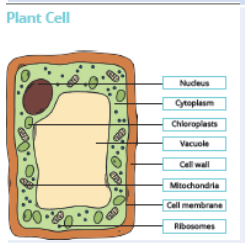
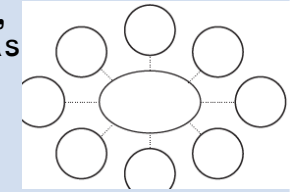
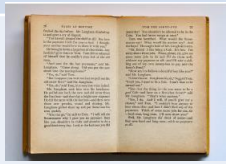
Name:

Year 7 Knowledge Organiser - Autumn 2

Just reading through your books or a knowledge organiser is not always an effective way to revise. Instead, you should do something with the information. Choose an example of the revision methods on the pages or see if you can come up with another method.

The knowledge is evolutionary not revolutionary. Approximately half the knowledge is new and half helps you revise. Many of the activities are changing. We hope you enjoy them.

Idea	Explanation
Make some flash cards or PowerPoint slides. Make top trumps. 	Write down key words, quotation, questions or equations on one side of a card. On the other side, write the definition or answer. Use them to test yourself.
 Make a poster.	Turn your notes into posters with lots of colour and illustrations. Summarising the key information in a different way is an effective way of learning and your brain will remember the colours more easily. Do the title last!
Draw spider diagrams, or for the adventurous mind maps. 	Write the topic/keyword in the centre of your page. Add everything you know in subtopics. Then explore each subtopic in turn adding more ideas. Colour/pictures help you recall.
Write a song or a rap. 	Are there songs that stick your head. Change the lyrics to the information you want to learn. If you record and listen back it will be a more fun way of revising.
 Plan a lesson	If you teach something to someone else the chance of recalling it is really high. This has been found to be the most effective way of learning something for the long term.
Write a story or comic strip. 	Take the keywords or facts that you need to learn and turn them into a story or a cartoon. The sillier the story the more likely you are to remember it.
Write a quiz. Design a game. 	Playing is how we learn as young children and it is a very powerful way of learning throughout life. If we enjoy the game it helps us remember.

Sharing the Love of Reading: 11-16-year olds

The Open University

1. Can I read aloud to a friend or relative?

2. Can I hide a story or poem to be found?

3. Can I deliver a speech from a character or public figure?

4. Can I share my reading journey over the last week?

5. Can I learn about a book from someone's past?

6. Can I…

7. Can I discover what books mean to someone else?

8. Can I…

9. Can I create a paper chain of poetry?

10. Can I gain a '7-day streak' of reading?

11. Can I design my own reading den?

12. Can I recreate a scene/poem using various materials?

13. Can I read in an unusual & unexpected place?

14. Can I set up a news desk & give a report?

18. Can I make my own mini book?

15. Can I recreate a favourite book or comic cover?

16. Can I find an online video of an illustrator drawing and draw along?

17. Can I make an A-Z of authors, book titles or favourite characters?

MAYFLOWER COMMUNITY ACADEMY & NURSERY

Questions, questions, questions…

Asking and answering questions (in our head and aloud) helps us to be better readers. We are constantly asking questions to encourage comprehension skills during reading and these can be broken into three clear sections; 'before', 'during' and 'after' reading.
Here are some examples you can try at home:
(You don't have to ask every question every time you read, try picking out 2-3 different questions each time you read.)

Before reading:

•Why did you select this book?
•What makes you think this book is going to be interesting?
•What do you think the book is going to be about (use the cover image, title and blurb for clues)?
•Does this book remind you of anything else you've already read or seen?

During reading:

•Who/What/Where/When/Why/How questions
•Will you catch me up on the story? What's happened so far?
•What do you think will happen next? Why do you think that?
•Why do you think the character did _____?
•If you were that character, what would you have done differently in that situation?
•How do you think the character is feeling right now?
•If the book was a TV show, which actors would you cast in it?
•Where is the book set?
•What does the place look like in your head as you read? Would you want to visit there?
•Did you learn any new words or facts so far?

After reading:

•What was your favourite part of the book? Why?
•Who was your favourite character? Why?
•What was the most interesting thing you learned from the book?
•Why do you think the author wrote this book?
•Would you have ended the book differently? Did it end the way you thought it would?
•If you could change one thing in the book, what would it be?
•Do you think the book had a good title? What different titles could it have had?
•Can you retell the story in your own words?
•Does this book remind you of anything else you have read? How so?

Accelerated Reader™

To improve my Book Level:

- I will always quiz within my ZPD.
- According to my last quiz result, I should choose a book....

100%	This book was comfortable for you, perhaps try a book higher up in your ZPD range next time.
90%	This book was perfect for you. Perhaps try one or two book levels higher next time.
80%	This book was a little difficult for you. Perhaps choose one or two book levels lower next time.
70%	This book was quite challenging for you. Perhaps try a book at the lower end of your ZPD range next time.
60% or below	This book was too challenging. Perhaps try a book at the low end of your ZPD or speak to your teacher for help.

To improve my Average Percent Correct:

I will use the 5 W's to review before I quiz

I will make sure my book within my ZPD range

I will take my time when quizzing

I will make notes when reading

I will quiz as soon as I finish my book

5 W's:
What...
Who...
When...
Where...
Why....

To meet my Points Target:

Aim for 100% to earn all the points

I will fit in extra reading time:
Before bed?
On the bus?
During lunch?

I will read **fewer long** books

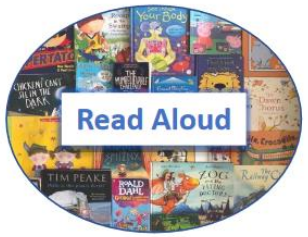
I will stick with a book and **finish it**

I will read several shorter books

If you are able to understand a book as you read, but struggle to remember events when you quiz, ask Miss Ling for a reading reminder sheet.

Supporting Readers at Home

Open University research suggests there are three important ways to support readers and a love of reading.



Reading aloud to your children shows them reading is a pleasure, not a chore. Older children can also read to younger ones.
*Reading together doesn't have to be a story (recipes, news articles etc. all count too!)
*If you are not confident in reading aloud, why not listen to an audiobook together.

Making time to read alongside one another helps develop children's reading stamina and interest, Let them chose what to read and relax together (you don't need to be reading the same thing.)
* Where can you 'fit' reading in? It could be 10 minutes before tea, when they come home from school, waiting in the car, before bed etc. You may find it easier to set a regular time aside, or fit it in around your other commitments.

Children who read, and are supported as readers, develop strong reading skills and do better at school. Research also shows that reading aids relaxation and has benefits for mental health.

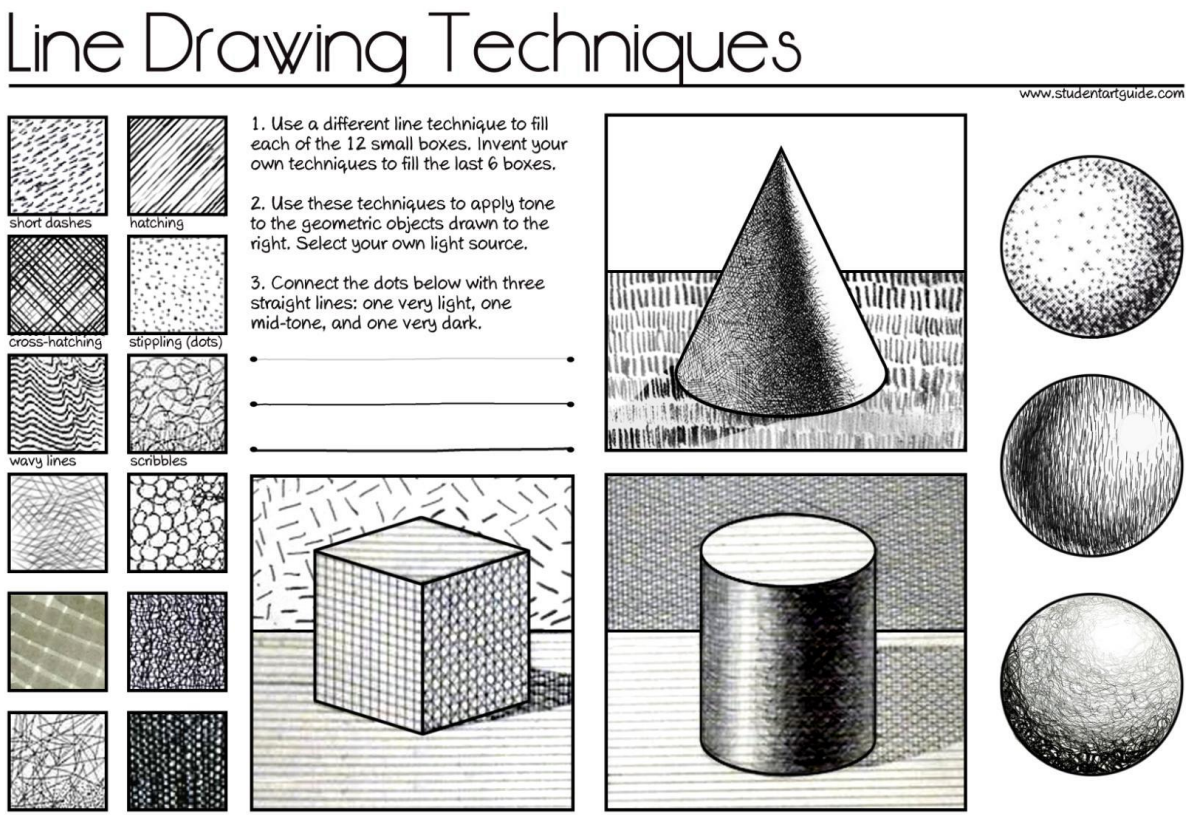
I wonder if…why…what…who…

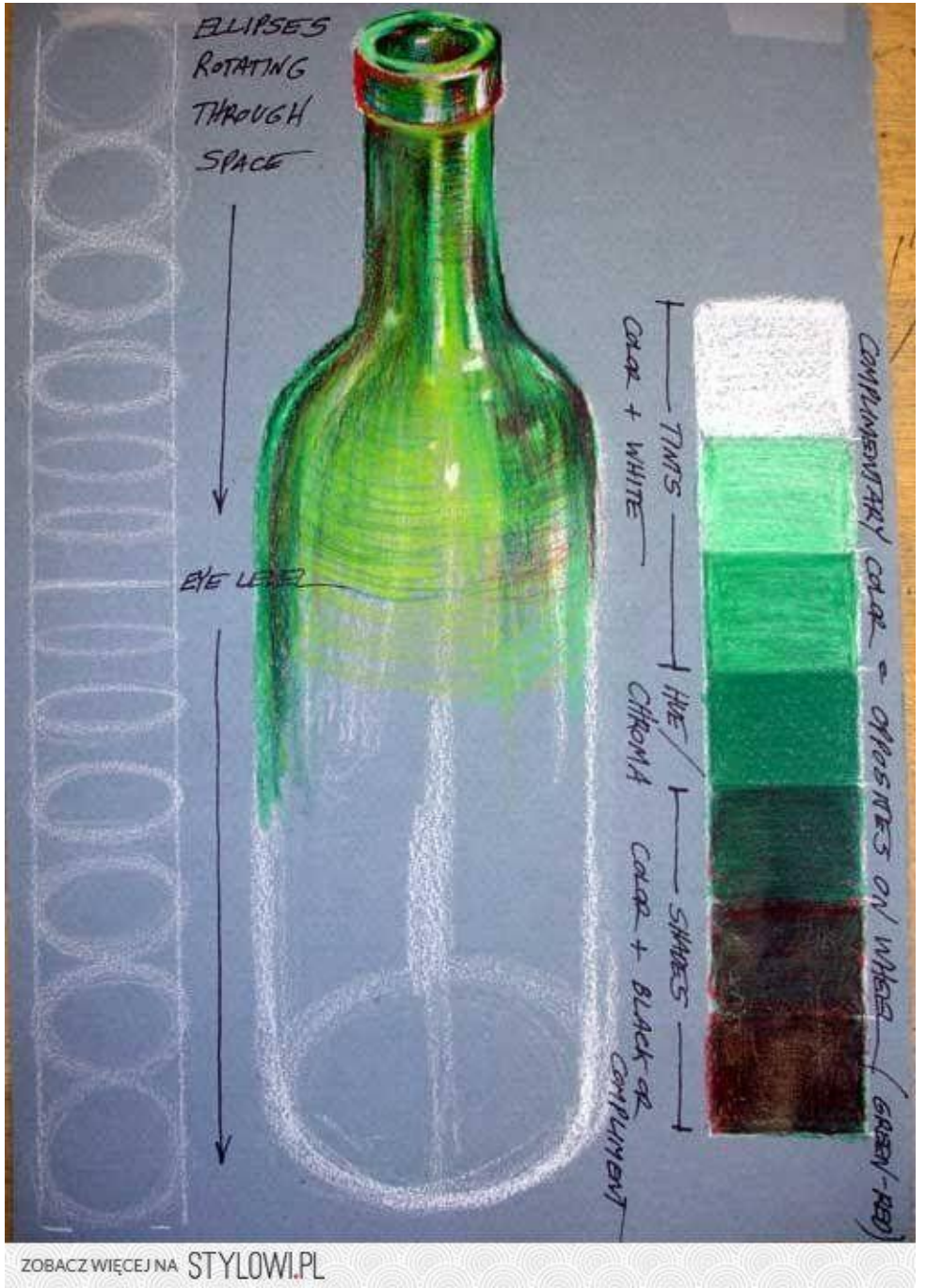
Book chats encourage readers. Invite them to make connections and share their views. Join in with your views too! (Please see the next page for suggested questions you can ask about any book.)

Adapted from Open University 'Supporting Reading at Home': https://researchrichpedagogies.org/_downloads/Supporting_Readers_at_Home_Poster_.pdf
For more ideas see: https://www/researchrichpedadgogies.org

Year 7 Art Knowledge Organiser:

- At the start of Year 7 we introduce you to the formal elements in Art such as **TONE**, **FORM**, **LINE**….etc… See next page for full breakdown of the art elements.
- You learn about how to ***look*** properly when drawing and how to shade effectively. See the diagram below.





Elements of Art

These are the basic elements that are used by Artists in creating Art; they are what you use to create an aesthetically pleasing work. When we make Art, we need to understand and apply these seven Elements of Art.

Line

A mark made by a pointed tool such as a brush, pen or stick; a moving point.

Shape

A flat, enclosed area that has two dimensions, length and width. Artists use both geometric and organic shapes.

Color

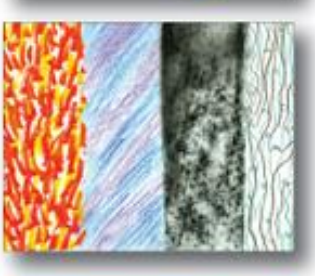
Is one of the most dominant elements. It is created by light. There are three properties of color; Hue (name,) Value (shades and tints,) and Intensity (brightness.)

Value

Degrees of lightness or darkness. The difference between values is called value contrast.

Form

Objects that are three-dimensional having length, width and height. They can be viewed from many sides. Forms take up space and volume.



Texture

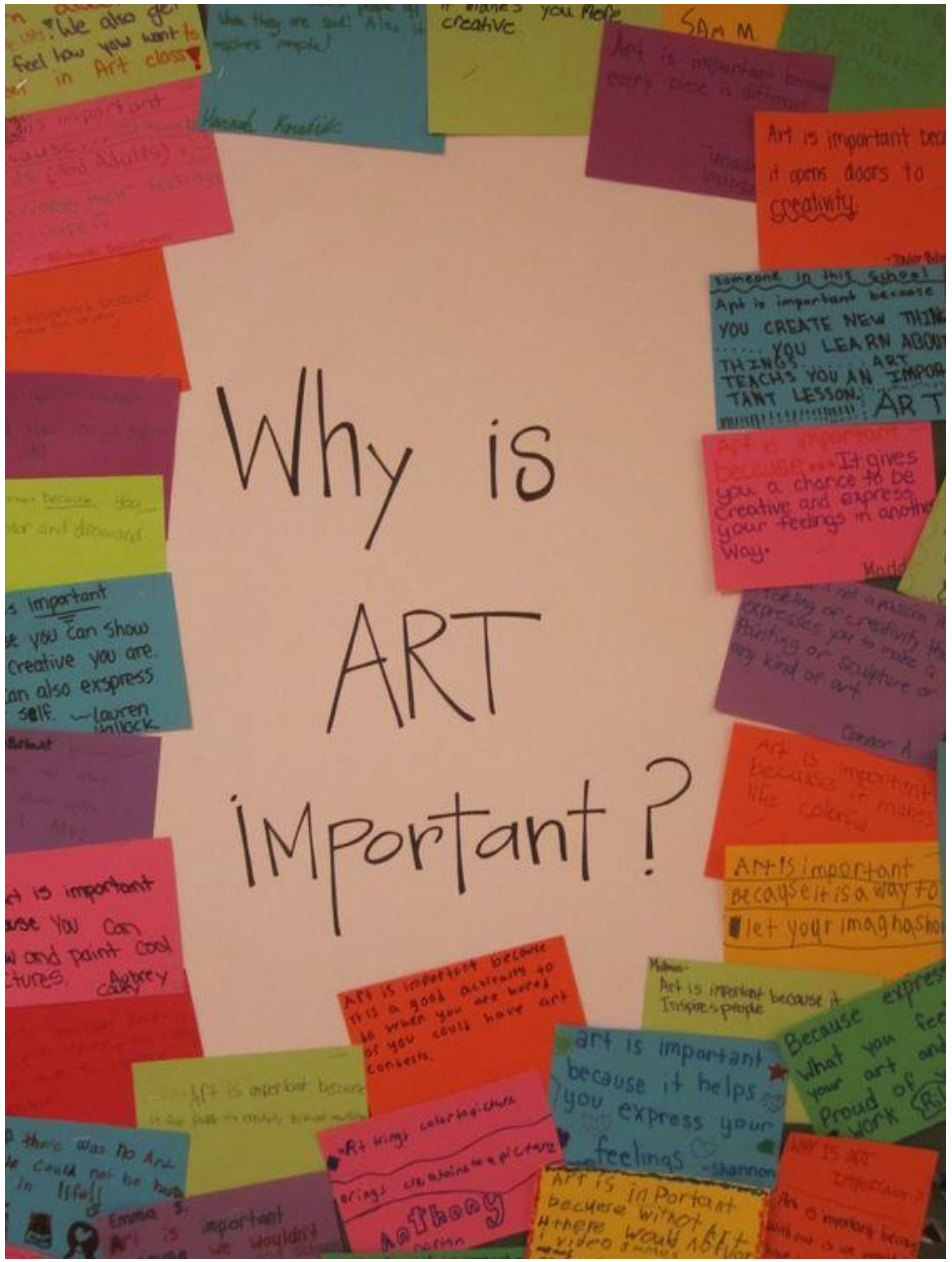
Describes the feel of an actual surface. The surface quality of an object; can be real or implied.

Space

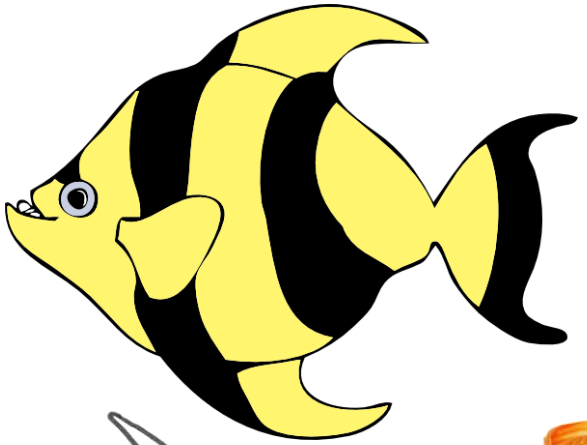
Is used to create the illusion of depth. Space can be two-dimensional, three-dimensional, negative and/or positive.

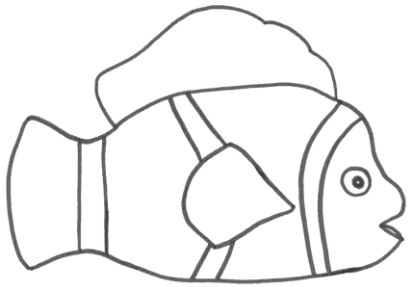
- You learn a little about why Art is important and why we learn about it in school.
- You learn about the colour wheel and the relationship colours have to one another.
- You learn how to use Art tools and materials in the correct way, e.g. brushes, paint, ink, clay and oil pastels.

You learn about effective ***Composition*** (where to place something in a picture). See Fish picture below for good example of this:

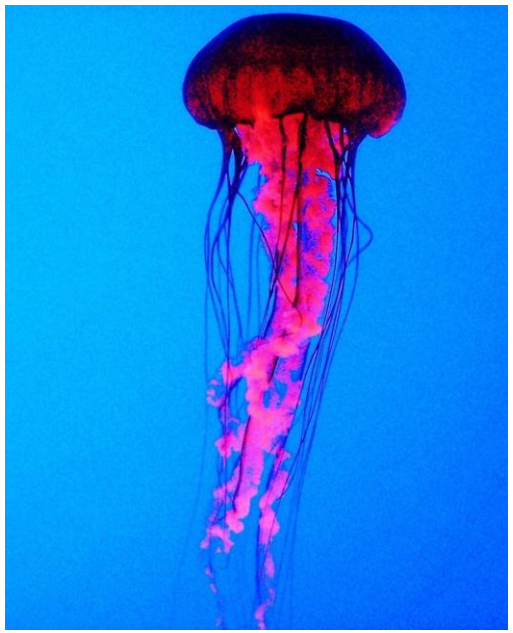


Year 7 Art





Composition



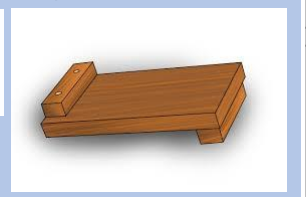
Paul Klee

Year 7 Picture Frame– Autumn 2 term

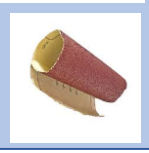
The first project of this year will be a focused practical task. You will be making a picture frame in the Academy workshop. The aims of this task is to be able to use the workshop safely and confidently.

You be following this exploded drawing carefully. It will explain what components, tools and equipment are needed. We will teach you how to change the blade of a coping saw safely. Do you recognise the different tools and equipment from the 'how to' pages?

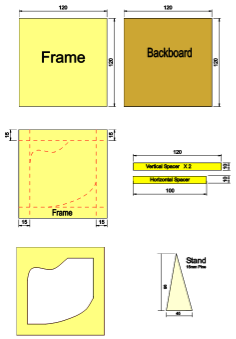
Can you name the following tools and explain what they are used for?

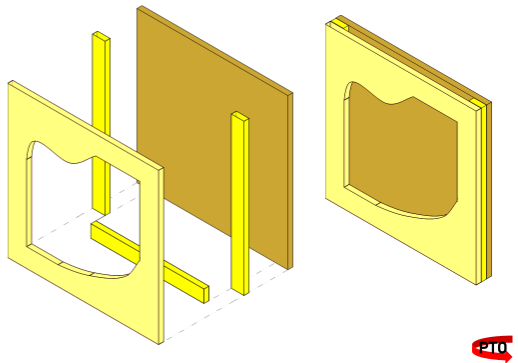


Careers using this knowledge: carpenter, engineer, product designer, teacher.



HOW TO... **Make a Picture Frame**





PTO

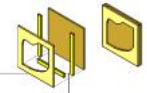
1

HOW TO... **Make a Picture Frame**

Components:			Equipment:
Amount	Size	Material	
2	120mmx120mm x3mm MDF	3mm MDF	• Tape measure or steel rule • *Sharp* pencil • Square • Pillar, Bench or Hand Drill and 4mm Drill bit • Wood Vice • Coping Saw • Sandpaper • Bench Hook • PVA Wood Glue • Spring Clamps
2	120mm x 10mm x3mm MDF	3mm MDF	
1	100mm x 10mm x3mm MDF	3mm MDF	
1	softwood for the stand	Softwood for the stand	
1	100mm x 100mm	Acetate	

2

HOW TO... **Make a Picture Frame**



Measuring & Marking

Mark 15mm in from the edge.

Draw a straight line using a square and a *sharp* pencil.

Do this on all four sides. This is the edge of your frame.

Draw on your design, mark where to drill and draw hatching lines to make it clear where to cut.

Cutting

Drill at least a 4mm hole in the workpiece where the cut-out will be.

Place the workpiece into the wood vice & attach the Coping Saw blade through drilled hole in the workpiece and tighten.

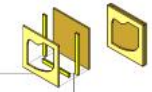
Saw carefully to LEAVE the LINE showing.
Move the workpiece as appropriate in the wood vice to make it easier to cut.

Remove the Coping saw from the frame by turning the handle anti-clockwise to undo.

PTO

3

HOW TO... **Make a Picture Frame**

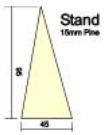


Sanding & Assembling

Sand the inside of the frame to a smooth finish

Start to assemble the spacers onto the backboard and glue in place using PVA wood glue

Apply glue onto the upper surface of the spacers and attach the frame. Clamp in place using spring clips until the glue dries



Make a stand at the angle shown from softwood

Finishing

Sand the edges of the completed frame to a smooth finish

Attach the stand using PVA wood glue

Cut-out 100mm x 100mm Acetate square and place in the frame

Paint, stain or varnish to complete

4

Nutrition

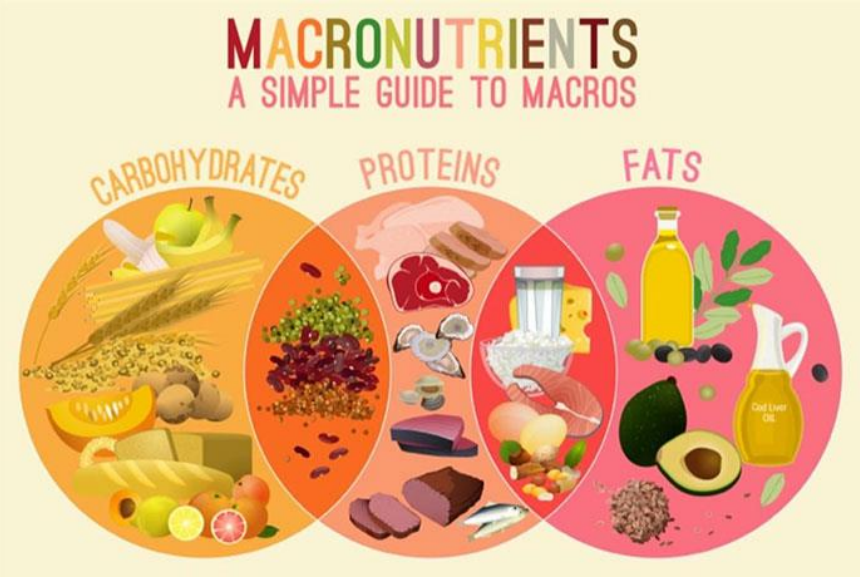
Nutrients

Macro nutrients – Needed in large quantities in the diet
1. Protein
2. Fats
3. Carbohydrates

Micro nutrients – needed in small quantities in the diet
1. Vitamins
2. Minerals

Example exam questions:

Explain three causes of obesity (3 marks)
What is the function of sugary and starchy carbohydrates (2 marks)
Why is protein especially important for children? (2 marks)
What are the functions of fat? (3 marks)
List 5 food sources of plant based protein (5 marks)



Protein

Food sources

Animal –beef, pork, lamb, poultry (chicken, turkey, duck), fish, cheese, butter milk
Plant – beans, chickpeas, lentils, peas, nuts, seeds, found in smaller amounts in some vegetables such as spinach and broccoli.

Function

Grown and repair of muscles and cells

Carbohydrates

There are two types of carbohydrates, complex and simple. They are also known as starchy (complex) and sugary (simple).

Food sources

Starchy – bread, rice, pasta, potatoes, bagels, oats, flour, cereal and some vegetables.
Simple – fruit, some vegetables, chocolate, sweets, biscuits, cakes

Function

Starchy/complex carbohydrates are digested slowly and provide long term energy.
Sugary/simple carbohydrates are digested slowly and provide short term energy

Fat

There are two types of fat, saturated and non saturated.
Saturated fats are classed as 'unhealthy fats', they are solid at room temperature and are generally animal based.
Unsaturated fats are classed as 'healthier fats' and are liquid or soft at room temperature and come from plant based sources.

Food sources

Animal –beef, chicken skin, processed meat (sausages, salami, pepperoni), bacon, butter, cheese, full fat milk
Plant – vegetable oils (sunflower, olive, rapeseed), avocado, nuts, seeds

Function

Keeps us warm (provides insulation), secondary source of energy, protects vital organs and bones.

Flapjack

Ingredients

125g rolled oats

75g sugar

75g margarine

2 tbsp. golden syrup

Try adding..
Nuts
Raisons
coconut

Equipment

Weighing scales

Measuring jug

Saucepan

Wooden spoon

Skills

Mixing

Melting

Weighing

baking

1. Pre-heat the oven to 180°C. Melt margarine, syrup and sugar in a pan. **Do not let the mixture boil.**

2. Remove the pan from the heat and stir in the oats.

3. Poor the oat mixture into an oven proof dish.

4. Lightly smooth the top of the mixture with the back of your spoon.

5. Bake in the oven for 15- 20 minutes

Cheesy Chicken Pasta

Ingredients
1 chicken breast
½ pepper
2 garlic cloves
1 carton of passata
200g pasta
100g cheddar cheese
1tsp mixed herbs
Salt and pepper
1 tbsp vegetable oil

Equipment
Red chopping board
White chopping board
Knife
Frying pan
Grater
Teaspoon
Saucepan
Colander

Skills
Working with raw meat
Chopping
Seasoning
Frying
Grating

1. Fill a saucepan over half way with water. Bring to the boil. When boiling, add the pasta and cook for 12 minutes.

2. Dice your chicken breast on a red chopping board. Cut up your pepper on a white chopping board.

3. Fry the chicken and peppers for 5 minutes until white. Add the squeezy garlic and cook for another minute.

4. Add the passata, mixed herbs and salt and pepper. Mix.

5. When the pasta is cooked, drain and add to the sauce. Mix together well.

6. Pour into an oven proof dish, cover with cheese and bake for 10 minutes until golden and bubbly.

If you already made this dish on the year 6 taster days, you are welcome to change some ingredients!
You could change the protein, vegetables, or the type of cheese on top.

Practical Assessment 1: Pizza Toast

Ingredients

2 slices of bread

2tbsp tomato passata

1 pepper

2 mushrooms

1 tomato

25g of cheese

Pinch of mixed herbs

Equipment

Chopping board

Knife

Grater

baking tray

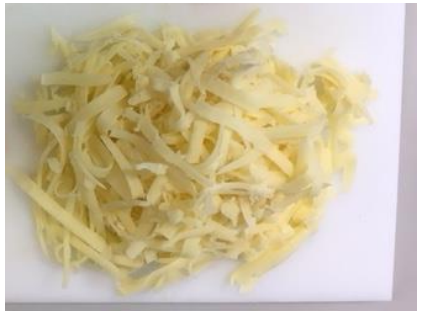
Skills

Slicing

Grating

baking

1. Pre-heat the oven to 180°C. Slice your vegetables.



2. Grate the cheese.

3. Spread the tomato sauce evenly on the bread.

4. Evenly sprinkle the cheese on the bread.

5. Evenly distribute the vegetables and then sprinkle with mixed herbs.

Bake in the oven for 20 minutes till golden and bubbly. ☺

Aerobic Endurance

Definition: The ability of the heart and lungs to work hard to supply **nutrients** and **oxygen** to the muscles during exercise.

Aerobic endurance can also be known as cardiovascular fitness or cardiovascular endurance.

Some sports that use aerobic endurance

Can you think of any other sports where you have needed good levels of aerobic endurance?

Tell your PE teacher some sports that use good aerobic endurance for some extra achievement points!

VO2 max (ml/kg/min): the maximum amount of oxygen uptake, usually measured in ml of oxygen per kg of body mass per minute. It is a measurement of aerobic endurance.

How can you train to improve your aerobic endurance?

Scan this QR code to watch a You-tube clip to find out more information on ways to train to improve your **aerobic endurance**.

They are:

- Fartlek – this is where the intensity of training is varied by running at different speeds or over different terrain. The training is continuous with no rest period.
- Continuous - this is training at a steady pace and moderate intensity for a minimum period of 30 minutes.
- Interval – this is where the individual performs a work period followed by a rest or recovery period.
- Circuit training - this is where different stations/exercises are used to develop aerobic endurance.

Year 7 Knowledge Organiser – Physical Education (Autumn 1)

How to test aerobic endurance

Here are three fitness tests that can be used to test aerobic en durance. Scan the QR codes to watch how to do each fitness test.

- Multistage fitness test (beep test)
- Forestry step test
- Cooper test (12 minute run test)

Multistage fitness test

Forestry step test

Cooper test

Remember that attending extra-curricular clubs will not only help improve your understanding in that sport but it will also help improve your fitness levels, communication, teamwork, leadership and many other key values found in sport. We **encourage** you to attend at least one extra-curricular session.

CHALLENGE: Can you run 5km without stopping? If you can't download the free NHS Couch to 5K App. This will improve your aerobic fitness and will support you with your everyday activities. If you can already run 5k, how about challenging yourself to the 10k App!

Career Link

Scan this QR code. Do you think you have what it takes to be a FIFA referee?

Referees' from a range of sports will need to have a good level of aerobic endurance as they will need to keep supplying their working muscles with nutrients and oxygen for the entire game. Football and rugby referees' are great examples as they will have to run up and down the pitch for long periods of time without getting tired. They will also need to keep up with the players so they have a good view of what is going on.

FORCES

A force can be a **push or a pull**, for example when you open a door you can either push it or pull it. You can not see forces, you can only see what they do.

When a force is applied to an object it can lead to a change in the objects
Speed

Direction of movement

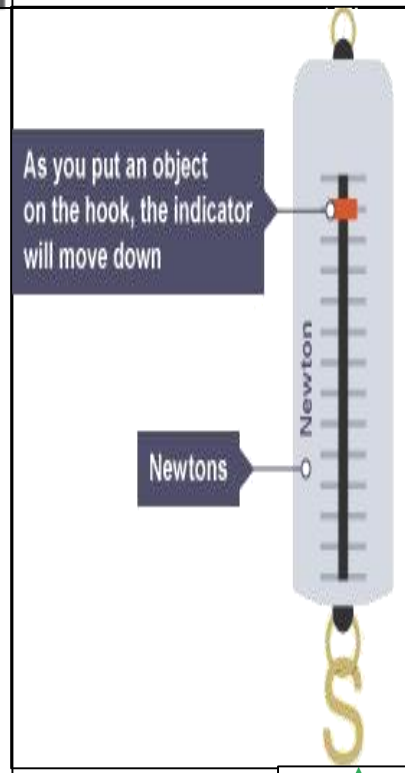
Shape (think about a rubber band)

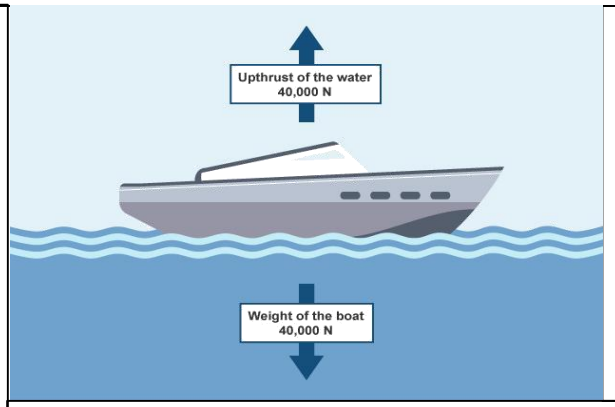
Forces can also be divided into 2 types, contact forces and non contact forces.

Contact forces for example friction, are caused when two objects are in contact.

Other forces for example gravity, are **non contact forces.** The two objects do not need to be in contact for the force to occur.

The unit of force is the **Newton (N)**, this is named after Sir Isaac Newton, who came up with many theories including those to do with gravity and the three laws of motion. We measure force using a piece of equipment called a Newton metre.





Force Diagrams

To show the forces acting on a body we use a free body force diagram. **A free body force diagram** shows all of the forces that are acting on the body. It has arrows that show the direction the force acts, the larger the arrow, the larger the force. A free body fore diagram should always have labelled arrows.

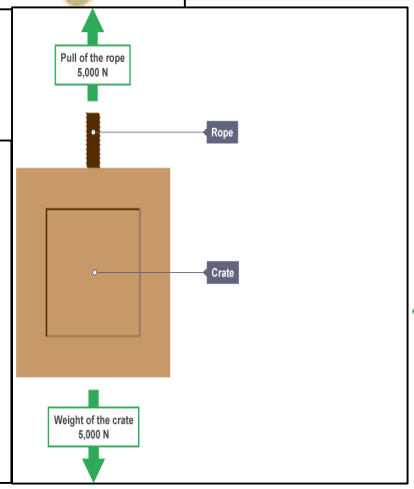
Unbalanced forces

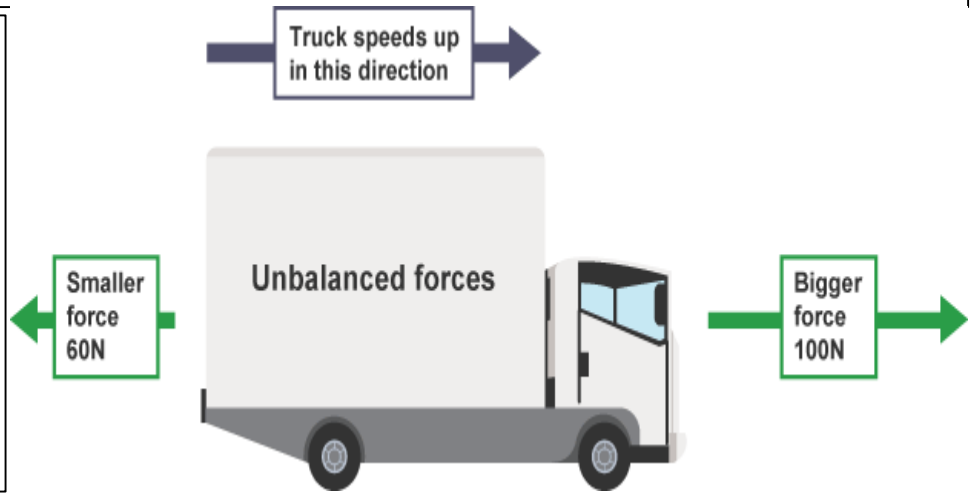
When two forces acting on an object are not equal in size, we say that they are unbalanced forces. The overall force acting on the object is called the **resultant force**. If the forces are balanced, the resultant force is zero.

If the forces on an object are unbalanced, this is what happens:
•a stationary object starts to move in the direction of the resultant force
•a moving object changes speed and/or direction in the direction of the resultant force
In the example below, the resultant force is the difference between the two forces:
100 – 60 = 40 **N** (to the right)

Balanced forces

When two forces acting on an object are equal in size but act in opposite directions, we say that they are **balanced forces**.
If the forces on an object are balanced (or if there are no forces acting on it), this is what happens:
•a stationary object stays still
•a moving object continues to move at the same speed and in the same direction
Remember that an object can be moving, even if there are no forces acting on it.

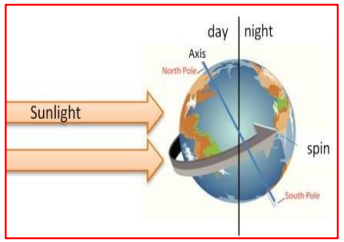




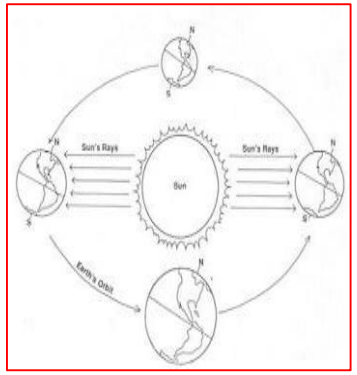
Earth and the solar system

Keyword	Definition
Attraction	When two or more things come together, eg the north pole of a magnet is attracted to the south pole of a magnet.
Gravity	The force of attraction between all objects. The more mass an object has, the larger the force of gravity it exerts.
Magnetic Field	Area surrounding a magnet that can exert a force on magnetic materials.
Mass	Amount of matter there is in something. Measured in kilograms, kg.
Orbit	An orbit is the path that an object takes in space when it goes around a star, a planet, or a moon.
Repulsion	When two or more things are forced apart, eg the north pole of a magnet is repelled by the north pole of another magnet.
Season	One of four times of the year (winter, spring, summer or autumn).
Solar System	The solar system consists of the Sun, with planets and smaller objects such as asteroids and comets in orbit around it.
Star	A large mass at the centre of a Solar System (if there are other bodies present) that produces heat and light, eg the star at the centre of our Solar System is called the Sun.
Weight	The force of gravity on an object. Measured in newtons, N.

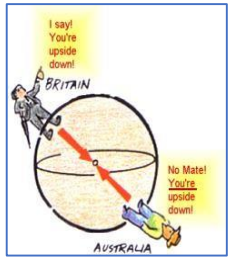
Day and Night
The Earth rotates (spins) round on its axis once in 24hours. We spin into the light – day - and then back out again – night

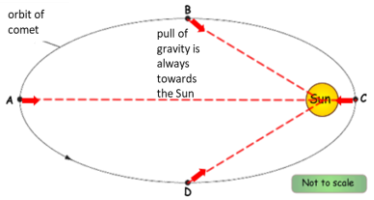


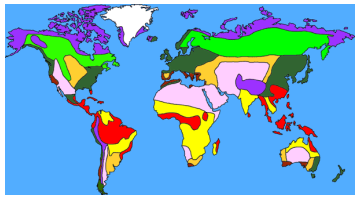
The Earth orbits the Sun ***once every 365 days***. Planets further out from the Sun travel more slowly and take longer to go round once. The Earth's axis is tipped over in space. In Britain we get different ***seasons*** because sometimes we are tilted towards the Sun and sometimes away.



- **Weight and Mass**
- **Mass** is the amount of matter there is in something. It is measured in kilograms, **kg.** An objects mass the same everywhere in the universe.
- **Weight** is the force of gravity on an object. All forces including weight are measured in Newtons, **N.** Gravity is not the same everywhere. So, an object's weight depends on where in the universe it is.
- To work out the weight of an object we do some Maths. **Weight**
- **(N) = mass (kg) x gravitational field strength (N/kg)**







Year 7 Knowledge Organiser: Global Ecosystems (Biomes)

Topics covered

- ✓ What is an ecosystem?
- ✓ Types of ecosystem/biomes
- ✓ Locations of biomes
- ✓ Deserts distribution (where they are found) and climate
- ✓ Deserts adaptations
- ✓ Tropical Rainforests distribution (where they are found) and climate
- ✓ Tropical Rainforests (TRF's) adaptations
- ✓ Threats to TRF's
- ✓ Protecting TRF's

Key Ideas:

1. I can describe the location of global climate zones (average weather zones) and biomes
2. I can describe the characteristics (what it is like) for deserts and tropical rainforests (TRF's)
3. I can explain how TRF's are being threatened
4. I can suggest ways that TRF's can be protected

Skills

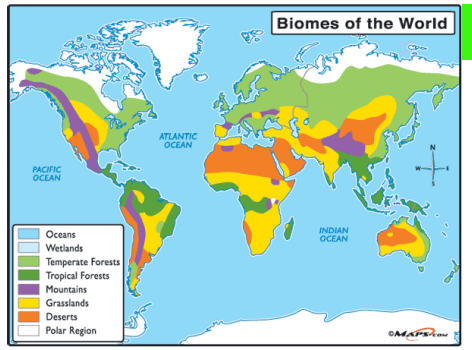
- ❑ Recognising/Describing geographical features from an image
- ❑ Describing a distribution on a global scale map
- ❑ Drawing a climate graph
- ❑ Research using ICT
- ❑ Writing a persuasive letter

Places and Environments

- ❖ The Sahara desert
- ❖ The Amazon Rainforest

Key Terms Used in this Unit

- ❑ Biomes
- ❑ Temperature
- ❑ Rainfall
- ❑ Climate
- ❑ Distribution
- ❑ Adaptations
- ❑ Evaporation
- ❑ Precipitation
- ❑ Lianas
- ❑ Buttress Roots
- ❑ Drip Tips
- ❑ Biodiversity
- ❑ Cattle ranching
- ❑ Plantations
- ❑ Palm Oil
- ❑ Sustainable



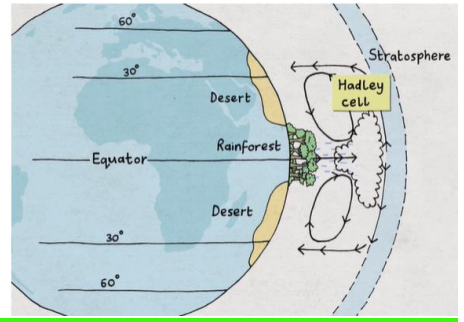
Describe the pattern that shows where Biomes occur

Biomes are giant areas of the planet that contain similar plants and animal species living in similar **climate** conditions.

Biomes are mainly split by how far North or South of the **equator** you go but can also be disrupted by mountain ranges and coasts.

A huge 'convection' movement occurs in the atmosphere above the equator. This pushes warm humid air upwards causing thunderstorms. The air continues to rise upwards after it has rained and hits the '**stratosphere**' forcing it to move left and right of the equator. This is called the **Hadley Cell**.

This same air which is now dry sinks back to the ground over desert areas. This explains why there are few clouds and little rain.



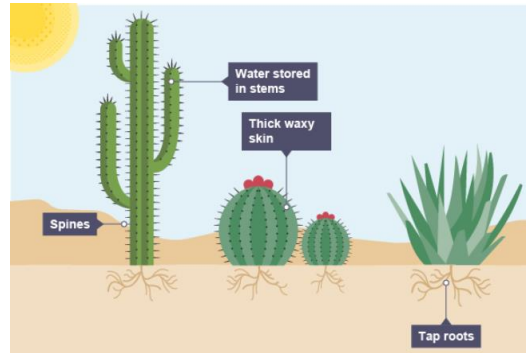
Describe the pattern that shows where Deserts occur

Explain the links found in an 'ecosystem'

The **food web** is one way that plants, feed animals (herbivores) who are then preyed upon by meat eaters (carnivores).

Dead animals are returned to the soil which feeds growing plants along with rain and sun.

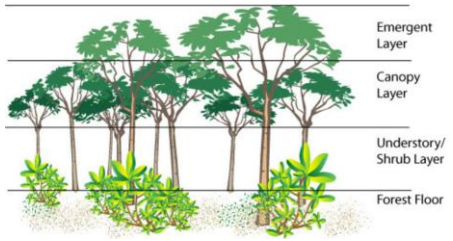
An **ecosystem** is the way all of these elements depend on each other.



Give reasons why plants have the adaptations found in deserts

Rainforests contain some of tallest trees on earth (**emergents**) as well as the most humid, green, **bio-diverse** (life – rich) environments on planet earth.

Label the names of the rainforest layers



Explain why rainforests are under threat today

Rainforests continue to be destroyed at devastatingly fast rates.

Tropical rainforests are the richest ecosystems on earth in terms of plant and animal species. These landscapes also play an important role in keeping us all alive for example by absorbing **Carbon Dioxide**.

Many of our favourite house plants originated in desert or '**arid**' landscapes (this is why it can be easy to kill them by over-watering!).

Because rain is in short supply plants have developed many ways to keep hold of water. We refer to these differences as '**adaptations**'. Many are known as 'succulents'.

German Autumn 2

Module 2: Familie und Tiere (Family and Pets)

Here is the vocabulary you will need for Module 2.

Remember to listen to the German by copying and pasting the blue codes next to the speaker icons here. The full address is:

https://www.activeteachonline.com/view

In this Module you will learn how to:

- talk about pets
- say what different pets can do
- talk about family members and ages
- describe family members
- talk about birthdays.

LXpXC2Uw

Eigenschaften • Qualities

Wie ist er/sie/es?	*What is he/she/it like?*
Er/Sie/Es ist ...	*He/She/It is ...*
dick/schlank	*fat/thin*
frech/niedlich	*cheeky/cute*
gemein/süß	*mean/sweet*
groß/klein	*big/small*
kräftig	*strong*
schlau	*cunning*
(super)lustig	*(really) funny*
Er/Sie/Es kann ...	*He/She/It can ...*
Italienisch sprechen	*speak Italian*
fliegen	*fly*
Flöte/Fußball/Wii spielen	*play the flute/football/on the Wii*
(schnell) laufen	*run (fast)*
lesen	*read*
Rad fahren	*ride a bike*
schwimmen	*swim*
singen	*sing*
springen	*jump*
tanzen	*dance*

zqkjSAHS

Haustiere • Pets

Hast du ein Haustier?	*Have you got a pet?*
Ich habe ...	*I have ...*
einen Goldfisch	*a goldfish*
einen Hamster	*a hamster*
einen Hund	*a dog*
ein Kaninchen	*a rabbit*
eine Katze	*a cat*
eine Maus	*a mouse*
ein Meerschweinchen	*a guinea pig*
ein Pferd	*a horse*
eine Schlange	*a snake*
einen Wellensittich	*a budgie*
kein Haustier	*no pet*

German

Die Zahlen 20–100 • Numbers 20–100

zwanzig	*twenty*
dreißig	*thirty*
vierzig	*forty*
fünfzig	*fifty*
sechzig	*sixty*
siebzig	*seventy*
achtzig	*eighty*
neunzig	*ninety*
hundert	*hundred*
einundzwanzig	*twenty-one*
zweiundzwanzig	*twenty-two*

4eBlvpoK

Die Farben • Colours

schwarz	*black*
weiß	*white*
grau	*grey*
braun	*brown*
rot	*red*
orange	*orange*
gelb	*yellow*
grün	*green*
blau	*blue*
indigoblau	*indigo*
violett	*violet*
lila	*purple*
rosa	*pink*
bunt	*brightly coloured*
hellblau/dunkelblau	*light blue/dark blue*

N8CxZXmV

Meine Familie • My family

Es gibt ... Personen in meiner Familie.	*There are ... people in my family.*
meine Mutter	*my mother*
mein Vater	*my father*
mein Bruder	*my brother*
mein Stiefbruder/ Halbbruder	*my stepbrother/ half-brother*
meine Schwester	*my sister*
meine Stiefschwester/ Halbschwester	*my stepsister/half-sister*
meine Eltern	*my parents*
meine Großeltern	*my grandparents*
Hast du Geschwister?	*Have you any brothers and sisters?*
Ich habe zwei Brüder.	*I have two brothers.*
Ich habe drei Schwestern.	*I have three sisters.*
Ich bin Einzelkind.	*I'm an only child.*
Ich habe keine Geschwister.	*I have no brothers and sisters.*

PYX0ie7M

www.textivate.com
Username: openacademy
Password: firstsecond123
Go to 'my resourses' to find your work.

n6KupfrE

Haare und Augen • Hair and eyes

Er/Sie hat ...	*He/She has ...*
schwarze/braune/ blonde/rote Haare	*black/brown/blond/red hair*
kurze/lange/mittellange Haare	*short/long/mid length hair*
blaue/braune/grüne/ graue Augen	*blue/brown/green/grey eyes*

KdI0x73u

Das Datum • The date

Wann hast du Geburtstag?	*When is your birthday?*
am 1. (ersten) Januar	*on 1 January*
am 3. (dritten) Februar	*on 3 February*
am 7. (siebten) März	*on 7 March*
am 8. (achten) April	*on 8 April*
am 15. (fünfzehnten) Mai	*on 15 May*
am 29. (neunundzwanzigsten) Juni	*on 29 June*
Ich habe (heute) Geburtstag.	*It's my birthday (today).*

German

Die Monate • The months

Januar	*January*
Februar	*February*
März	*March*
April	*April*
Mai	*May*
Juni	*June*
Juli	*July*
August	*August*
September	*September*
Oktober	*October*
November	*November*
Dezember	*December*

M5aYrRZm

Read the Strategy Box for ideas on learning German vocabulary.

Strategie 2

Cognates

You can use your knowledge of English to help you work out the meanings of German words. Cognates are words that look the same or similar in German and English, and they often mean the same too (but not always!). However, watch out for pronunciation because they usually sound slightly different. Here are some examples of cognates and near-cognates from this chapter: ***April***, ***orange***, ***Goldfisch***, ***braun***.

Compound words

Long words can be difficult to remember, but they are usually made up of shorter ones, so it helps to break down these compound words into more manageable chunks – for example: ***Halb/schwester*** (half-/sister), ***Groß/eltern*** (grand/parents), ***Haus/tier*** (house/animal = pet).

KdI0x73u

Das Datum • The date

Wann hast du Geburtstag?	*When is your birthday?*
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www.quizlet.com: 7H 7O 7P 7E

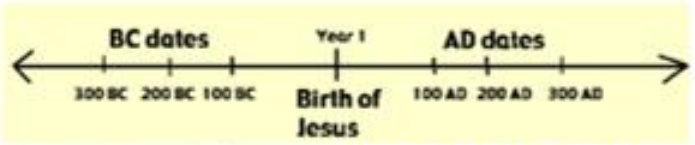
Oft benutzte Wörter • High-frequency words

und	*and*
aber	*but*
oder	*or*
ziemlich	*fairly, quite*
sehr	*very*

FKE5t6AJ

Year 7 History: Medieval life, kings and castles

Key words	
Chronology	The order in which things happen. The earliest event comes first.
BC	'Before Christ' – the number of years before the birth of Jesus Christ
AD	'Anno Domini' – the number of years after the birth of Jesus Christ
Decade	10 years
Century	100 years
Millennium	1000 years
Primary source	A source created in the time being studied
Secondary source	A source created after the time being studied
Evidence	Facts, statistics, or knowledge used to prove a particular point



100 - 199 2nd century
200 - 299 3rd century
300 - 399 4th century

Have you spotted the pattern yet? Have a close look at the numbers that are underlined - what do you notice?

REMEMBER! Look at the first number(s) of the year and **ADD ONE** to get the century (c) e.g.
2018 = 21st c 968 = 10th c 1815 = 19th c 1905 = 20th c 56 = 1st c

English, with experience of ruling Wessex

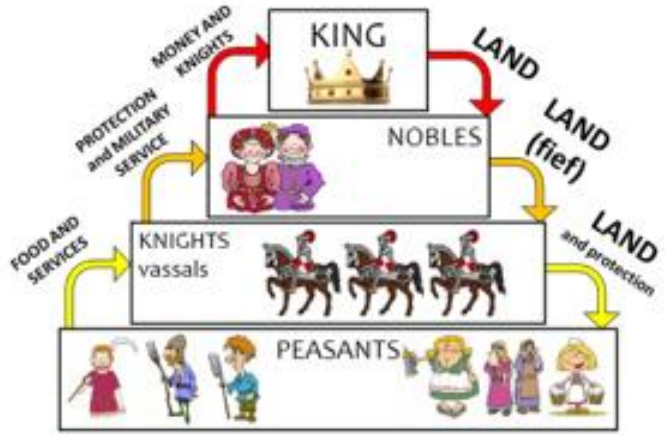
Betrayed the old King and tried to overthrow him

Protected the old King against Harold Godwinson

Already the ruler of a foreign land!

Has experience of being a King

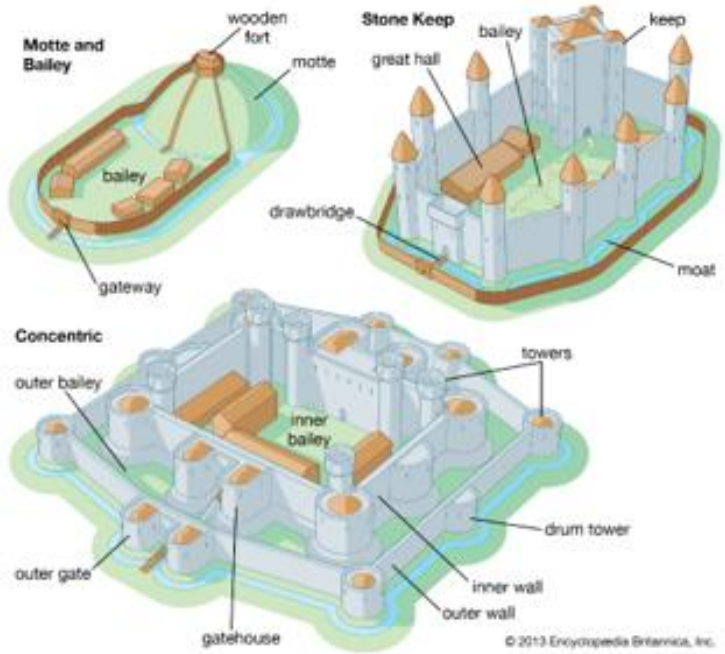
A foreigner who uses force to get what he wants



The Feudal system, introduced by William the Conqueror to keep order in medieval society. Each layer receives something from those above them, and gives something in return.

The Battle of Hastings, 14th October 1066

- Harold's Saxon forces assembled at the top of Senlac Hill
- William's archers fire but the Saxon shield wall holds
- William's footmen charge but the shield wall still holds
- William's cavalry charge and even they can't break the shield wall!
- The Normans believe William is dead – they retreat and some Saxons follow. Once William declared that he was still alive, his men turned and killed the pursuing Saxons
- The Normans carried out another false retreat and killed more gullible Saxons
- The shield wall now weakened, William's archers fired again and killed Harold Godwinson. The Saxons surrendered.



Castles

In order to protect himself and his barons from Saxon attacks William also built castles around the country. These became more advanced over time. As well as being defensive structures they were also places for lords, barons and nobles to live.

The Domesday Book

William wanted to know who owned what so he could tax them efficiently, so he sent inspectors around the country and they compiled their findings in the Domesday Book.

Find where you live on the Domesday Book! Search at https://opendomesday.org/

Vocabulary to learn

Horowitz
Diary
Impact
Prediction
Genre
Inference
Verbs
Horror
Connectives
Explain
Structure

It's a world where everything seems pretty normal. But the weird, the sinister and the truly terrifying are lurking just out of sight. Like an ordinary-looking camera with evil

Structure analysis - methods:

- Zoom in/out
- Repetition of an image/idea
- Links and connections between paragraphs
- Shifts:
  - inside to outside (and vice versa)
  - focus
  - time
  - topic
  - setting/place
  - mood/atmosphere
  - description to dialogue (and vice versa)

Language analysis Checklist:

- Link to task
- Relevant quote
- Meaning of quote
- Method named
- Effects explained
- Word zoomed in on
- Meaning of word
- Implied meanings

TIPTOP

PARAGRAPHS

Time – change in TIME

Place – change in PLACE

Topic – change in TOPIC

Person – change in SPEAKER

Sentence Form	Definition	Example
Fragment sentence	An incomplete idea.	*Rolling thunder.*
Simple sentence	Contains one complete idea in an independent clause.	*The lightning flashed.*
Compound sentence	Contains two independent clauses linked by a conjunction or a semi-colon.	*The lightning flashed **and** the rain fell.* *The lightning flashed; the rain fell.*
Complex sentence	Contains an independent clause and at least one dependent clause.	*Despite the thunder and lightning, there was no rain.*

Literary devices and word class

- Metaphor – a literal comparison – *she was a monster*
- Personification – human qualities – *the grass danced in the wind*
- Simile – as/like/as if – *he was like a man possessed*
- Onomatopoeia – the sound words – *bang, pop, sizzle*
- Alliteration – same starting sounds - *really rather raucous*
- Verbs – doing words
- Adjectives – describing words
- Nouns – objects or abstract things e.g. love
- Adverbs – describe doing words e.g. wrote **neatly**
- connotations of words – associations – night-time = mystery

Year 7 – Drama
Knowledge Organiser
Greek Theatre

Origins of Greek Theatre

Ancient Greek drama was a theatrical culture that flourished in ancient Greece from 600BC. The word 'theatre' comes from the Greek word 'theatron' which means seeing place.

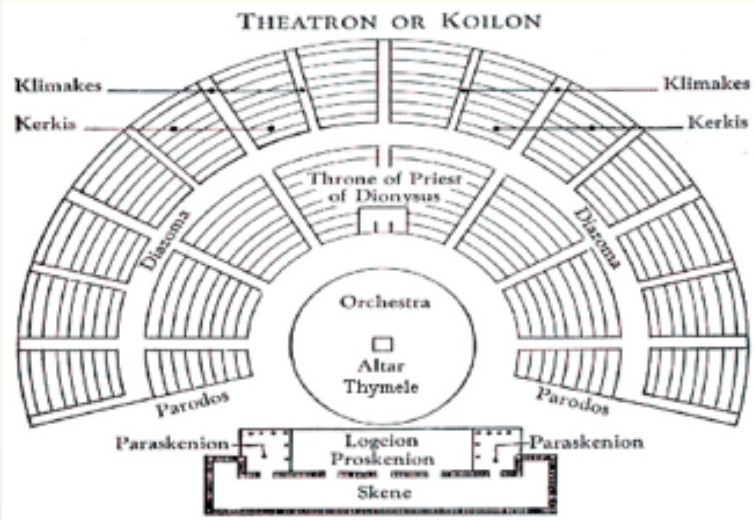
Plays were often performed as part of a competition at the festival CITY DIONYSIA, which was a celebration in honour of the god DIONYSUS, the Greek god of music, feasting and wine.

The best playwrights of the day were famous celebrities in Ancient Greece, the most famous were: Aeschylus, Sophocles, Euripes and Aristophanes. Having a play win at the City Dionysia was a great honour and playwrights would go to great extremes to win.

Most Greek cities had a theatre. It was in the open air, and was usually a bowl-shaped arena on a hillside. Some theatres were very big, with room for more than 15,000 people in the audience.

All the actors were men or boys. Dancers and singers, called the chorus, performed on a flat area called the orchestra. Over time, solo actors also took part, and a raised stage became part of the theatre. The actors changed costumes in a hut called the "skene". Painting the walls of the hut made the first scenery.

The plays were *comedies* (funny, often poking fun at rulers) or *tragedies* (sad and serious, with a lesson about right and wrong).



YEAR 7 – APPLICATION OF NUMBER

Solving problems with addition and subtraction

@whisto_maths

What do I need to be able to do?

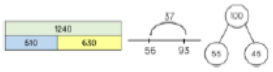
By the end of this unit you should be able to:

- Understand properties of addition/ subtraction
- Use mental strategies for addition/subtraction
- Use formal methods of addition/Subtraction for integers
- Use formal methods of addition/Subtraction for decimals
- Solve problems in context of perimeter
- Solve problems with finance, tables and timetables
- Solve problems with frequency trees
- Solve problems with bar charts and line charts

Keywords

Commutative: changing the order of the operations does not change the result
Associative: when you add or multiply you can do so regardless of how the numbers are grouped
Inverse: the operation that undoes what was done by the previous operation (The opposite operation)
Placeholder: a number that occupies a position to give value
Perimeter: the distance/ length around a 2D object
Polygon: a 2D shape made with straight lines
Balance: in financial questions – the amount of money in a bank account
Credit: money that goes into a bank account
Debit: money that leaves a bank account

Addition/ Subtraction with integers



Modelling methods for addition/ subtraction

- Bar models
- Number lines
- Part/ Whole diagrams

Addition is commutative

6 + 3 = 3 + 6

The order of addition does not change the result

Subtraction the order has to stay the same

$360 - 147 = 360 - 100 - 40 - 7$

- Number lines help for addition and subtraction
- Working in 10's first aids mental addition/ subtraction
- Show your relationships by writing fact families

Formal written methods

	H	T	O
	1	8	7
+	5	4	2

	H	T	O
	4	2	7
–	2	4	9

Remember the place value of each column
You may need to move 10 ones to the ones column to be able to subtract

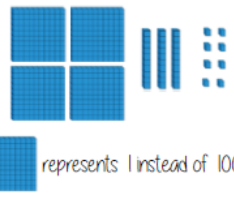
Addition/ Subtraction with decimals

4	.	3	8
7	.	9	0

+

0 can be used to fill empty places with value

The decimal place acts as the placeholder and aligns the other values



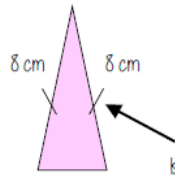
If  represents 1 instead of 100

$5.43 + \frac{8}{10}$

Revisit Fraction – Decimal equivalence
5.43 + 0.8

Solve problems with perimeter

Perimeter is the length around the outside of a polygon



Isosceles Triangle notation

The triangle has a perimeter of 25cm
Find the length of x

$8cm + 8cm + xcm = 25cm$
$16cm + xcm = 25cm$
$xcm = 9cm$

Solve problems with finance

Profit= Income - Costs

Credit – Money coming into an account

Debit – Money leaving an account

Money uses a two decimal place system
14.2 on a calculator represents £14.20

Check the units of currency – work in the same unit

Tables and timetables

Distance tables

	London		
211	Cardiff		
556	493	Glasgow	
518	392	177	Belfast

This shows the distance between Glasgow and London
It is where their row and column intersects

Bus/ Train timetables

Harton	1005	1045	1130
Bridge	1024	1106	1147
Aville	1051	1133	1205
Ware	1117	1202	1233

Each column represents a journey, each row represents the time the 'bus' arrives at that location

TIME CALCUALTIONS – use a number line

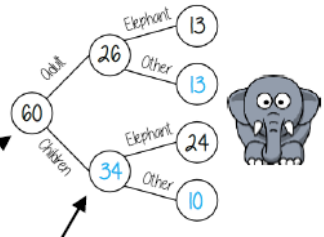
Two-way tables

	H	T
H	HH	HT
T	TH	TT

Where rows and columns intersect is the outcome of that action

Frequency trees

60 people visited the zoo one Saturday morning
26 of them were adults. 13 of the adult's favourite animal was an elephant. 24 of the children's favourite animal was an elephant.

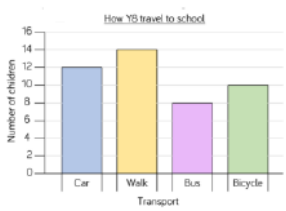


The overall total "60 people"

A frequency tree is made up from part-whole models
One piece of information leads to another

Probabilities or statements can be taken from the completed trees
e.g. 34 children visited the zoo

Bar and line charts



Use addition/ subtraction methods to extract information from bar charts.

e.g. Difference between the number of students who walked and took the bus.
Walk frequency – bus frequency

When describing changes or making predictions:

- Extract information from your data source
- Make comparisons of difference or sum of values.
- Put into the context of the scenario

YEAR 7 – APPLICATION OF NUMBER

Fractions and percentages of amounts

@whisto_maths

What do I need to be able to do?

By the end of this unit you should be able to:

- Find a fraction of a given amount
- Use a given fraction to find the whole or other fractions
- Find the percentage of an amount using mental methods
- Find the percentage of a given amount using a calculator

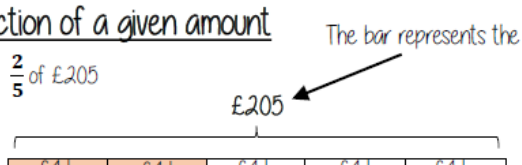
Keywords

Fraction: how many parts of a whole we have
Equivalent: of equal value
Whole: a number with no fractional or decimal part
Percentage: parts per 100 (uses the / symbol)
Place Value: the value of a digit depending on its place in a number. In our decimal number system, each place is 10 times bigger than the place to its right
Convert: change into an equivalent representation, often fraction to decimal to a percentage cycle.

Fraction of a given amount

Find $\frac{2}{5}$ of £205

The bar represents the whole amount

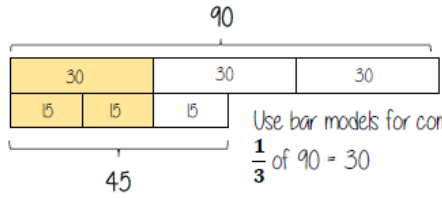


2 out of the 5 equal parts

2 x £41 = £82

£205 ÷ 5 = £41

Each part of the bar model represents £41



Use bar models for comparisons

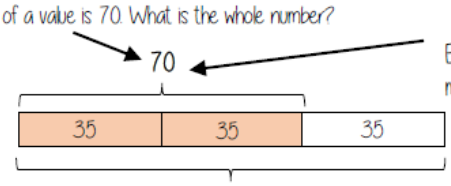
$\frac{1}{3}$ of 90 = 30

$\frac{2}{3}$ of 45 = 30

$\therefore \frac{1}{3}$ of 90 = $\frac{2}{3}$ of 45

Use a fraction of amount

$\frac{2}{3}$ of a value is 70. What is the whole number?



70 ÷ 2 = 35

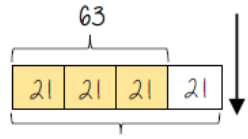
Each part of the bar model represents 35.

35 x 3 = 105

The whole number is 105

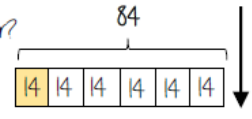
The wording of the question is important to setting up the bar model

$\frac{3}{4}$ of a number is 63.



Find the whole

What is $\frac{1}{6}$ of the number?

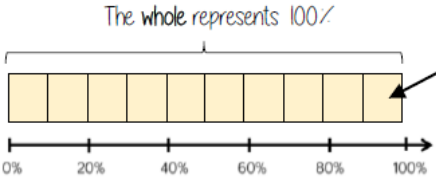


Use the whole to find a given part

= 14

Find the percentage of an amount (Mental methods)

The whole represents 100%



10% = $\frac{1}{10}$ of the whole

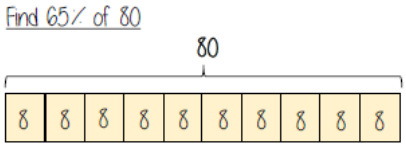
10% = $\frac{1}{10}$ of the whole

50% = $\frac{5}{10}$ = $\frac{1}{2}$ of the whole

20% = $\frac{2}{10}$ = $\frac{1}{5}$ of the whole

5% = $\frac{1}{20}$ of the whole

Find 65% of 80



For bigger percentages it is sometimes easier to take away from 100%

Method 1

65% = 10% x 6 + 5%

= (8 x 6) + 4

= 52

Method 2

65% = 50% + 10% + 5%

= 40 + 8 + 4

= 52

Find the percentage of an amount (Calculator methods)

Using a multiplier

Find 65% of 80

Fraction, decimal, percentage conversion

65% = $\frac{65}{100}$ = 0.65 ← The multiplier

0.65 x 80 = 52

Using the percent button

Find 65% of 80

This brings up the % button on screen

You will see 65%

Type 65

Press SHIFT ((%)

Press × 80 and then press =

You can also use the calculator to support non calculator methods and find 1% or 10% then add percentages together

"of" can represent 'x' in calculator methods

YEAR 7 – APPLICATION OF NUMBER

Solving problems with multiplication and division

@whisto_maths

What do I need to be able to do?

By the end of this unit you should be able to:

- Understand and use factors
- Understand and use multiples
- Multiply/ Divide integers and decimals by powers of 10
- Use formal methods to multiply
- Use formal methods to divide
- Understand and use order of operations
- Solve area problems
- Solve problems using the mean

Keywords

Array: an arrangement of items to represent concepts in rows or columns
Multiples: found by multiplying any number by positive integers
Factor: integers that multiply together to get another number.
Milli: prefix meaning one thousandth
Centi: prefix meaning one hundredth
Kilo: prefix meaning multiply by 1000
Quotient: the result of a division
Dividend: the number being divided
Divisor: the number we divide by

Factors

Arrays can help represent factors

5 x 2 or 2 x 5

Factors of 10
1, 2, 5, 10

10 x 1 or 1 x 10

The number itself is always a factor

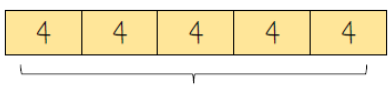
Square numbers have an ODD number of factors

Factors of 4
1, 2, 4

Factors of 36
1, 2, 3, 4, 6, 9, 12, 18, 36

Be strategic - Lay factors out in pairs can help you not to miss any

Multiples



Bar models can represent by something is a multiple. E.g. 20 is a multiple of 4

Lowest Common Multiples

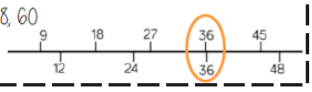
LCM of 9 and 12

The first time their multiples match

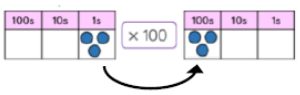
LCM = 36

9: 9, 18, 27, 36, 45, 54

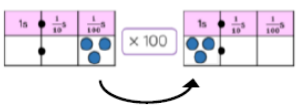
12: 12, 24, 36, 48, 60



Multiply/ Divide by powers of 10



3 x 100 = 300



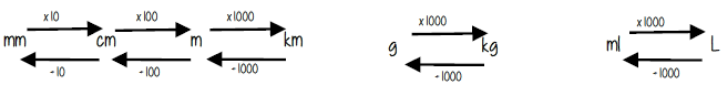
0.03 x 100 = 3

Repeated multiplication and division by powers of 10 is commutative

÷ 10 then ÷ 10 → ÷ 100

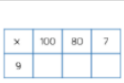
Metric conversions

Useful Conversions

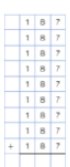


Multiplication methods

Long multiplication (column)



Grid method



Repeated addition

Less effective method especially for bigger multiplication

Estimations: Using estimations allows a 'check' if your answer is reasonable

Multiplication with decimals

Perform multiplications as integers

e.g. 0.2 x 0.3 → 2 x 3

Make adjustments to your answer to match the question: 0.2 x 10 = 2

0.3 x 10 = 3

Therefore 6 ÷ 100 = 0.6

Division methods

3584 ÷ 7 = 512

Short division

$$\begin{array}{r} 5\,1\,2 \\ 7\overline{)\,3\,{}^{3}5\,\,8\,\,{}^{1}4} \end{array}$$

Complex division

÷ 24 = ÷ 6 ÷ 4

Break up the divisor using factors

Division with decimals

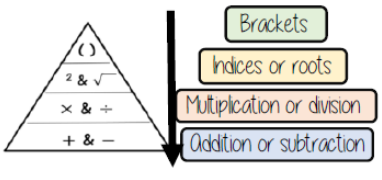
The placeholder in division methods is essential – the decimal lines up on the dividend and the quotient

24 ÷ 0.02 → 24 ÷ 0.2 → 240 ÷ 2

All give the same solution as represent the same proportion

Multiply the values in proportion until the divisor becomes an integer

Order of operations



If you have multiple operations from the same tier work from left to right

e.g. 10 – 3 + 5 → 10 - 3 → 7 + 5

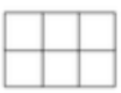
6 x 4 + 8 x 2

24 + 16 = 40

Area problems

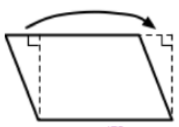
Rectangle

Base x Perpendicular height



Parallelogram/ Rhombus

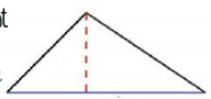
Base x Perpendicular height



Triangle

½ x Base x Perpendicular height

A triangle is half the size of the rectangle it would fit in

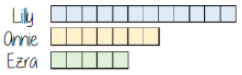


Mean problems

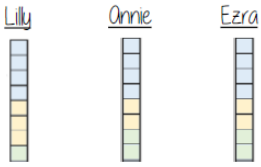
Mean – a measure of average

It gives an idea of the central value

Lilly, Annie and Ezra have the following cubes



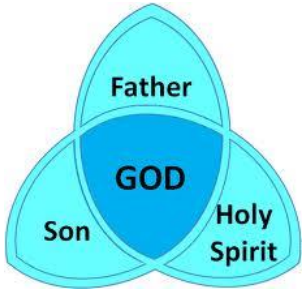
Finding the mean amount is the average amount each person would have if shared out equally



The mean number of blocks would be 8 each

What do Christians believe in the Oneness of God and the Trinity?

The idea of the Trinity is that there are three 'persons', all of which are God. Just as a clover leaf is made up of what seems to be three separate leaves, the one God is made up of three 'persons' – **God the Father, God the Son and God the Holy Spirit.**



God the Father

Christians believe that the first person of the Trinity is God the Father. The Lord's Prayer, is a prayer Jesus taught his disciples and which is commonly used in worship.

What message do you think Jesus wanted to portray with this prayer?

The Lord's Prayer

Our Father who art in heaven;
hallowed be thy name,
thy kingdom come,
thy will be done,
on earth as it is in heaven.

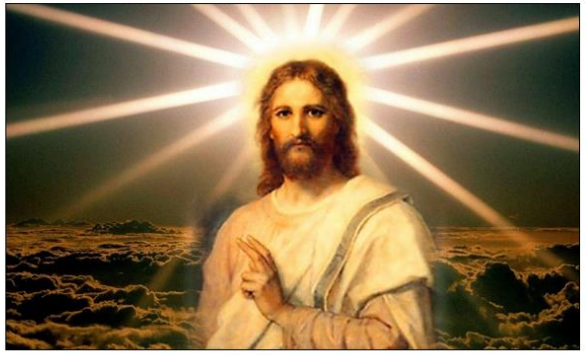
Give us this day our daily bread;
and forgive us our trespasses,
as we forgive those who trespass
against us;
and lead us not into temptation,
but deliver us from evil.

For thine is the kingdom
and the power and the glory
forever and ever. Amen

God the Father is believed to be the creator of the earth and all living things on it. As creator of life, he acts as a good father towards his children. He is believed to be all powerful **(omnipotent)**, all loving **(omnibenevolent)** all knowing **(omniscient)** and present everywhere **(omnipresent)**.

God the Son

The second person of the Trinity is often referred to as the Son of God and became incarnate (embodied in human form) on earth and in history through Jesus. Christians believe Jesus was both fully human whilst on earth and also fully God at all times.



God the Holy Spirit

Christians believe that once Jesus had left the earth, God sent the Holy Spirit to influence, guide and sustain earth and all life on it. The Holy Spirit is believed to be the unseen power of God at work in the world in the past, present and future.

Year 7 RS: How do Sikhs interact with culture and society ?

Key words	
Sikh	A follower of a religion called Sikhism.
Guru Nanak	The founder of Sikhism
Waheguru	The Sikh God
Punjab	An area in the Northern part of India were Sikhism was started by Guru Nanak.
Guru Granth Sahib	The holy book for Sikhs.
Gurdwara	The Sikh Temple-place of worship.
The Golden Temple	The Pilgrimage or spiritual place of worship for Sikhs.
Sewa	Serving others, showing love and kindness to all.
Langar	A community kitchen in a Gurdwara, food is cooked and served daily to everyone.

People of all religions are welcomed in and even allowed to say their own religion's prayers.
They must not take meat, alcohol or cigarettes into the Golden Temple and their head must be covered. They take off their shoes when they enter.
The central point of the Golden Temple is the known as the Divine Temple. Here one can see some of the earliest copies of the Guru Granth Sahib as during the day it is placed on the takht in this diwan hall. However, a newer copy is used in daily worship to protect the oldest one.
The walls inside the Harmandir Sahib are carved with verses from the Guru Granth Sahib. People swim in the lake – it is known as a Sarovar (sacred pool) and is said to heal illnesses.

An Overview of Sikhism.

Sikhism is one of the world's major religions. It is the world's 5th major religion, with about 28 million followers. It began over 500 years ago.

Sikhs are people who follow Sikhism. Sikhs believe in One God, who guides and protects them. Sikhs see everybody as being equal in Gods eyes.

Leading a good life and making important choices are important in Sikhism.

The Guru Granth Sahib is the holy book in Sikhism. Sikhs worship at home and also in a Gurdwara, their Sikh Temple.

Pilgrimage in Sikhism.

The Golden Temple's real name is Harmandir Sahib. This means 'temple of God.' (Har means God, mandir means temple – you should remember this from Hinduism and Sahib is a way of showing respect to something. It's very similar to sa'lah'lah'hu'alla'him/'peace be upon him' in Islam.)
It is built on a platform in the middle of a man-made lake, on a site chosen by Guru Nanak. This is in the centre of Amritsar, a Sikh city. It was first built in 1574. However it was destroyed in 1740 by a Mogul emperor and then was recaptured by a Sikh army and rebuilt. It was later built again in the 19th century out of marble and then the top half covered in gold leaf. There are 4 doors, one on every side to show that people of all races, religions and nations are welcome. Continued on the left

The 5 K's

Sikhs display their commitment to their religion by adhering to the 5 K's, which are the Sikh Articles of faith.

The 5 Ks are symbols of Sikh faith. Many non-baptised Sikhs will wear them, but all members, both male and female, of the khalsa (Sikh community) are obliged to wear them.

They will also change their name as a sign. Men who have joined the khalsa add Singh (meaning 'lion' to their name), showing they are strong & fearless, but also caring & kind.

Women add Kaur (meaning 'princess'), showing all women should behave & be treated like princesses. The commitment to the 5 Ks first came into place in 1699 when Guru Gobind Singh (the 10th guru) made the announcement that they should be worn as a display of faith and devotion to God. They are also a symbol of belonging to the Sikh Community. The 5 K's are Kesh- uncut hair, Kangha-comb, Kara-Steel bracelet, Kirpan- small sword and Kachera- shorts worn under their

Where and how do Sikhs worship?

Sikh temples are called Gurdwaras. They are built with a large central dome. Gurdwaras have 4 doors, one on each side of the temple. This shows that they are open to all people of any faith as Sikhs believe that everyone is equal and we all can and should worship together.

3 Principles all Sikhs live by:

Nam Simran: Remember God's name always.

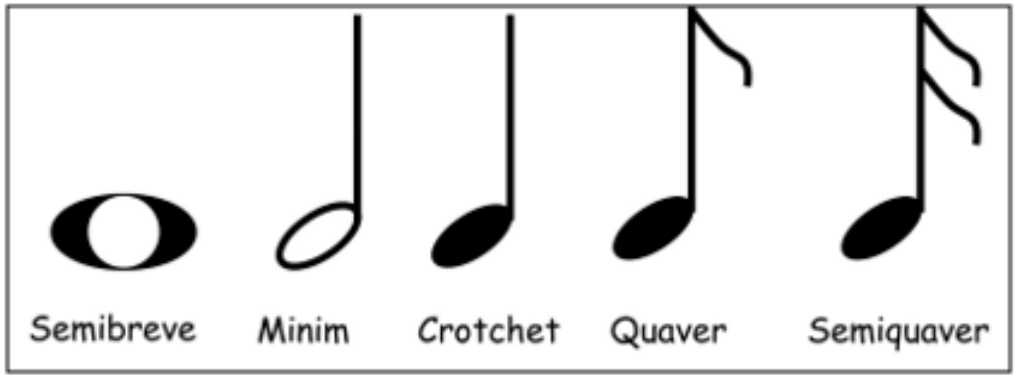
Kirat Karna: Earn an honest living.

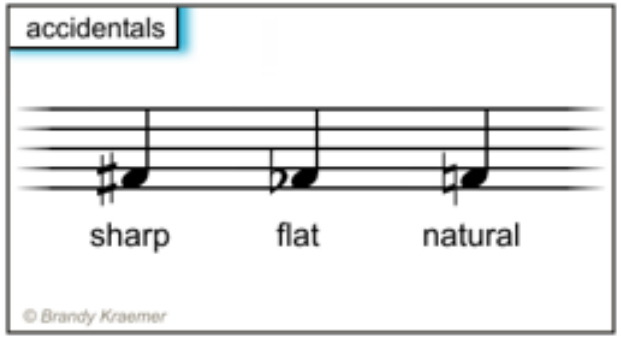
Everyone is obligated to work hard to earn a living if they are able
They cannot have a job which hurts others (running a gambling business, making pornography, dealing illegal drugs, etc.)
Shouldn't be about getting rich but just to help them live life.

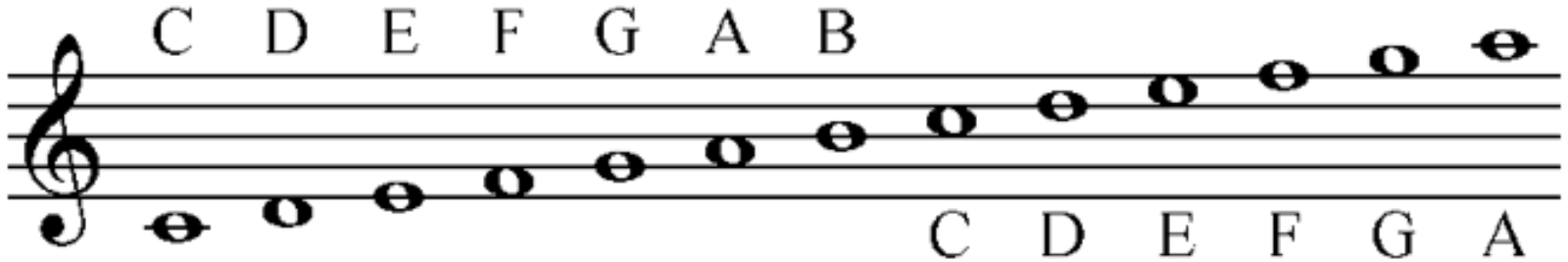
Vand Chhakna: Share in charity with those who are less fortunate. This shows generosity and self-sacrifice. Sikhs believe that the best way to worship God is by caring for other people. We cannot love God if don't take care of his creations. All beings and creatures are His; He belongs to all.' This means respect for all living things because God is in everything- including animals. As a result, many Sikhs are vegetarian. They think they are stewards of the Earth so they also have to care for it as God created it.

Year 7 Autumn Term Knowledge Organiser

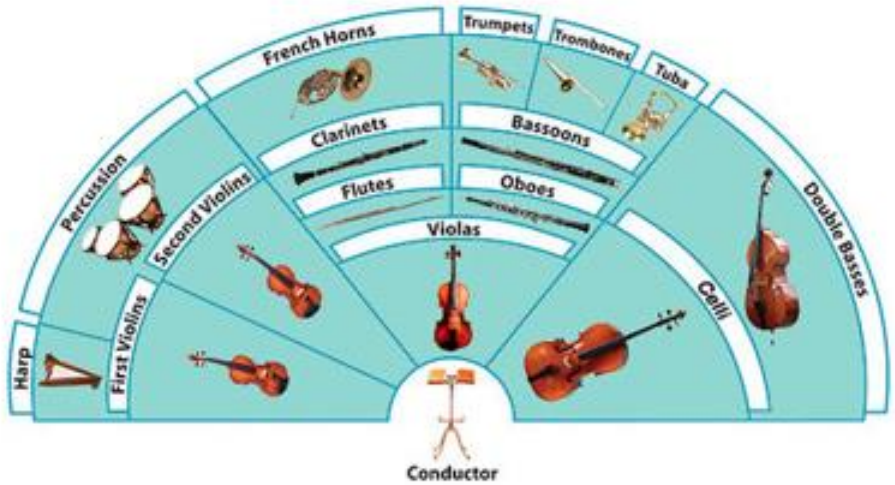
Duration	How long a note lasts for
Pitch	How high or low a note is
Tempo	How fast or slow a note is
Dynamics	How loud or quiet the music is
Timbre	The quality of sound
Texture	How thick or thin the music is
Structure	How the sections of music are laid out e.g. chorus, verse etc.
Silence	When the instruments stop playing



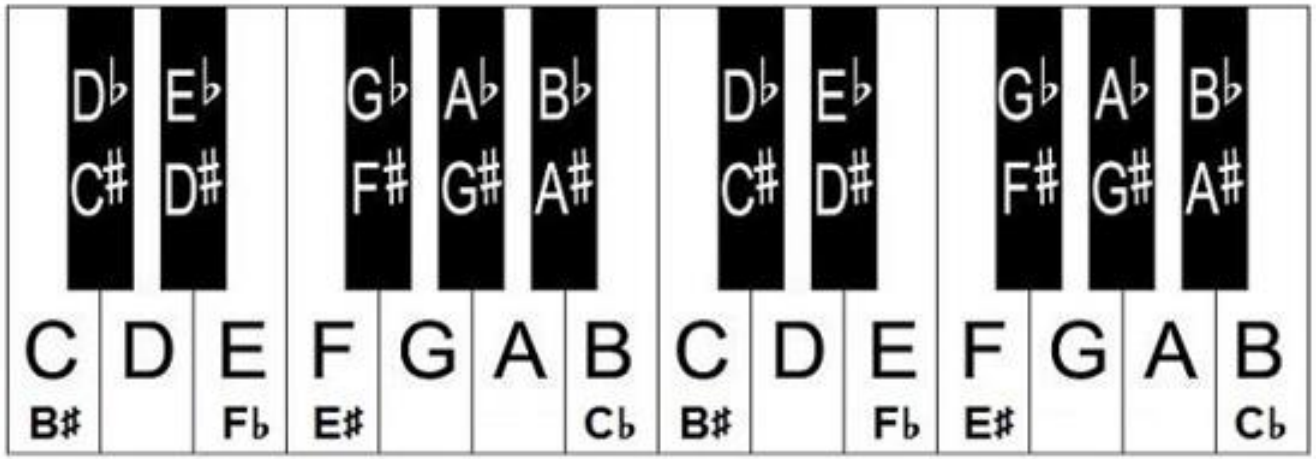




Year 7 Autumn Term Knowledge Organiser



Strings	Violin, Viola, Cello, Double Bass, Guitar, Harp, Ukulele, Banjo
Brass	Trumpet, Trombone, Tuba, Cornet, French Horn, Euphonium, Sousaphone
Woodwind	Flute, Piccolo, Clarinet, Oboe, Bassoon, Recorder, Saxophone
Percussion	Drums, Timpani, Cymbals, Djembes, Cajons, Xylophone, Glockenspiel, Maracas, Claves, Snare Drum, Bass Drum



General vocab

accent – where the music is emphasised
bar – a regular section on a staff, separated by vertical lines. Contains the beats
beat - unit of rhythm
canon – tune that is repeated at regular intervals by different performers, but with different starting times
chant – singing in unison, with a similar rhythm to speech
choir – group of singers
chord – 2 or more notes (usually 3) played simultaneously in harmony
chord progression – string of chords played in succession, usually a pattern
clef – a symbol on written music, defining what pitch to play the note
crescendo – getting louder
decrescendo – getting quieter
dissonance – harsh sounds, chords not in harmony
downbeat – first beat in a bar
drone – monotonous tone
duet – two vocalists or instruments
dynamics – how loud or quiet a piece of music is
ensemble – all instruments in an orchestra or all voices in a choir, playing at once.
flat – playing a note a semitone lower than the written one
forte – loud
harmony – pleasing combination of two or more notes, played in background behind melody
key – system of notes based on a key note

Rest lengths

Semibreve rest – 4 beats
Minim rest – 2 beats
Crotchet rest – 1 beat
Quaver rest – ½ beat
Semiquaver rest – ¼ beat

key signature – the flats and sharps at the beginning of each line, to be played throughout the piece
music
major – a happy sounding piece of
measure – a bar in a piece of music
minor – a sad sounding piece of music
notation – a method of writing music
octave – 8 full tones above the key note. Start and end of a scale
off beat – the unaccented beat
orchestra – a large group of instruments, usually classical
pulse – the constant beat in a piece of music
rest – moment when a note is not played for a defined length of time
rhythm – structured groups of accented and unaccented beats
scale – successive notes of a key, ascending or descending
sharp – note to be raised by a semitone
slur – a curve over notes, suggesting that it is slurred together
staccato – short, sharp notes
staff – five horizontal lines on which notes are written
tempo – speed of a piece
time signature – how many beats to a bar
unison – playing or singing the same notes simultaneously
vibrato – quickly alternating between two notes – a wobbly sound

Common Tempo words

allegro – quick and lively
andante – at a walking pace
adagio – slow and calm
largo – slow and broad
moderato – a moderate pace
rallentando - gradually getter slower
accelerando – gradually getting faster

Knowledge Organiser: Year 7 Autum Term Part 2 Understanding computers *and binary*

Summary

Binary, is a number system that is made of two numbers. 1 and 0. Also known as base two.

Computers are made up of **switches**. If you turn on a light switch at home, a computer scientist would say that the light is **1**. If you turned it off, a computer scientist would say that the light is **0**. A typical computer has **billions of switches**. That's a million million switches. Another name for a switch is **transistor**.

Computer scientists love **binary**. Why? In simple terms, a computer is just switches. If we understand Yes/No questions we can **code** a computer to do what we want it to do. This is a form of

'Computational thinking'.

Imagine a billion people standing by their own light switch and working as a team to make a mobile phone respond to text message. To get close to modern computer/smart phone speeds each person would have to turn the switch at the same time and have to do this 4,000,000,000 in one second . All of actions in life are based on a number of binary decisions.

What is a **computer?** A computer can be instructed to accept, process, store and output data . That could be a phone, a washing machine, a tablet , a TV or even the humble PC (personal computer).

Storage- stores programs and files long term, even when they are not in use. Devices such as hard drives, USB memory sticks or SD cards are used to store files such as photos, music and software applications long term.

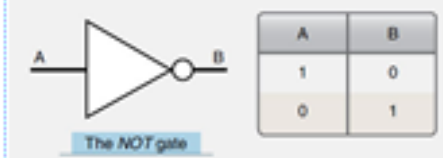
An **input device** is any piece of computer hardware used to **provide data** to a computer system.

An **output device** is any piece of computer hardware used to **communicate** the results of data to **audience**.

Key Vocabulary

Binary	1 or 0.Also known as base 2 .
Computer	A hardware device made up of switches. A switch can have a state of 1 or 0.
Computational thinking	Methods that involve expressing problems and their solutions in ways that a computer could solve.
Switch	a device for making and breaking the connection in an electric circuit
Decimal	Base 10 also known as denary. Symbols include up of 0 1 2 3 4 5 6 7 8 and 9.
Hardware	The **physical** parts of a computer. Eg the touchscreen ,
Input Device	Hardware that sends data to a computer, allowing you to interact with and control it.
Output Device	Hardware which converts information into human-readable form. It can be **text, graphics, tactile, audio, and video.**
Storage Device	Hardware on which information can be stored
Software	Software is the programs that run on a computer., referenced as apps.
Transistor	Another name for a switch.

A Switch



A	B
1	0
0	1

Input / Ouput and storge devices

Binary and Decimal

http://bit.ly/2CTk1IV

KEEP CALM AND GO PRACTICE

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