llueve voy al cine** - When it rains I go to the cinema
11. **¿Te gustaría ir al la bolera?** - Would you like to go to the bowling alley?
12. **Lo siento, no puedo** - I'm sorry, I can't

Me llamo Sara y tengo trece años. Tengo el pelo rubio y corto y los ojos verdes. Hay cinco personas en mi familia y tengo un conejo negro. Es muy divertido.

En mi tiempo libre me encanta escuchar música o jugar a los videojuegos porque es divertido sin embargo odio ver la televisión porque es aburrido. Los lunes siempre salgo con mis amigos y cuando hace sol juego al tenis en el parque. En mi opinión leer es entretenido pero nunca bailo porque es estúpido. A veces saco fotos y hablo con mis amigos todos los días porque es muy interesante.

Para ir más lejos: (To go further...)



Link to BBC Bitesize



Your teacher should have given you your username and password for LanguageNut. Log in and complete some of the revision games on there. It's great for practising speaking and listening skills!

**Task 1:** Practice key phrases 1-6 - look, cover, write, check, correct x 3. Read the sentences out loud to practice your pronunciation.

**Task 2:** Practice key phrases 7 -12 - look, cover, write, check, correct x3. Read the sentences out loud to practice your pronunciation.

**Task 3:** Pick one of the boxes of vocab from page 2 and draw a picture to represent each phrase in that box.

**Task 4:** Read through the model paragraph and translate what you can into English.

**Task 5:** Re-write the model paragraph, changing the underlined words and phrases. Try to do this without looking at the vocab!

**Task 6:** Create mind maps under the following headings: Activities, present tense and opinions. Do this from memory and then add to it with your red pen from the vocab page.

**Task 7:** Teach it! Create a resource that will help teach others these key phrases. It could be a poster, a PowerPoint presentation, a leaflet or anything else. If you can, stick it in your home learning book.

**Task 8:** Write a paragraph about yourself FROM MEMORY! Then check it over with your red pen. Read it out loud to a member of your family to practice your pronunciation.





# Spanish - Key verbs and vocab

## Opiniones - opinions

**Me gusta** - I like  
**Me gusta mucho** - I really like  
**Me encanta** - I love  
**Me chifla** - I'm crazy about  
**No me gusta** - I don't like  
**No me gusta nada** - I really don't like  
**Odio** - I hate  
**No soporto** - I can't stand  
**porque...** - because  
**porque es...** - because it is  
**porque no es...** - because it isn't  
**interesante** - interesting  
**guay** - cool  
**divertido/a** - funny  
**estúpido** - stupid  
**aburrido/a** - boring  
**entretendido** - entertaining  
**activo** - active  
**sano** - healthy  
**relajante** - relaxing  
**emocionante** - exciting

## Actividades - activities

**chatear en línea** - to chat online  
**escribir correos** - to write emails  
**escuchar música** - to listen to music  
**jugar a los videojuegos** - to play videogames  
**leer** - to read  
**mandar sms** - to send text messages  
**navegar por internet** - to surf the net  
**salir con mis amigos** - to go out with my friends  
**ver la televisión** - to watch t.v  
**jugar al fútbol** - to play football

## El tiempo - the weather

**Cuando...** - when  
**hace calor** - it's hot  
**hace frío** - it's cold  
**hace sol** - it's sunny  
**hace buen tiempo** - it's nice weather  
**llueve** - it's raining  
**nieva** - it's snowing

## Adverbios de tiempo - Time phrases

**A veces** - sometimes  
**De vez en cuando** - From time to time  
**Nunca** - never  
**Todos los días** - everyday  
**Siempre** - always  
**Los lunes** - On Mondays, every Monday  
**Los martes** - On Tuesdays, every Tuesday  
**Los miércoles** - On Wednesdays, every Wednesday  
**Los jueves** - On Thursdays, every Thursday  
**Los viernes** - On Fridays, every Friday  
**Los sábados** - On Saturdays, every Saturday  
**Los domingos** - On Sundays, every Sunday  
**En primavera** - in Spring  
**En verano** - in Summer  
**En invierno** - in Winter  
**En otoño** - in Autumn

## El presente - present tense

**bailo** - I dance  
**canto karaoke** - I sing karaoke  
**hablo con mis amigos** - I talk with my friends  
**monto en bici** - I ride my bike  
**saco fotos** - I take photos  
**salgo con mis amigos** - I go out with my friends  
**toco la guitarra** - I play the guitar  
**hago artes marciales** - I do martial arts  
**hago atletismo** - I do athletics  
**hago equitación** - I do/go horse riding  
**hago natación** - I go swimming  
**juego al baloncesto** - I play basketball  
**juego al fútbol** - I play football  
**juego al tenis** - I play tennis  
**juego al voleibol** - I play volleyball

## Structure and Form

Term	Definition
Prologue	An introductory section to a piece of literature or drama.
Rhyming couplet	Two lines of the same length that rhyme.
Soliloquy	A character speaking alone, voicing their thoughts out loud.
Aside	A comment made by a character, only to be heard by the audience.

## Themes

Theme	Description
Fate	<b>Fate</b> is something that is meant to happen. In the play, this is Romeo and Juliet's relationship.
Love	The main point of the plot is that Romeo and Juliet fall in <b>love</b> .
Conflict	The Montagues and the Capulets have an ongoing feud, which results in <b>conflict</b> and violence.
Religion	Shakespeare uses religious imagery to show the purity of Romeo and Juliet's love. <b>Example:</b> "O speak again, <i>bright angel</i> "

## Year 7 William Shakespeare *Romeo and Juliet*

### Characters

Character	Description
Romeo Montague	Young and romantic. Falls in love with Juliet.
Juliet Capulet	Beautiful and naive. Falls in love with Romeo.
Benvolio Montague	Cousin and protector of Romeo.
Tybalt Capulet	Violent and spiteful cousin of Juliet.
Mercutio	Best friend of Romeo. Neither a Montague nor a Capulet.
Friar Lawrence	Marries Romeo and Juliet with hopes to end the families' feud.

## Literary Terms

Term	Definition
Simile	A comparison using the words 'like' or 'as' <b>Example:</b> "My bounty is <b>as</b> boundless <b>as</b> the sea"
Metaphor	A description saying something is something else <b>Example:</b> " <b>I am</b> the East and Juliet <b>is</b> the sun."
Personification	Giving human qualities to something that is not human. <b>Example:</b> "Then love-devouring <b>death</b> do what <b>he</b> dare."
Foreshadowing	A hint at what is to come next. <b>Example:</b> Friar Lawrence discusses "violence" just before a fight scene.
Rhyme	Words that sound similar. <b>Example:</b> "Did my heart love till now, forswear it <b>sight</b> , For I ne'er saw true beauty till this <b>night</b> ."
Sonnet	A poem of 14 lines, usually to express love. <b>Example:</b> Romeo and Juliet's first conversation is written in sonnet form.

# Romeo and Juliet Home Learning - Shakespeare



Click on the QR code to take you to BBC Bitesize revision for Romeo and Juliet



Research five things about William Shakespeare	Create a information poster about William Shakespeare and find out about three of his plays.	Research William Shakespeare's life. Write a short pamphlet with sub-headings that tells you about his life.
Create a family tree for the characters in Romeo and Juliet.	Research the key themes in Romeo and Juliet and create Theme Cards for each one.	Create an advertising campaign for The Globe Theatre. You need to include a logo, a slogan and a production poster for the play.
Research the key themes of Romeo and Juliet and create your own Knowledge Organiser	Research the treatment of women in the time Romeo and Juliet was set. How has it changed?	What was the legal age for marriage in Elizabethan times? Write an argument for why this should be raised.
Find out what 'foreshadowing' is and research how this is used in the play.	Which house would you belong to: Montague or Capulet? Why? (at least three reasons/paragraphs)	Create a poster showing how symbolism is used in Romeo & Juliet.
Create an ingredients list and method for creating the poison.	Create a rhyming poem that helps you remember the key characters.	Create a new character to be included in the play. Explain their importance and what influences they would have.
Create a new character to be included in the play. Explain their importance and what influences they would have.	Imagine you are Lady Capulet. Write a letter to an agony aunt asking for advice about your wayward daughter.	Write an alternative ending to the play. Do not use 'happily ever after'.
Create a 10 frame storyboard of the play	Create a 10 frame storyboard of the play	Create a set of Top Trump cards for each of the characters in the play.

Easy

Difficult

Challenging



**Key process- erosion**

**Abrasion-** This is the process by which the bed and banks are worn down by the river's load. The river throws these particles against the bed and banks, sometimes at high velocity.

**Hydraulic Action-** This process involves the force of water against the bed and banks.

**Solution (Corrosion) -** This is the chemical action of river water. The acids in the water slowly dissolve the bed and the banks.

**Attrition-** Material (the load) carried by the river bump into each other and is smoothed and broken down into smaller pieces.

**Key process- transportation**

**Traction -** Where large rocks and boulders are rolled along the river bed.

**Saltation -** Where smaller stones are bounced along the river bed in a leap frogging motion.

**Suspension-** Where very small grains of sand or silt are carried along with the water.

**Solution -** Where some material is dissolved (like sugar in a cup of tea) and is carried downstream.

**Key process- deposition**

When a river loses energy, it deposits (drops) its load.

**The hydrological cycle- key terms**

**Evaporation-**The change of water from a liquid to a gas.

**Condensation-** The change of water from a gas to a liquid.

**Precipitation-** Water falling from the sky (e.g. rain, sleet, hail, snow).

**Transpiration-** The release of water vapour from the leaves of trees of plants.

**Throughflow-** Flow of water through the soil.

**Infiltration-** When water soaks down through the ground.

**Tasks- if you complete all 6, revisit some or all from memory**

Task 1: Learn the key processes of erosion.

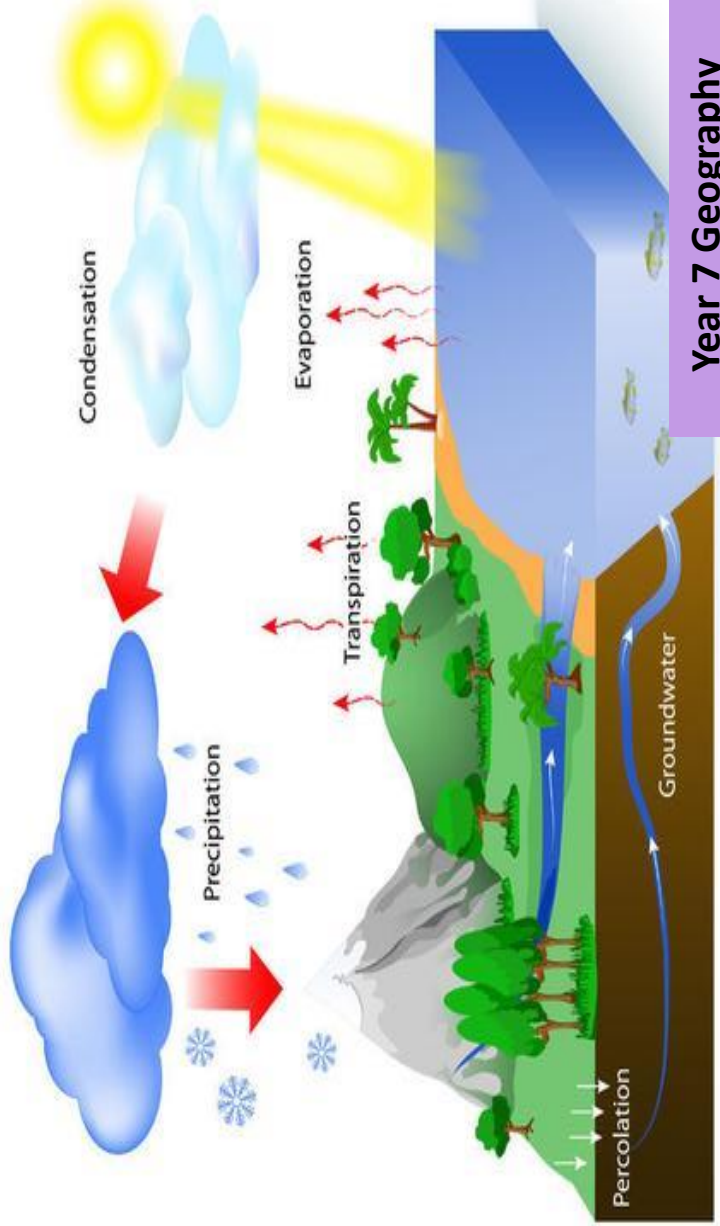
Task 2: Learn the key processes of transportation.

Task 3: Revise the diagram of the hydrological cycle, then cover it and draw the diagram from memory, then self assess and add any detail you have missed.

Task 4: Learn the key terms linked the hydrological cycle.

Task 5: Draw 4 small diagrams that help you remember the key processes of transportation.

Task 6: Create a quiz linked to erosion, transportation and deposition. Max 10 questions.



# WHY WAS JESUS CRUCIFIED?



“Love your neighbour”  
 “I have not come to call the good, but sinners”  
 “You have turned the House of God into a den of thieves”

“Before the cock crows 3 times, you will deny knowing me”  
 “Let him without sin cast the first stone”

## USEFUL QUOTES FROM JESUS

As we study think about...

reflection questions

What was Jesus' main purpose in everything he did?

Why did people follow Jesus?

How did Jesus challenge people?

Why did some people hate Jesus?

Why is the crucifixion and resurrection important for Christians?



## KEY WORDS:

MIRACLE	A surprising event that defies natural laws	PARABLE	A story with a meaning, used by Jesus to communicate ideas about God
SABBATH	The Jewish holy day of rest and worship	BLASPHEMY	Saying something that is against God or making yourself equal to God
CRUCIFIXION	Being put to death by hanging on a cross. It was the worst punishment the Romans would give	TREASON	Saying something that is against the ruler/king or making yourself equal to the ruler/king
RESURRECTION	Coming back to life after you have died	PHARISEE	A Jewish holy man, responsible for teaching people about God
PROPHECY	Using the power of God to predict something that will happen in the future	FORGIVENESS	Having your sins taken away and no longer being responsible for something bad you have done
SIN	A bad action that goes against God's law	SAMARITAN	A person coming from Samaria (disliked by the Jews)

SOME TASKS FOR YOU TO COMPLETE

1 Create a timeline of Jesus's last week

2 Create a mind map of the things Jesus did. Add the criticisms in a different colour

3 Draw a symbol for each key word

4 Write your answers to 3 reflection questions

5 Create a symbol for each of Jesus' teachings

6 Create key word flash cards or a quiz

7 Retell the Good Samaritan story in 4 images or less



## WHAT JESUS SAID:

- You can only judge people if you are perfect
- You should put God above everything in your life
- He came to help people who want to change
- We should love and help people in need

## BUT...

- Sometimes we compare ourselves to others to improve our self-esteem
- Family and friends are important too
- Sometimes we don't want to change
- It's hard to be kind to people who we don't like or who treat us badly

## THE PARABLE OF THE GOOD SAMARITAN

A Jewish man was left for dead on the road by robbers. A Jewish priest and a Levite walked past but did not help him. The man that finally helped him was a Samaritan (his enemy). He took him to safety and paid for him to be looked after.



Teaches that we should love others and help them, **WHOEVER THEY ARE**

## WHAT JESUS DID:

- Jesus told a man his sins were forgiven
- He healed a man's hand on the Sabbath
- He rode into Jerusalem and was treated like a king
- He smashed up the stalls in the temple because they were disrespectful to 'God's house'

## BUT...

- Only God can forgive sins
- Jews are forbidden to do anything on the Sabbath except worship God
- He is challenging the Romans because Caesar was king
- It is making the Pharisees angry because he is criticising them

## THE MIRACLE OF HEALING THE PARALYSED MAN

Some men lowered a paralysed man through a roof to Jesus. He wanted to heal him so said, "Your sins are forgiven" but the Pharisees were not happy because it was blasphemy as only God can forgive sins. Jesus responded by instead telling the man to get up and walk and the man was healed.

Shows that Jesus has God's power to heal and forgive sins

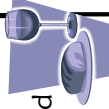


**SUNDAY:** Jesus arrived in Jerusalem. People praised him as a **king and a saviour** but this **challenged the Romans** and the **Jewish leaders** who didn't believe he was a saviour. He smashed up the temple which angered the Jewish leaders who ran it.

People were confused by Jesus' claims that he could **rebuild the temple in 3 days**. This seemed to be a challenge to them that he would destroy their building but many now see it as a **prophecy** by Jesus about what he would accomplish by dying and then resurrecting.



**THURSDAY:** At the last supper Jesus **predicted his own death**, saying that the bread was his body and the wine was his blood. He also said that Judas would betray him and told Peter that he would **deny knowing him**.



He was arrested in Gethsemane and taken to the Chief Priest's house where he was accused of **blasphemy**. They found him guilty but couldn't punish him so they took him to the Roman leader, Pilate and charged him with **treason**. Pilate could not find him guilty but sentenced him to be whipped and crucified.



**FRIDAY:** Jesus was **crucified**. He was humiliated as he carried his cross through the streets then on the cross he shouted **"My God, why have you given up on me?"**

He asked John to look after his mother then said **"It is finished"** and he died. The sky turned black and the disciples hid away because they were frightened and in despair.

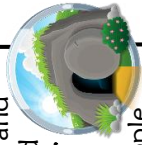


## Jesus' Last Week



**SUNDAY:** Mary and some other women went to the tomb and found it empty. The stone had been rolled away and the burial cloth was neatly folded. When Peter, James and John went and an angel told them Jesus had risen: **"Why do you look for the living among the dead?"**

Jesus appeared to many people. He **ate** with them, he **showed them his scars** and he **talked** to them about his life and death





# ART KNOWLEDGE ORGANISER

YEAR 7 Term 2:  
(January-March)  
Pop Art project

## Topic: Pop Art. Creating Pop Art inspired outcomes using paint and printmaking techniques

### History/Context:

Pop art, or popular art, was an art movement of the 1950s and 60s in America and Europe. It made use of popular imagery, such as comics, films, advertising and household objects.

Pop Art is characterized by bright colours such as red, blue and yellow, as well as images of celebrities or fictional characters from TV or comics, particularly in Roy Lichtenstein's body of work.

Some of the most famous pop artists included Richard Hamilton, David Hockney and Jasper Johns. Another well known pop artist was Peter Blake who designed one of the Beatles' album covers.

Andy Warhol was the most famous pop artist. His work consisted of prints using repeated images of familiar images from everyday life, including banknotes, soup tins and Marilyn Monroe.

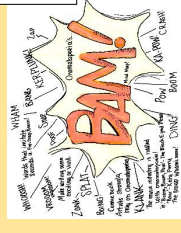
Another well known pop artist was Roy Lichtenstein. His paintings and prints looked just like comic strips, including his most well-known work entitled *Whaam!*

Some pop art works are among the most expensive paintings ever sold. In 2010 a painting of the American flag by Jasper Johns sold for about £70 million.

London's Tate Gallery is one of the best places to see pop art, along with New York's Museum of Modern Art.

Pop art is one of the most instantly recognisable forms of art. The Pop art movement aimed to show the idea that art can draw from any source, in particular everyday objects.

Week 1(Mind Map)



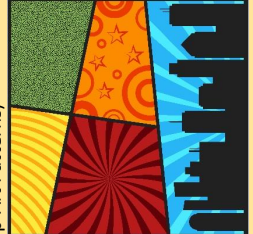
Use these examples as inspiration



You can find out some more about Roy Lichtenstein and Peter Blake on these websites.

Weeks 4/5(Artist Research)

Weeks 6/7 (Pop-Art Patterns)



To help you with your designs



Weeks 8/9 (Artist Research)

### Home Learning tasks:

**Week 1:** AP 1 Revision Create an artistic mind map and add as many words as you can about the Pop-Art movement. Add your key literacy words and maybe some small drawings. Look for about 30 words on the page!

**Week 2:** Practice key literacy vocab 1-5 – look, cover, write, check, correct x 3. Read the sentences again and check for understanding.

**Week 3:** Practice key phrases 6 -10 - look, cover, write, check, correct x3. Read the sentences again and check for understanding.

**Weeks 4/5:** Research the work of Roy Lichtenstein, try to find out a little bit about how he created his work, what inspired him and pick out one of your favourite drawings of his and write about what you like about the piece and why. Research the work of British Pop Artist Peter Blake. Try to find some examples of different album covers that he has produced designs for over the years.

**Weeks 6/7:** Create a page of pop-art patterns inspired by the work of different pop-artists. The images below may help you.

**Weeks 8/9:** Research the work of Andy Warhol, try to find out a bit about how he created his work and what inspired him. Pick a selection of his work and produce a drawing of your favourite one.

**Weeks 10/11:** Create your own Andy Warhol inspired piece of work at home using an everyday object. This could be a food can, a drinks bottle or even a favourite item of clothing!

### Key Literacy Vocabulary:

**Post war** – After the war.

**Consumerism** – Practice of buying products – culture that values buying products.

**Mass Production** – Manufacturing of the same product / identical products being produced quickly.

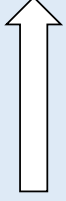
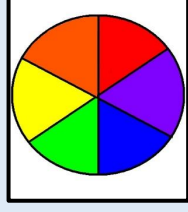
**Marketing** – More need to advertise – industry ads took off.

**Mass media** – Influence, 1950 more common for TV to be in every home in America.

**Popular Culture** - Popular culture can be understood as a set of cultural products, practices, beliefs, and objects which dominates society and influences them.

**Celebrity** – TV creating icons – eg: Marilyn Monroe.

**Colour Wheel** - Shows the relationships between primary colours and secondary colours.



**Comic Strips** – A sequence of drawings in boxes that tell an amusing story, typically printed in a newspaper or comic book.

**Irony and satire** - Humor was one of the main components of Pop art.

Weeks 10/11 (Andy Warhol Piece)

You can find out some more information about Andy Warhol on this website.



Use this link to help you get started.



### Week One

Read your knowledge organiser focusing on **Atoms, Elements and Compounds** for 5 minutes. Turn to the page labelled **Atoms, Elements and Compounds Key Questions**.

Cover the answers or cut the page out and fold down the middle line.

Answers questions 1-14 in full sentences.

Mark your own work using the answers.

### Week Two

Read your knowledge organiser focusing on **Atoms, Elements and Compounds** for 5 minutes. Turn to the page labelled **Atoms, Elements and Compounds Key Questions**.

Cover the answers or cut the page out and fold down the middle line.

Answers questions 15-28 in full sentences.

Mark your own work using the answers.

### Week Three

Read your knowledge organiser focusing on **Reaction** for 5 minutes. Turn to the page labelled **Reactions Key Questions**.

Cover the answers or cut the page out and fold down the middle line.

Answers questions 1-10 in full sentences.

Mark your own work using the answers.

### Week Four

Read your knowledge organiser focusing on **Reaction** for 5 minutes. Turn to the page labelled **Reactions Key Questions**.

Cover the answers or cut the page out and fold down the middle line.

Answers questions 11-20 in full sentences.

Mark your own work using the answers.

### Week Five

Read your knowledge organiser focusing on **Reaction** for 5 minutes. Turn to the page labelled **Reactions Key Questions**.

Cover the answers or cut the page out and fold down the middle line.

Answers questions 21-30 in full sentences.

Mark your own work using the answers.

WE ARE USING



TASSOMAI

Have you completed your 4 daily goals?  
Complete your 4 daily goals this week to  
ensure you improve 😊

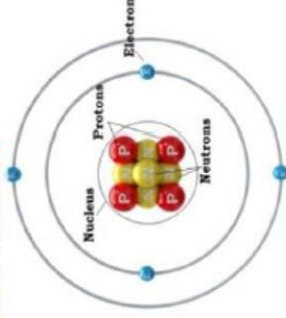
Home learning tips:

1. Answer any questions in full sentences.
2. Take your time reading through your knowledge organiser.
3. Read the task twice.
4. Ask your teacher in your next lesson if you are unsure about anything.
5. Not sure which week to do? Ask your teacher!



### Structure of the Atom

- An atom is made up of three subatomic particles: protons, electrons and neutrons.
- Protons are in the nucleus and have a positive charge.
- Neutrons are in the nucleus and have no charge.
- Electrons are in the shells and have a negative charge.
- Protons and neutrons are the same size, where electrons have hardly any mass.
- In an atom, there are equal numbers of protons and electrons because the positive and negative charges need to balance.



### Key Terms

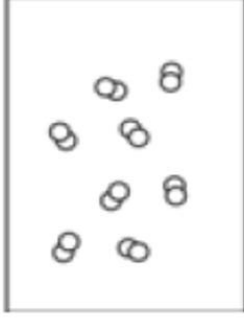
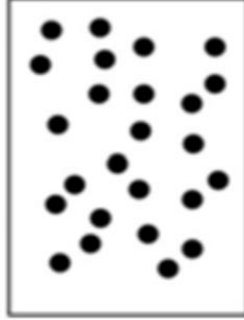
Key Terms	Definitions
Atom	What all matter is made up off
Atomic number	The number of protons in an atom
Mass Number	The total number of protons + neutrons in the nucleus

## Science Department Y7 Atoms, Elements and Compounds Knowledge Organiser



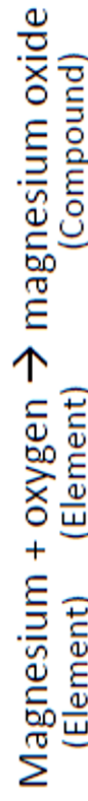
### Elements

- Elements are substances made up of one type of atom.
- All 118 elements are found listed in the Periodic Table.
- The atoms in an element can either be single, or go around in pairs. It doesn't matter, as long as the atoms are **the same**.
- Elements that go around in pairs are called diatomic elements.



## Compounds

- Compounds are substances made up of **different elements** which are chemically bonded.
- Compounds can be formed by chemically reacting elements together e.g.:

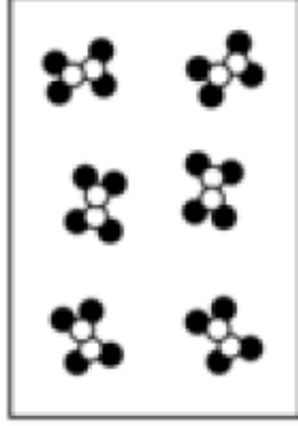


- Often, the compound formed has different properties to the elements that make it. E.g. magnesium is a shiny metal, oxygen is a colourless gas and magnesium oxide is a white powder
- In order to separate the elements in a compound you would need to carry out another chemical reaction.
- Compounds are still pure because, although they contain different atoms, those atoms are bonded to make **one particle**

- Examples of compounds are:

- Carbon dioxide (CO<sub>2</sub>)
- Water (H<sub>2</sub>O)
- Anything else that has more than one element

Joined together



## Chemical Formulae

To show how many atoms are bonded together in an element or a compound, scientists use chemical formulae.

A small number after an element symbol, tells you how many of that type of atom are in the substance.

For example: Cl<sub>2</sub> This means that there are **2 chlorine atoms** chemically bonded together.

For example: H<sub>2</sub>O This means there are **2 hydrogen atoms and 1 oxygen atom**, chemically bonded together.

For example Fe<sub>2</sub>O<sub>3</sub> This means that there are **2 Iron and 3 oxygen atoms**, chemically bonded together.

### Keywords

<b>1. Atom</b>	The smallest possible piece of an element. Has a radius of 0.1nm (or 1x10 <sup>-10</sup> m)
<b>2. Element</b>	A substance in which all the atoms have the same atomic number
<b>3. Isotope</b>	Atoms with the same number of protons but different numbers of neutrons
<b>4. Molecule</b>	Two or more atoms bonded together
<b>5. Compound</b>	Two or more <u>different</u> atoms bonded together
<b>6. Mixture</b>	At least two different elements or compounds together. Can be separated easily
<b>7. Nucleus</b>	The centre of an atom. Contains protons and neutrons
<b>8. Proton</b>	A positively charged particle found in the nucleus
<b>9. Neutron</b>	A neutral particle found in the nucleus. Has no charge
<b>10. Electron</b>	A negatively charged particle found in energy levels (shells) around the nucleus



# Atoms, Elements and Compounds – Key Questions

## Questions



1. Describe the structure of an atom. Refer to the 3 subatomic particles in your answer.
2. State the masses of each subatomic particle.
3. State the charges of each subatomic particle.
4. What is an atom?
5. Which subatomic particles are in the nucleus of an atom?
6. Where are electrons found?
7. What does the atomic number represent?
8. What does the mass number represent?
9. How many protons, neutrons and electrons are in an atom of sodium?
10. How many protons, neutrons and electrons are in an atom of Aluminium?
11. Explain why atoms have no charge.
12. What is the atomic number of potassium and what does this mean?
13. What is the definition of an element?
14. What is the definition of a compound?
15. How are mixtures different to compounds?
16. What compound is formed when magnesium reacts with oxygen?
17. What compound is formed when iron reacts with sulfur?
18. What compound is formed when sodium reacts with chlorine?
19. Which elements are in the compound lithium bromide?
20. What elements are found in copper sulfate?
21. What is the formula of sodium chloride?
22. What is the formula of magnesium chloride?
23. What is the formula of water?
24. Which elements are found in CO<sub>2</sub>?
25. How many atoms are found in H<sub>2</sub>O<sub>2</sub>?
26. How many of each element are found in Fe<sub>2</sub>O<sub>3</sub>?
27. What does the prefix 'di-' mean?
28. What does the prefix 'mono-' mean?



## Answers

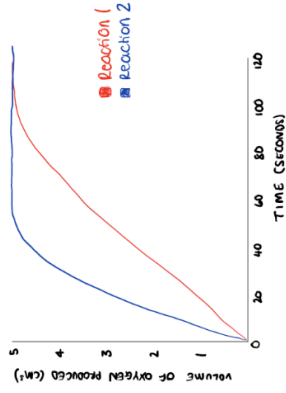
1. The atom has a nucleus made of protons and neutrons. These are orbited by electrons.
2. Proton- 1, neutron-1, electron- almost 0
3. proton-positive, neutron-neutral, electro-negative
4. The smallest amount of matter that can exist.
5. Protons and neutrons are found in the nucleus.
6. Electrons are found in shells, orbiting the nucleus.
7. The atomic number represents the number of protons in one atom of that element.
8. The number of protons and neutrons in one atom of that element is the mass number.
9. In an atom of sodium there are 11 protons, 11 electrons, 12 neutrons
10. In an atom of aluminium there are 13 protons, 13 electrons, 14 neutrons
11. Atoms have an equal number of positive protons and negative electrons. The charges cancel out.
12. The atomic number of potassium is 19 which means one atom of potassium contains 19 protons.
13. An element is a substance made of only one type of atom.
14. A compound is made up of more than one type of atom chemically bonded.
15. Mixtures contain more than one type of atom but are not chemically bonded.
16. When magnesium reacts with oxygen, magnesium oxide is formed.
17. Iron sulfide is formed when iron reacts with sulfur.
18. When sodium reacts with chlorine, sodium chloride forms.
19. Lithium and bromine are the elements in lithium bromide.
20. Copper, sulfur and oxygen are the elements in copper sulfate.
21. NaCl is the formula of sodium chloride.
22. The formula of magnesium chloride is MgCl<sub>2</sub>.
23. H<sub>2</sub>O is the formula of water.
24. Carbon and oxygen are the elements found in CO<sub>2</sub>.
25. H<sub>2</sub>O<sub>2</sub> contains four atoms.
26. Fe<sub>2</sub>O<sub>3</sub> contains 2 iron and 3 oxygen atoms.
27. The prefix "di-" means two.
28. The prefix "mono-" means one.

## What do I need to be able to do?

- Describe the difference between chemical and physical changes.
- Understand chemical reactions as the rearrangement of atoms
- Understand the conservation of mass in changes of state and chemical reactions.
- Define exothermic and endothermic chemical reactions (qualitative) and classify reactions as such
- Describe and give examples of combustion, thermal decomposition, oxidation and displacement reactions
- Identify the reactants in, and products of, photosynthesis
- Describe the role of catalysts
- Construct a word summary for the reactions involved in photosynthesis, aerobic respiration, combustion, and thermal decomposition reactions
- Apply laws of conservation of mass

## 4. Catalysts

Catalysts are substances added to increase the rate of reaction – they speed up reactions.



Reaction 2 shows a catalysed reaction compared to reaction 1. **The same overall volume of product is made, but in less time.**

### Catalysts are beneficial in industry because:

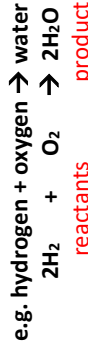
- More product is made in a certain time frame (but not in each reaction)
- Are not used up in a reaction
- Work by reducing the energy required to start a reaction

## 7.5 – Reactions

### 1. Physical & Chemical Changes

**Physical Changes** are those in which **no new** products are made. This means they are usually easily reversible e.g. *changes of state*

During a **chemical reaction**, bonds are broken in the reactants and atoms are rearranged. Then new bonds form between the atoms forming the **new products**. They are hard to reverse.



**Signs that a chemical reaction has occurred:**

- colour changes
- change in temperature
- fizzing or bubbling (due to a gas being released)

### 5. Photosynthesis & Respiration

**Photosynthesis** is the chemical reaction in which plants **absorb** and use light energy from the sun to make glucose – a store of energy

**It happens in the leaf cells**



**Respiration** is the chemical reaction in which energy is **released** from glucose.

**It happens in the cells of all living organisms**

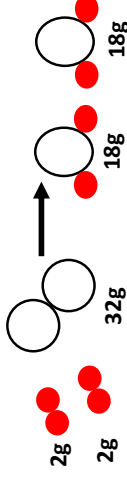


### 2. Conservation of Mass

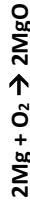
During chemical reactions, mass is conserved – not lost or gained

**Total mass of reactants = total mass of products**

The same atoms are present in the reactants and products but just in different arrangements



Therefore we must always **balance symbol equations** – to show that the reaction obeys the laws of the conservation of mass



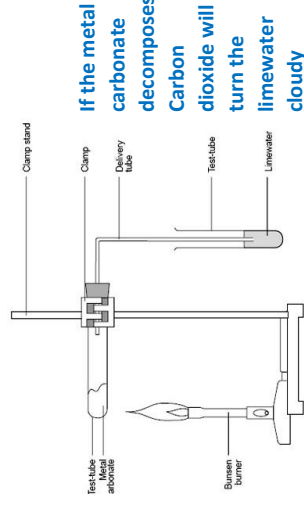
2 atoms of Mg                      2 atoms of Mg  
 2 atoms of O                      2 atoms of O

### 6. Thermal Decomposition

When some substances are heated, they do not react with the oxygen in the air, instead they **decompose**

**Thermal decomposition is breaking down substances using into simpler compounds and elements using heat**

e.g. Copper carbonate → copper oxide + carbon dioxide



**If the metal carbonate decomposes.**  
**Carbon dioxide will turn the limewater cloudy**

### 3. Exothermic & Endothermic

**Exothermic** - Energy is transferred **from** the reacting molecules **to** the surroundings. Energy is released.

**Temperature of surroundings increases**  
 e.g. hand warmers, burning fuels



**Endothermic** - Energy is transferred **from** the surroundings **to** the reacting molecules. Energy is absorbed.

**Temperature of surroundings decreases**  
 e.g. changes of state, cooking



### 7. Combustion

**Fuels are chemical energy stores** that can be released from reaction with **oxygen**. Energy is released when new bonds are formed in the products of the reaction.



When a fuel is **combusted** (burned) with a plentiful supply of oxygen to **release energy**, carbon dioxide and water are also produced.

**Fuel + oxygen** → **carbon dioxide + water**  
 e.g. methane + oxygen → carbon dioxide + water

**The carbon dioxide released contributes to global warming.**

# Reactions – Key Questions

## Questions



1. What is a physical change in chemistry?
2. Give an example of a Physical Change.
3. Define a chemical change.
4. Give an example of a chemical change.
5. What are the reactants in a chemical reaction?
6. What are the products in a chemical reaction?
7. Define "conservation of mass"
8. What is an exothermic reaction?
9. What is an endothermic reaction?
10. What is a fuel?
11. What is the general equation for combustion?
12. What is "combustion" more commonly known as?
13. What is thermal decomposition?
14. What is the general equation for the thermal decomposition of a metal oxide?
15. What is the word equation for photosynthesis?
16. Is photosynthesis endo- or exothermic?
17. What is the word equation for respiration?
18. Is respiration endo- or exothermic?
19. What is a catalyst?
20. What are the six signs of a chemical reaction?
21. What is an oxidation reaction?
22. What is the general equation for an oxidation reaction?
23. How does a catalyst affect the rate of reaction?
24. State 4 factors that will increase the rate of a reaction
25. Define "neutralisation"
26. What is the general equation for a neutralisation reaction?
27. What is the state symbol for a solid?
28. What is the state symbol for a liquid?
29. What is the state symbol for a gas?
30. What is the state symbol for a solution?

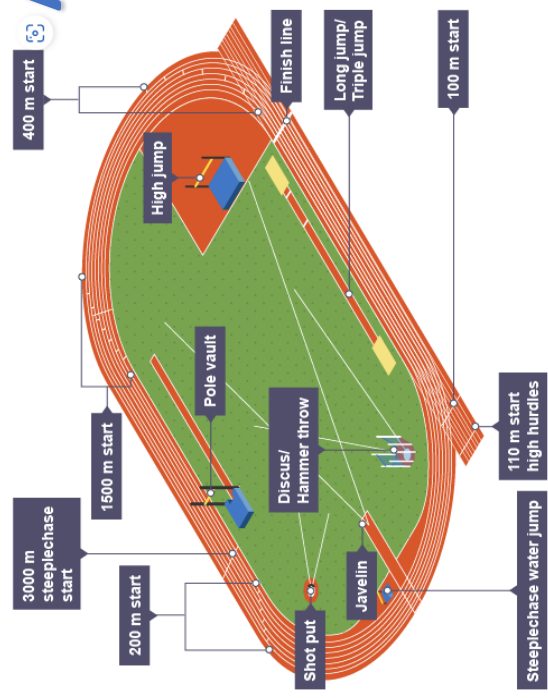
## Answers



1. A physical change in chemistry produces no new substances and is easily reversed.
2. An example of a physical change is melting/freezing or evaporating/condensing.
3. A chemical change involves the formation of new chemicals and is not easily reversible.
4. Examples of chemical change include combustion, neutralisation and decomposition.
5. The reactants in a chemical reaction are the chemicals that react together.
6. The products in a chemical reaction are the chemicals that are produced.
7. Conservation of Mass means that the total mass of reactants is equal to the total mass of products.
8. An exothermic reaction transfers energy from the reacting molecules to their surroundings.
9. An endothermic reaction transfers energy to the reacting molecules from their surroundings.
10. A fuel is a chemical store of energy, which is usually transferred by combustion.
11. Fuel + oxygen -> carbon dioxide + water
12. Combustion is commonly known as burning.
13. Thermal decomposition is the breaking down of substances into simpler compounds and elements using heat.
14. Metal Oxide -> Metal + Oxygen gas
15. Carbon Dioxide + Water ---> Glucose + Oxygen
16. Photosynthesis is an endothermic reaction.
17. Glucose + Oxygen ---> Carbon Dioxide + Water
18. Respiration is an exothermic reaction.
19. Catalysts are chemicals used to speed up the rate of a reaction, without being used up in the reaction.
20. The six signs of a chemical reaction are: 1) Odour, 2) colour change, 3) precipitate formed, 4) temperature change, 5) gas produced and 6) light emitted.
21. An oxidation reaction involves a substance chemically combining with oxygen.
22. Metal + oxygen -> metal oxide
23. A catalyst provides an alternative pathway with a lower activation energy.
24. Four factors that will increase the rate of a reaction are: increase surface area, increase concentration, add catalyst, increase temperature.
25. Neutralisation is the reaction of an acid with an alkali to form a neutral salt and water.
26. Acid + alkali -> salt + water
27. The state symbol for a solid is (s).
28. The state symbol for a liquid is (l).
29. The state symbol for a gas is (g).
30. The state symbol for a solution is (aq) = aqueous.

# Athletics (Indoor)

SPIN FOR ANSWERS



**Jumping (field) events** – these events are measured from the front edge of the take-off board to the first mark made in the sand by the athlete. The distance is always measured to the nearest centimeter and athletes will always be given a minimum of three jumps.

**Throwing (field) events** – these events are measured from the front edge of the throwing line to the first mark made in the ground by the implement. The distance is always measured to the nearest centimeter and athletes will always be given a minimum of three attempts.

Athletics is a collection of sporting events that consist of the three major areas of running, jumping and throwing. The running events include sprints, middle and long-distance events and hurdling. Jumping events include the long jump, high jump, triple jump and pole vault, while the throwing events include the discus throw, hammer throw, javelin throw and shot put.

**Track events** – these races are started with an electronic pistol which is only sounded again on a false start. In races that are very close, officials use a digital line-scan camera across the finish line to give them a photo finish picture. The clock stops when an athlete has passed through the finish line.

**Task 1**  
Components of fitness in athletics

- 1) When is reaction time needed in a 100m race?
- 2) Why does a javelin thrower need power?
- 3) Why does a long jumper need speed?

**Task 2**  
True or False

- 1) The pole vault is a throwing event
- 2) The 4x100m relay is performed by 4 athletes
- 3) When landing in the sand on the triple jump it is measured from the closest landing mark to the take off board.

**Task 3**  
Answer if the following events are field or track

1. 800M race
2. 400M race
3. 100M race
4. Shot putt
5. Long jump
6. 400M Relay
7. High jump

Watch all 5 videos multiple times to learn and understand the techniques to become an even better performer



Answers:  
Task 1:  
1) At the start reacting to the gun

2) A javelin thrower needs speed in their run up and strength in their throw

3) A long jumper needs power to jump far and power is made up of strength and speed

Task 2:  
1) False  
2) True  
3)

Task 3  
1. Track  
2. Track  
3. Track  
4. Field  
5. Field  
6. Track  
7. Field

PERFECT  
PRACTICE  
MAKES  
PERFECT



Learning to Learn



The 'Listen' Project #1