Year 7 Mathematics Term 1 Knowledge Organiser Algebraic Thinking – Sequences

What do I need to be able to do?
By the end of this unit you should be able to:
- Describe and continue both linear and non-linear sequences
- Explain term to term rules for linear sequence
- Find missing terms in a sequence

Linear and Non Linear Sequences

Linear Sequences – increase by addition or subtraction and the same amount each time
Non-linear Sequences – do not increase by a constant amount – quadratic, geometric and Fibonacci.
- Do not plot as straight lines when modelled graphically
- The differences between terms can be found by addition, subtraction, multiplication or division.

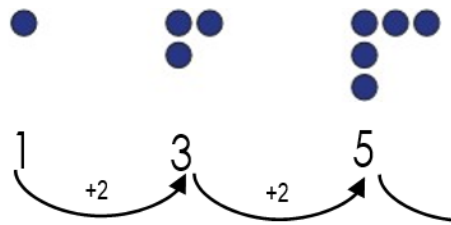
Fibonacci Sequence – look out for this type of sequence
0 1 1 2 3 5 8 …

Each term is the sum of the previous two terms.

MW A22

Describe and continue a sequence diagrammatically

Count the number of circles or lines in each image



What will the next number be? Can you draw this?

MW A11b

MW A11c

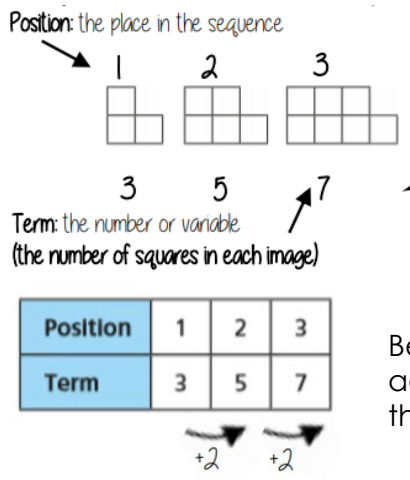
Continue Linear Sequences

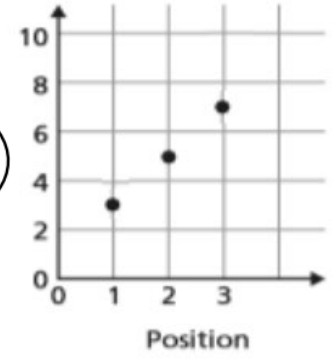
7, 11, 15, 19…
How do I know this is a linear sequence? It increases by adding 4 to each term.
How many terms do I need to make this conclusion? At least 4 terms – two terms only shows one difference not if this difference is constant. (a common difference).
How do I continue the sequence? You continue to repeat the same difference through the next positions in the sequence

Keywords

Sequence: items or numbers put in a pre-decided order
Term: a single number or variable
Position: the place something is located
Rule: instructions that relate two variables
Linear: the difference between terms increases or decreases by the same value each time
Non-linear: the difference between terms increases or decreases in different amounts
Difference: the gap between two terms
Arithmetic: a sequence where the difference between the terms is constant
Geometric: a sequence where each term is found by multiplying the previous one by a fixed non zero number

Sequence in a table and graphically





Because the terms increase by the same addition each time this is linear – as seen in the graph

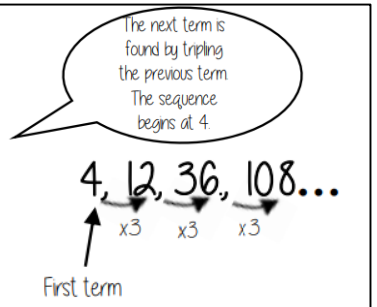
Continue non-linear Sequences

1, 2, 4, 8, 16 …
How do I know this is a non-linear sequence? It increases by multiplying the previous term by 2. – this is a geometric sequence because the constant is multiply by 2
How many terms do I need to make this conclusion? At least 4 terms – two terms only shows one difference not if this difference is constant. (a common difference).
How do I continue the sequence? You continue to repeat the same difference through the next positions in the sequence.

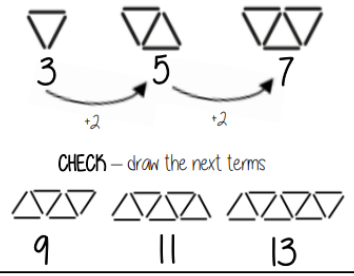
Explain term-to-term rule

MW A11a

How you get from term to term
Try to explain this in full sentences not just with mathematical notation.
Use key maths language – doubles, halves, multiply by two, add four to the previous term etc.
To explain a whole sequence you need to include a term to begin at…



Predict and check terms



Predictions: Look at your pattern and consider how it will increase. e.g. How many lines in pattern 6?
Prediction - 13 If it is increasing by 2 each time - in 3 more patterns there will be 6 more lines

Year 7 Mathematics Term 1 Knowledge Organiser Algebraic Thinking – Understand and Use Algebraic Notation

What do I need to be able to do?
By the end of this unit you should be able to:
- Be able to use inverse operations and "operation families".
- Be able to substitute into single and two step function machines.
- Find functions from expressions.
- Form sequences from expressions

Substitution into an expression

$2(x + 3)$

Add 3 to the input then times by 2

Put the expression into a function machine

INPUT → +3 → x2 → OUTPUT

If x = 10
10 + 3 = 13 → 13 x 2 = 26

Single Function Machines

INPUT → ☐ → OUTPUT

The number that goes IN

The number that comes OUT

This box gives the calculation instruction

To find the input from the output → Use the **INVERSE** operation

Forming a sequence

$2(x + 3)$

INPUT	1	2	3
OUTPUT	8	10	12

The substitution is the 'input' value The OUTPUT becomes the sequence

Keywords

Function: a relationship that instructs how to get from an input to an output.
Input: the number/ symbol put into a function.
Output: the number/ expression that comes out of a function.
Operation: a mathematical process
Inverse: the operation that undoes what was done by the previous operation. (The opposite operation)
Commutative: the order of the operations do not matter.
Substitute: replace one variable with a number or new variable.
Expression: a maths sentence with a minimum of two numbers and at least one math operation (no equals sign) Evaluate: work out
Linear: the difference between terms increases or decreases by the same value each time **Sequence:** items or numbers put in a pre-decided order

Two step Function Machines (algebra)

b → x5 → 5b → +4 → 5b + 4

÷5 ← ← -4

c → +4 → c+4 → x5 → 5(c + 4) = 5c + 20

-4 ← ← ÷5

MW N26

IMPORTANT
Calculate the value at the end of each operation

NOTE
The whole first output is multiplied by 5

Two step Function Machines

INPUT → ☐ → ☐ → OUTPUT

Calculate the value at the end of each operation

To find the input from the output
Use the **INVERSE** operation

Using letters to represent numbers

MW A3

5 + 5 + 5 3 x 5 5 x 3	y + y + y + y y x 4 4 x y 4y	20 ÷ h $\frac{20}{h}$

Addition and multiplication can be done in any order **Commutative calculations**

4 lots of 'y'

20 shared into 'h' number of groups

Substitution into expressions

4y ← 4 lots of 'y'

If y = 7 this means the expression is asking for 4 'lots of' 7

4 x 7 or 7 + 7 + 7 + 7 or 7 x 4 =28

Eg. y – 2 = 7 – 2 = 5

MW A10

Single Function Machines (algebra)

INPUT: a, 3c → x10 → OUTPUT: 10a, 30c

÷10

To find the input from the output
Use the **INVERSE** operation

Representing functions graphically

Take the function and generate a sequence
2(x+3)

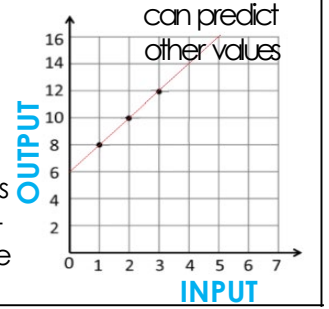
INPUT → +3 → x2 → OUTPUT

To represent graphically the input becomes x co-ordinates and the output becomes y co-ordinates

y = 2(x+3)

INPUT	1	2	3
OUTPUT	8	10	12

Gives us the co-ordinate (3,12)



NOTE:
Because this is a linear graph you can predict other values

Find functions from expressions

INPUT 7x → ? → OUTPUT 14x

Find the relationship between the input and the output
Sometimes there can be a number of possible functions eg. **+ 7x** or **x 2** could both be solutions to the above function machine

Year 7 Mathematics Term 1 Knowledge Organiser Algebraic Thinking – Equality and Equivalence

What do I need to be able to do? By the end of this unit you should be able to:
- Form and solve linear equations
- Understand like and unlike terms
- Simplify algebraic expressions

Keywords

Equality: two expressions that have the same value
Equation: a mathematical statement that two things are equal
Equals: represented by '=' symbol – means the same
Solution: the set or value that satisfies the equation Solve: to find the solution.
Inverse: the operation that undoes what was done by the previous operation. (The opposite operation)
Term: a single number or variable
Like: variables that are the same are 'like'
Coefficient: a multiplicative factor in front of a variable e.g. 5x (5 is the coefficient, x is the variable)
Expression: a maths sentence with a minimum of two numbers and at least one math operation (no equals sign)

Equality

$2 + 14 = 5 + 5 + 6$

16 = 16

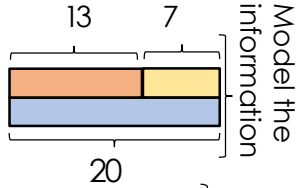
"Is equal to"

Saying it out loud sometimes helps you to understand equality

The sum on the left has the same result as the sum on the right

Fact Families

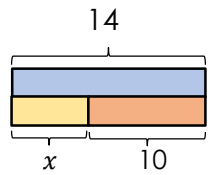
Use a bar model to display the relationships between terms and numbers



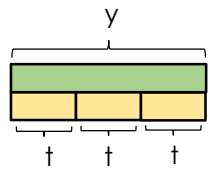
Model the information

Fact Family

13 + 7 = 20
7 + 13 = 20
20 – 7 = 13
20 – 13 = 7



x + 10 = 14
10 + x = 14
14 – 10 = x
14 – x = 10



t + t + t = y
3 x t = y
3t = y

y – t – t = t
y ÷ 3 = t
y ÷ t = 3

Equivalence

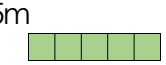
Check equivalence by substitution e.g. m=10

5m	2 x 2m	7m – 3m
5 x 10 = 50	2 x (2x10) = 2 x 20 = 40	(7x10) – (3x10) = 70 – 30 = 40

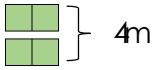
Equivalent expressions

Repeat this with various values for m to check

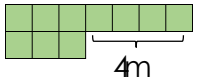
5m



2 x 2m



7m – 3m



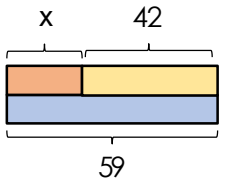
Solve one step equations (+/-)

There is more to this than just spotting the answer

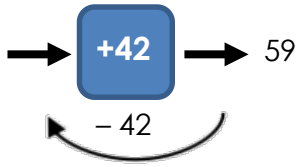
x + 42 = 59

x + 42 = 59
42 + x = 59

59 – x = 42
59 – 42 = x



Don't forget you know how to use function machines



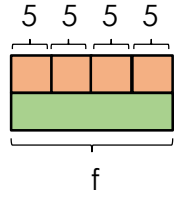
MW A12

Solve one step equations (+/-)

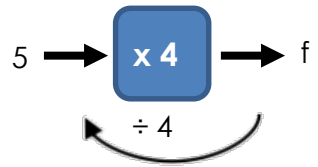
$\frac{f}{4} = 5$

f ÷ 4 = 5
f ÷ 5 = 4

5 x 4 = f
4 x 5 = f



Don't forget you know how to use function machines



MW A12

Like and unlike terms

Like terms are those whose variables are the same

Examples and non-examples

Like terms
y, 7y
$2x^2$, x^2
ab, 10ba
5, -2

Unlike terms
y, 7x
$2x^2$, $2c^2$
ab, 10a
5, -2t

Note here ab and ba are commutative operations, so are still like terms

♡ and 3♡
the variable is the same

the variables are NOT the same

MW A6

Collecting like terms ≡ symbol

The ≡ symbol means equivalent to. It is used to identify equivalent expressions.

Collecting like terms

Only **like terms** can be combined

4x + 5b – 2x + 10b

4x + 5b – 2x + 10b

2x + 15b

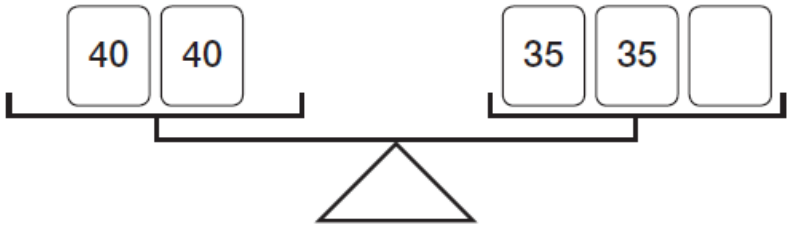
MW A6

Common misconceptions

$2x + 3x^2 + 4x \equiv 6x + 3x^2$

Although they both have the x variable x^2 and x terms are unlike terms so can not be collected

Write the missing number so that these scales balance.



Solve the equation.

$10a = 50$

$a =$

Simplify these expressions.

$a + a + a$

$e + f + e + f$

$5d - 2d$

Here are the weights of five babies.

3 kg 3.5 kg 3.7 kg 4 kg 3.4 kg

What is the **median** of the babies' weights?

kg

What is the **range** of the babies' weights?

kg

Samira represents a number on a place value grid.

Hundreds	Tens	Ones
100 100 100 100 100 100 100	10 10 10	1 1 1 1 1 1

What is Samira's number rounded to the **nearest ten**?

Marie has £20

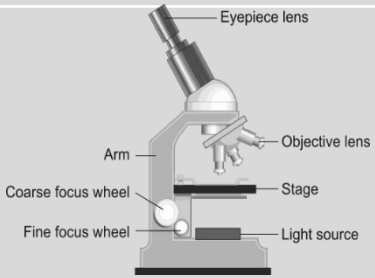
She spends this amount of money on a bracelet.

What fraction of the money does Marie have **left**?

Write your answer in its simplest form.

Year 7 GCSE Science Autumn Term Knowledge Organiser - Cells

Key Vocabulary:

1	Hazard	Something that can cause harm
2	Risk	The harm that might happen to you or someone else
3	Precaution	What you do to prevent a hazard from causing harm
4	Nucleus	Controls the cells activities because it contains DNA
5	Cell Membrane	Controls what enters and leaves the cell
6	Cytoplasm	A jelly-like substance where reactions happen
	Mitochondria	Where aerobic respiration takes place
7	Cell Wall	Surrounds plant cells and provides strength and support
8	Chloroplast	Where photosynthesis take place to make food (glucose) for the plant and contain chlorophyll to absorb sunlight
9	Vacuole	Contains a liquid that stores substances for the cell and keeps it rigid
10	Specialised Cells	Different structures that let them carry out their function
11	Microscope	

Asking Questions and Cells

12 Science is about…

a) observing the world (watching and listening)
b) asking questions about nature and how the world works
c) coming up with ideas and explanations that explain what we see
d) testing our ideas to see if they are true
e) using our knowledge and skills to solve problems and improve lives

13 A scientific question is one that…

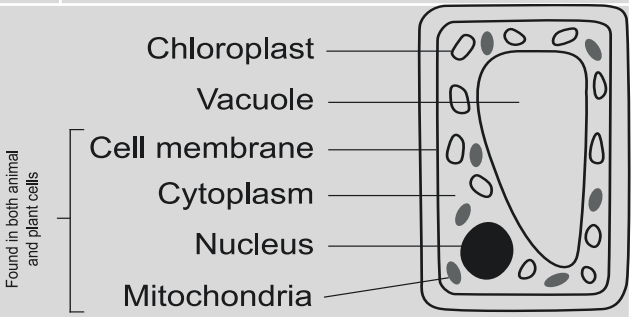
a) Can be answered
b) Can be tested or measured

14 Living Organisms

- Living things are called organisms
- All organisms carry out the 7 life processes: movement, respiration, sensitivity, growth, reproduction, excretion and nutrition
- All living things are made of cells
- Unicellular organisms are made of only one cell e.g. bacteria
- Multicellular organisms are made of many cells e.g. humans

15 Animal Cells

16 Plant Cells



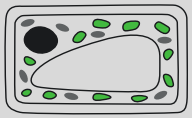
Specialized Cells and Microscopes

17 Specialised Cells

Sperm cells: Their function is to swim to the egg cell for fertilisation. The structure that helps them to do this is a tail for swimming

Neurons (nerve cells): Their function is to send messages to control the body. The structure that helps them to do this is a long axon and connections at the end

Palisade cells: Their function is to take in lots of sunlight (for photosynthesis to make food). Their structure helps them to do this as they have lots of chloroplasts



Root hair cells: Their function is to take in lots of water. To help them to do this, their structure consists of a large surface area to take water in

18 Microscopes

- A microscope is used to make something small appear much larger.
- To calculate the magnification of an image seen under the microscope, this equation can be used:
- Magnification = eyepiece magnification x objective lens magnification

19 Organisation

- A group of the same cells working together is called a tissue
- A group of tissues working together for the same function is called an organ
- A group of organs working together for the same function is called an organ system
- There are many organ systems in the human body including: respiratory, excretory, nervous, muscular, circulatory, skeletal and digestive

Year 7 Science Knowledge Organiser - Forces

Key Vocabulary:

1	**Air resistance**	A force that acts in the opposite direction to motion.
2	**Contact**	When two objects touch each other to cause a reaction.
3	**Deformation**	When a force changes the shape of an object.
4	**Drag**	A force of resistance that opposes motion in fluids and includes air resistance and water resistance.
5	**Extension**	The difference between the original length of an object and its length after it has been stretched.
6	**Force**	A push, pull or twist that can change the shape, speed or direction of an object.
7	**Free-body force diagrams**	Diagrams that are used to show how forces act on an object.
8	**Friction**	The resistance to motion of between two surfaces
9	**Gravity**	A force of attraction that acts between all objects with mass.
10	**Interaction**	When forces or objects affect one another.
11	**Lubricant**	A substance that can be used to reduce friction.
12	**Magnetic**	A force caused by magnets.
13	**Non-contact**	A force that acts on an object without coming physically in contact with it.
14	**Opposing**	To work against each other.
15	**Resultant force**	The net force or the overall effect of all the forces acting on an object.
16	**Tension**	A force exerted on a rope, chain, string or cable.
17	**Water resistance**	A type of force that acts in the opposite direction to motion on objects that are moving through water

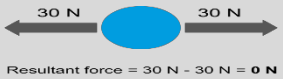
18 Forces

1. A force is an interaction (e.g. a push, pull or twist) between 2 objects.
2. A force can change an object's shape, speed or direction.
3. Forces are either contact or non-contact
4. Contact forces need the objects to be touching.
5. Examples of contact forces include: drag forces, friction, air resistance, tension and normal contact forces.

6. Non-contact forces can act at a distance. They do not need the objects to be touching.
7. Examples of non-contact forces include: gravity, electrostatic attraction and magnetism.
8. Forces have size and direction.
9. Forces acting on one object are represented by free-body force diagrams using arrows to show the direction and size.

19 Balanced and Unbalanced Forces

1. Forces are balanced *only* when forces acting on the same object are equal in size but opposite in direction.
2. An object's motion or shape does not change if the forces are balanced.
3. Unbalanced forces change an object's shape, speed or direction.
4. The unit of force is Newton (N).
5. The resultant force on an object is the net force or the overall effect of all the forces acting on an object.
6. When forces are balanced the resultant force is 0N.



Resultant force = 30 N - 30 N = **0 N**

7. When the forces are unbalanced the resultant force is *not* 0N.

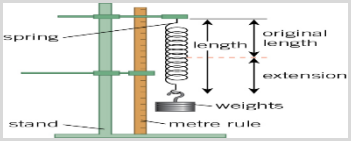
Resultant force = 50 N - 30 N = **20 N right**

20 Interaction Pairs

1. Forces *always* act in interaction pairs.
2. Interaction pairs act on 2 different objects.
3. If A exerts a force on B, then B exerts a force on A. The forces are equal in size but opposite in direction.

21 Deformation

1. Changing the shape of an object can be called deformation.
2. The extension of a spring is an example of deformation.
3. The extension of a spring = final length- original length.
4. The extension of spring can be measured when different weights are added.
5. The extension is larger when more weight is added.



6. If too much force is added, then a spring does not return to its original shape. The spring has reached its elastic limit.

22 Drag Forces & Friction

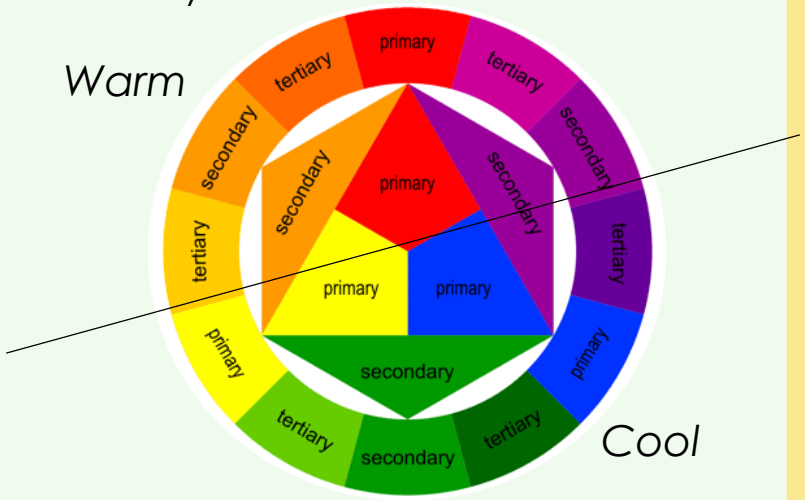
1. Drag forces occur in fluids. Fluids are liquids and gases. Drag forces include water resistance and air resistance.
2. Friction occurs between solids.
3. Drag forces and friction are caused by interaction of 2 objects moving or trying to move over one another.
4. Drag forces and friction act in the opposite direction to motion.
5. To move a block along a surface, the forces need to be unbalanced. The pulling force needs to be just bigger than friction.

6. Rougher surfaces generate more friction than smoother surfaces.
7. Friction is reduced by adding a lubricant.

Year 7 ART HT1 Knowledge Organiser

Colour Theory

- **Primary** colours – R B & Y
- **Secondary** colours – G P & O
- Primary colours are mixed together to make secondary colours
- Primary colours cannot be mixed.



- B + R = Purple
- Y + R = Orange
- B + Y = Green
- The colour wheel is split into two halves: **warm and cool colours.**
- **Harmonious** colours look well together and are pleasing to the eye. These are next to each other on the colour wheel.
- **Complementary** colours are opposite each other – these are not so pleasing to the eye.

Keywords

Formal Elements - The parts used to make a piece of artwork.

Line - Line is the path left by a moving point. A line can be horizontal, diagonal or curved and can also change length.

Shape - A shape is an area enclosed by a line. It could be just an outline or it could be shaded in. Shapes can be geometric or irregular.

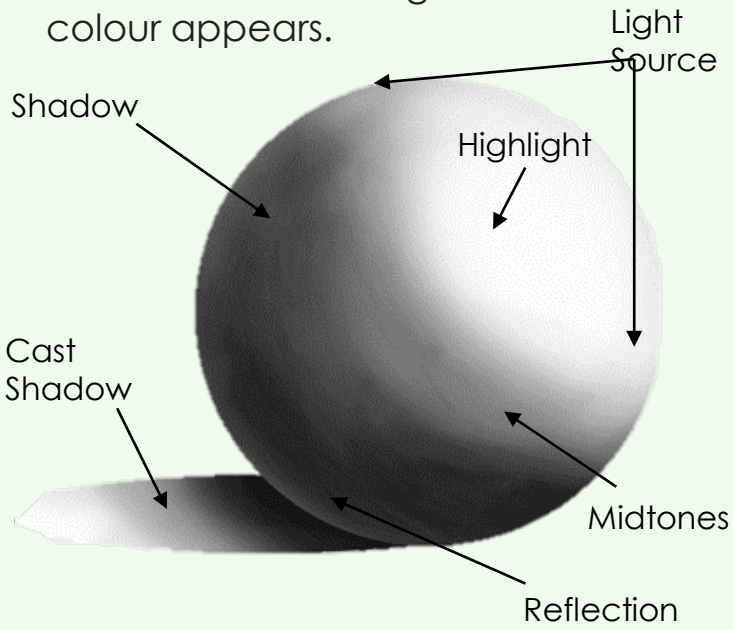
Tone - This refers to the lightness or darkness of something.

Technique – The way tools and media are used to create an artwork.

Space – This refers to the emptiness or area between, around, above, below, or within objects.

Tone

- In art and design, tone refers to how light or dark something is. Tones could refer to black, white and the grey tones between. It could refer to how light or dark a colour appears.



- In real life tone is created by the way light falls on an object.
- The parts of the object on which the light is strongest are called **highlights** and the darker areas are called **shadows**.

Year 7 ART HT1 Knowledge Organiser

Key words

Composition – The arrangement and layout of elements within a work of art.

Still life - A work of art featuring an arrangement of inanimate, everyday objects, often flowers or fruit.

Abstract - Abstract art is modern art which does not represent realistic images of our everyday world.

Patterns – A design in which lines, shapes, forms or colours are repeated.

Landscape - the depiction of natural scenery in art.

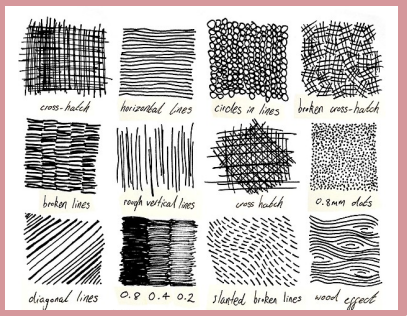
Man-made – Something which was created by humans.

Carolee Clark

Carolee Clark is an artist best known for her vibrant use of colour. Her subject matter tends to be common scenes, such as landscapes and food. She primarily uses acrylic paints.

Mark-making

This describes the different lines, dots, marks, patterns, and textures we create in an artwork. It can be loose or neat.



Observational Drawing tips

Observe – Look at what you are drawing.

Understand **perspective** and **proportion.**

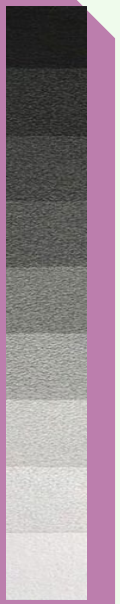
Keep the outlines light.

Use a good **range of tone**.

Use **mark-making** to create texture.

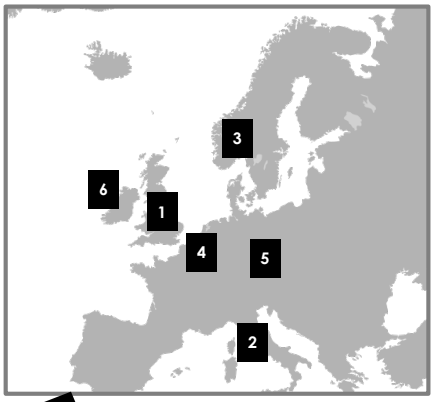
WAGOLLS

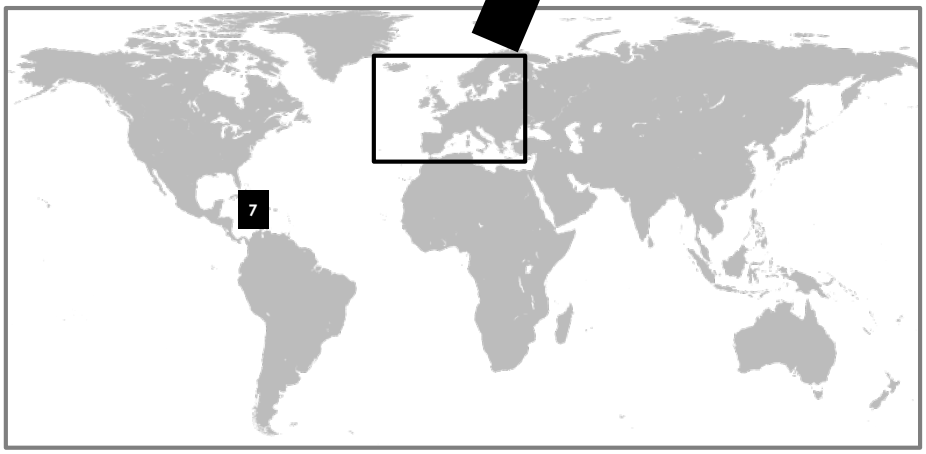
Tonal Scale



Year 7 History Term 1 Knowledge Organiser: Migration

	PLACE	PEOPLE
1	Manchester	Brigantes
2	Italy	Romans
3	Norway	Vikings
4	Flanders	Flemish Weavers
5	Bavaria, Germany	Nathan brothers
6	Ireland	Irish
7	Jamaica	Euton Christian





EVIDENCE	clues or information about the past.
INFERENCE	a guess based on evidence. Reading between the lines
CHRONOLOGY	the sequence of events in time.
HISTORICAL SIGNIFICANCE	Explaining what makes past events important.
MIGRATION	movement of people to a new area or country.
MIGRANT	Someone who moves from one place to another to live.
PUSH FACTOR	something that forces people to move away from the place they are in.
PULL FACTOR	something that attracts people to a new place.
SYNAGOGUE	a Jewish place of worship.
FAMINE	an extreme shortage of food.
RACISM	when people are treated unfairly because of their skin colour or background
COLOUR BAR	when people were banned because of the colour of their skin. For example; jobs, housing, bars etc.

TIMELINE OF MIGRATION TO MANCHESTER

Romans 70AD → **Vikings 870AD** → **Medieval (Flemish weavers 1363)** → **Early Modern (Nathan brothers 1780)** → **Industrial Revolution (Irish 1850)** → **The 20th Century (Euton Christian 1948)**

Year 7 Subject Term Knowledge Organiser: Computing: E-Safety

Password:
Have a password that is six or more characters long Include upper and lower letter case letters Include numbers Avoid information that may be easy to guess e.g. pet name

Email: stands for "electronic mail"
This is when a message is sent from one computer to another, usually over the internet.

Netiquette is the term for how you should behave when sending emails and using the internet.

Social media:
interactive technologies that allow the creation and sharing of information, ideas, career interests, and other forms of expression via virtual communities.

Digital footprint:
A trail of information and data that you create whilst you are surfing the internet. If you post any updates on social media, pictures, or videos then you are creating a 'data trail'.

Personal data:
This is any information related to an individual person. Examples include name, address, date of birth, email address

An Internet Troll
People who leave intentionally provocative or offensive messages on the internet in order to get attention, cause trouble or upset someone.

Cyberbullying
This is a form of bullying through mobile phones and the internet. This includes malicious text messages, "happy slapping", sending nasty or threatening messages on websites and chat rooms and setting up fake accounts on somebody else's behalf.

Staying Safe Online:
1) Think Before you post
2) Keep your Personal Data safe/Check your privacy settings
3) Never give out your password
4) Don't accept a friendship request from someone you don't know

A Virus
A Virus is a program that "infects" your computer.
It harms your computer in some way, usually by deleting or altering files and stopping programs from running.

Anti Virus Software
Antivirus software acts as a "vaccine" against virtual viruses. It can identify and eliminate the threat before you were even aware of it

Phishing Scams
When people send you phony emails, pop-up messages, social media messages, texts, calls, or links to fake websites in order to hook you into giving out your personal and financial information.

Year 7 PE Knowledge Organiser- Dodgeball

Objective

The objective of dodgeball is to eliminate all players of the opposing team by throwing one of four game balls and hitting the opposing player below the shoulders.

RULES OF THE GAME

Starting a Game

Each team starts with ONE (1) ball and then there are TWO (2) balls evenly spread on the centre line
at the beginning of each game. It is a sprint to the TWO (2) balls once the play begins. There is a five

A player is out if:

- They throw a ball that is caught by the other team
- They get hit by a ball thrown by the other team Players may use the ball to block;

however, if the ball is knocked out of their hand while blocking, they will be out.

- They cross the centre line.

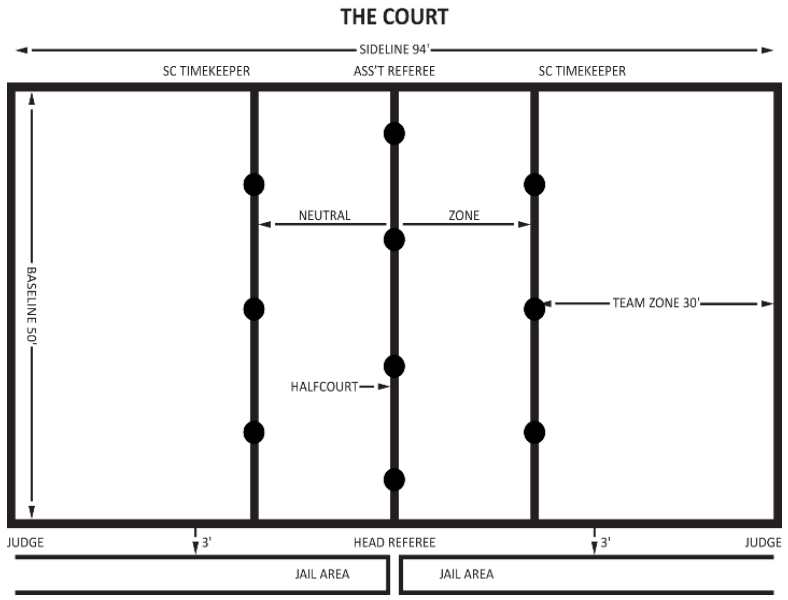
A player is not out if:

- Their ball is caught off the wall or
- They get hit above the shoulders

The centre line is the off sides line. If any part of your foot or body touches the centre line, you will be declared out and thrown ball will be dead.

No player can hold the ball for longer than 5 seconds

Players are expected to be honest and take themselves out when the time comes. Once a player is out, they must stand out in order as if a player on their teams catches a ball they can return to play



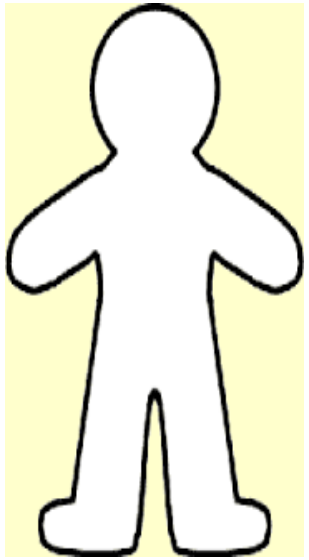
Key Words

Spatial Awareness	Spatial awareness is the ability to see and understand two or more objects in relation to each other and to one's body in terms of space and distance.
Tactics	Tactics are a plan or strategy put into place to allow the best outcome for an individual or team in sporting competition
Formation	A formation are the positions players of a team are put into during a competitive match. There are different formations depending on your strategy
Leadership	The ability to lead a team and be a role model to your team mates. Communicate strategies and tactics in a way that motivates team members.
Accuracy	How precise a pass, shot or throw is when aiming for a specific target.
Technique	Technique is skill and ability in a sporting or other practical activity that you develop through training and practice.

Year 7 Drama HT1 Knowledge Organiser

Summary of topic

Through imaginative process drama learners are engaged through teacher-in-role exploration as they become 'experts'. They develop credible characters using role-on-the-wall and hot-seating as they solve the mystery of 'the black cloud' and the secrets that 'The Island' has in store.



Skills & Definitions

HOT SEATING – Asking interesting questions and answering them in character to discover more about your character

FREEZE FRAMES – Frozen images that represent a story/message

ROLE ON THE WALL – Exercise to get a deeper understanding of a characters feelings, traits and personality

IMPROVISATION – Drama/Performance made up by yourself.

Aims of the topic

To be introduced and explore key drama techniques that help develop character, teamwork and imagination.

The Island Y7

Knowledge Organiser

DRAMA

Key Words

Thought-tracking
one line of speech

Character
Another person you play

Audience
The people who watch a performance

Devising
Act of creating a piece of drama

Hot-seating
Answering questions in role

Performance
A play/drama presented to an audience

Props
Object to support character

Freeze Frames
Frozen picture

Imagination
Thinking outside of the box

Mime
Movement no speech

Assessment & Performance Tips

The assessment is a group devised performance at the end of the first half-term. You will play your expert role to solve the mystery of the black cloud.

- Face the audience at all times
- Speak loud and clear so everyone can hear you
- Try not to laugh and stay focused
- Bring props and costume in to enhance your character
- Use an accent or voice to differentiate your character from yourself
- Try your best

Once by Morris Gleitzman - Knowledge Organiser

Inference: using your own knowledge to work out what is being suggested in the text.

First Person Narrative: When a character – often the protagonist – is narrating the story using first person pronouns.

Context: Information about the world when a story was written/set and how this has influenced the writer.

Protagonist: The main character in the story, whose side we are on and whose 'mission' we support.

Pronoun: A word used to replace a noun for fluency: he / she / they / it / we / I / me / my / you / your

Noun: The name of a person, place or thing.

Analysing an Extract

- Write as **succinctly** as you can, without letting your point get lost in lots of wasteful words.
- Try to **embed** your **quotations**: choose the shortest, most precise phrase from the text as you can and try to let it **flow naturally** in the paragraph you're writing.
- **Zoom in to key words**, particularly explaining **connotations.**
- Don't rely on knowing what the text means, focus instead on **working out** what Gleitzman is **implying**.

Adjective: A word which describes a noun.

Adverb: A word which describes a verb; often ends in -ly (but not always).

Connotation: Links or associations we have with a word or concept; what it makes you think of.

Verb: An action or a doing word. Every sentence needs a verb.

Quotation: A short section of a text which you copy – word-for-word – in quotation marks to help you prove your point.

Subject: The person/thing in a sentence completing an action; all sentences need a subject.

Analysing the Full Text

- Don't try to quote when you're writing about the full text, instead, try to describe a **specific moment, scene or event** in the novel which proves your point.
- It's important you don't just find yourself retelling the story; instead, after each event you describe, **explain** and **infer** what you think Gleitzman was trying to **imply** or **suggest.**
- Remember the **context** and what you think Gleitzman was trying to say about the Holocaust and, most importantly, **why**.

Imagery: When the writer describes something in detail so it makes a clear image in your mind.

Rhetorical question: A question which does not require an answer; often an obvious answer, or can show hesitance or self-doubt.

Possessive Apostrophe: An apostrophe used to show something belongs to someone.

Climax: The most tense moment of the story, where the plot starts to move towards resolving.

Dramatic Irony: When the character in the story understands *less* about the story than the reader does.

Omissive Apostrophe: An apostrophe used to show a contraction of two words into one: do + not = don't

Plot: The order in which the writer *plots* the storyline in a novel.

Reliability of Narrator: Whether or not the reader can trust the narrator's telling of the story.

Creative Writing

- You can control the mood and tone of your writing by choosing **vocabulary** with the right **connotations**.
- Imagery creates a powerful image in the reader's mind if you write in enough detail; consider what you can see (**visual imagery**), hear (**auditory imagery**), smell (**olfactory imagery**), taste (**gustatory imagery**), and touch (**tactile imagery**).
- It's important to understand the features of different writing formats: a newspaper will have **temporal phrases**, a largely **chronological** order, a **headline** and a **strapline** and will be written in **prose**.
- **Proof reading** is a key skill; no writer publishes their first draft of anything! Check your **punctuation**, particularly **apostrophes**, **capital letters** and that your **sentences** are complete.

Year 7 PE Knowledge Organiser- Striking and Fielding

Key Vocabulary	
Batting order	The order that the batsmen will play in: the strongest go first.
Body position	How the batsman or fielder coordinates their body to strike or field effectively.
Defensive	Deciding on a tactic or action that prevents the other team from scoring.
Field placement	Where the fielders are positioned to be most effective.
Innings	The period of time when one team are batting.
Long barrier	A fielding technique to stop a low or rolling ball.
Offensive	Deciding on a tactic or action that is designed to give your team the best chance of scoring.
Over	6 balls bowled by the same bowler from one end of the pitch.
Stance	How the batter positions their body to strike the ball.
Stroke	The shot that is chosen by the batsman to hit the ball.
Umpire	The official who is in charge of the game.
Wicket	The set of stumps and bails at each end of the pitch.

Rules of the Game

Two teams of 11 players each play an innings of batting and bowling. Each innings will be made up of a set number of overs.

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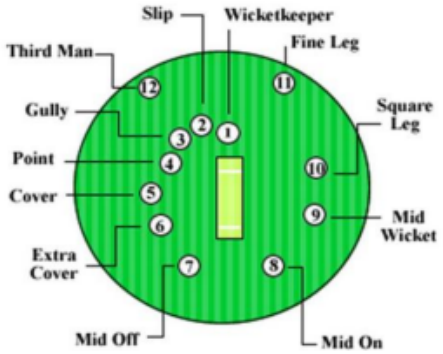
Fielding positions



Method of scoring:

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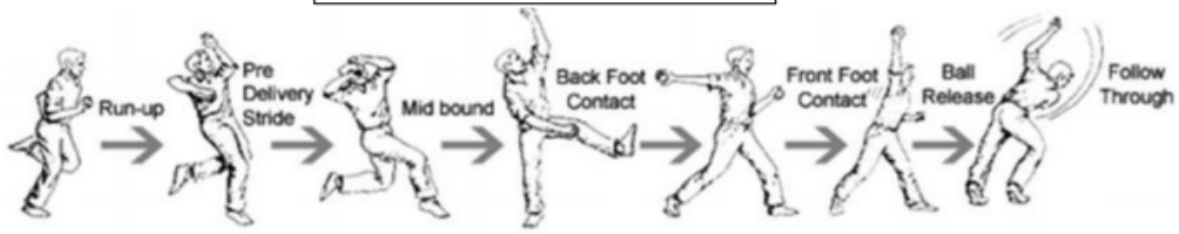
Bowling Action



RE 7.1 Do rules make life difficult?

Key terms

1. **Torah:** Jewish holy scripture revealed to Moses
2. **Mitzvot:** Commandment given by God
3. **Synagogue:** Jewish place of worship
4. **Shabbat:** Jewish holy day and day of rest, Saturday
5. **Covenant:** An agreement made between God and humankind
6. **Monotheist:** A person who believes in ONE God
7. **Prophet:** A person who has received messages from God
8. **Worship:** Showing dedication and love towards God

Crucial Commands:

Describe: Say in detail what something or someone is like, and the impact it has. E.g. Describe rites of passage in Judaism.

Explain: Say why something or someone is important, and the impact it has. E.g. Explain why Moses is important.

Discuss: Write about at least two points of view and explain why these points of view are valuable or not. E.g. ""Yom Kippur is the most valuable Jewish festival" Discuss.

The beginning

The history of Judaism begins with Abraham. Jews believe that he was chosen to begin a new religion. Most people in Abraham's time believed in many Gods. Abraham believed in ONE God.
God tested Abraham's faith ten times, for example by asking him to give up his home and by seeing how willing he was to sacrifice his son, Isaac.
God made a covenant with Abraham saying that he would bless him and make his family a great nation.

Moses

Moses was a Hebrew who was brought up with the Pharaoh. He witnessed the Hebrews being treated cruelly as slaves and challenged the Pharaoh to free them. God helped Moses to free the Hebrews by inflicting ten plagues upon the Egyptians. The Hebrews were freed and Moses led them for many years until they reached the Promised Land. Moses was a prophet and was given commandments by God to spread amongst the Hebrews.

Festivals

Rosh Hashanah and Yom Kippur. Rosh Hashanah is the first day of the Jewish new year. On the ten days between Rosh Hashanah and Yom Kippur Jews will reflect on their behaviour from the previous year. On Yom Kippur Jews have a chance to seek forgiveness from God.
Passover/Pesach. Jews remember the night they were protected from the tenth plague - the death of first-born sons - and were freed from slavery.

Rites of Passage

When boys and girls 'come of age' they have a special ceremony called a Bar Mitzvah (boys) or Bat Mitzvah (girls). After the ceremony, they person is considered responsible for their own actions and faith. Young Jews are expected to study and prepare carefully for their ceremony.
After the ceremony has taken place a special meal is shared and there is often a party held with family, friends and the community.

Shabbat

Saturday is an important day of the week as the Jewish creation story says that on this day God rested. Jewish people will also rest on this day.
Many Jews take the rules about resting very seriously! For example, they will not use electronic devices and they will not drive their car. They will spend time with their family and the community.
Observing the Shabbat is one of the Ten Commandments given to Moses.

Mitzvot

There are 613 commandments or mitzvot! The most well-known are the Ten Commandments. Jews believe that the commandments are a gift, given to help them.

Jews have different ways of interpreting the mitzvot. Some believe that they should be followed at all times, no matter how difficult they are. Others believe that it's acceptable only to follow commandments that are relevant in the modern world.

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MFL Knowledge Organiser

KO. Yr7 Greetings

Tenses-Present

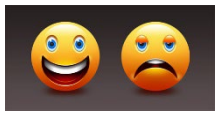
ESTAR = TO BE	
Estoy	I am
Estas	You are
Esta	He/She/It is
Estamos	We are
Estaís	You all are
Estan	They are

Sentaos = sit down
Levantaos = stand up
¡Silencio, por favor! = be quiet please
Mirad la pizarra = Look at the board
Abrid los libros = Open your books

Opinions & Pronouns

Fenomenal Regular

Muy bien mal



Bien

Connectives

- **También= also**
- **Y= and**
- **Pero= but**
- **Sin embargo = however**
- **Porque = because**

Adjectives

Contento/a	*Happy*
Tranquilo/a	*Calm*
Relajado/a	*Relaxed*
Feliz	*Happy*
Estresado/a	*Stressed*
Nervioso/a	*Nervous*
Triste	*Sad*

¿Qué tal? = how are you
¿Cómo estas? = how are you?

¿Pór que? = Why?

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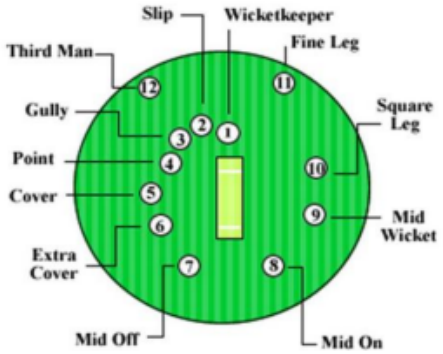

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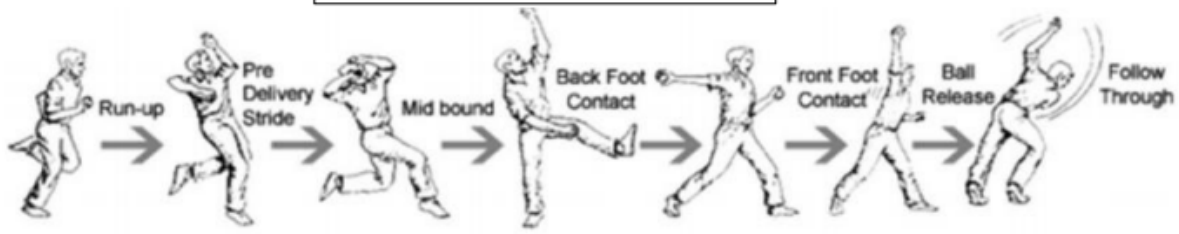
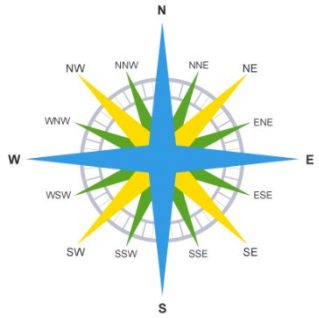


What is Geography? Knowledge Organiser

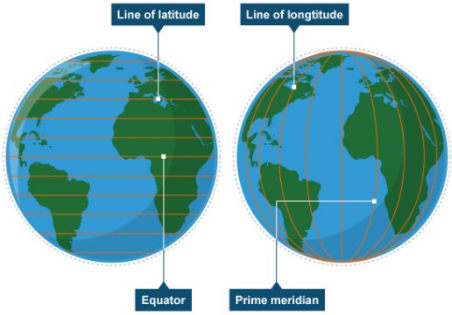
Compass Points

The four main points of the compass are north, east, south and west. Half way between each of these there are four other points: north-east, south-east, south-west and north-west.



Lines of latitude

Lines of latitude circle the Earth in an east-west direction. They are parallel. Lines of longitude run from the top of the Earth to the bottom. They meet at a point at the north and south poles and are called meridians.



Physical and political maps

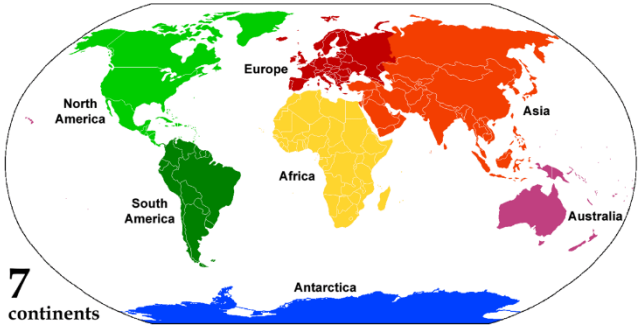
There are two types of maps;

Physical maps - show natural features such as rivers and mountains.

Political maps – show artificial features such as borders and countries.

Continents

Asia
North America
South America
Europe
Antarctica
Australasia/ Oceania
Africa



Four Major cities of the UK

Human and Physical Geography

Human and physical features are things that you can see all around you.

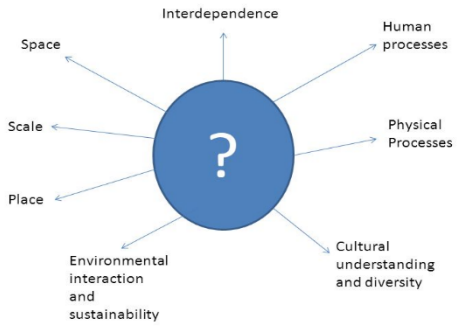
Physical features like seas, mountains and rivers are natural. They would be here even if there were no people around.

Human features like houses, roads and bridges are things that have been built by people

Europe

Europe is a continent located entirely in the Northern Hemisphere and mostly in the Eastern Hemisphere.
Area: 10.18 million km²
Population: 746.4 million (apx)
Some languages spoken in Europe are: Bulgarian, Croatian, Czech, Danish, Dutch, English, Estonian, Finnish, French, German, Greek, Hungarian, Irish, Italian, Latvian, Lithuanian, Maltese, Polish, Portuguese, Romanian, Slovak, Slovenian, Spanish

Geographical Concepts



Year 7 Design Knowledge Organiser

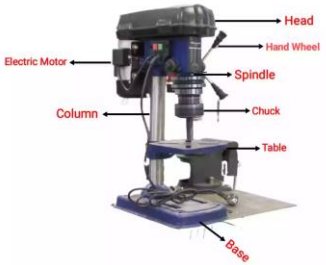
Longdendale High School

Design Process

Design Brief	A statement outlining what is to be designed and made.
Specifications	A list of design criteria.
Research	Sourcing information and inspiration to help with design work
Ideas	A range of potential solutions to the Problem.
Development	Further improving an idea.
Final Design	A presentation drawing of chosen idea.
Manufacture	Making the final outcome.
Evaluation	Reviewing strengths and weaknesses of final product and design work.

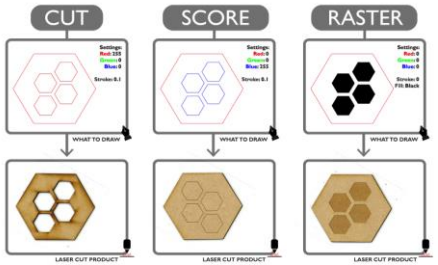
Health and Safety

Pillar Drill



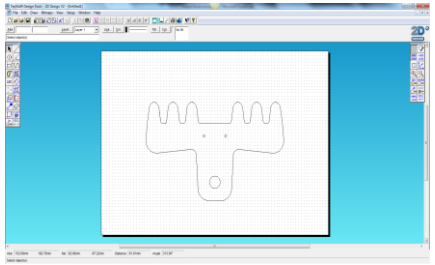
Pillar drills are free standing machine tools used by engineers that use high powered motors to rotate drill bits at varying speed.

Laser Cutter



Laser cutting is a method of cutting shapes or designs into sheet metal or other structural materials.

CAD / CAM

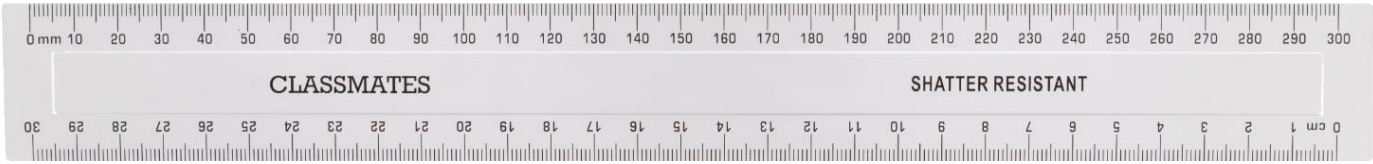


CAD stands for Computer aided design and refers to any design that is created through the use of computer software.

Plywood

Sheet materials manufactured from layers or particles of wood. Reddish brown or white in colour. Layered in odd numbered sheets. Strong. Susceptible to splintering Used in sheds and cladding, furniture, flooring, boats (marine ply).

Measure



Measuring in millimetres is more accurate than measuring in centimetres. 1cm = 10mm

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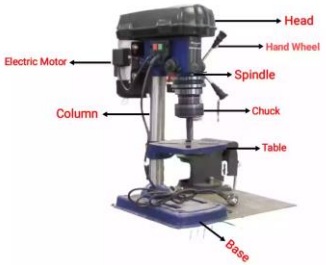

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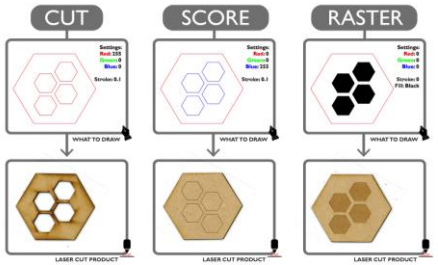

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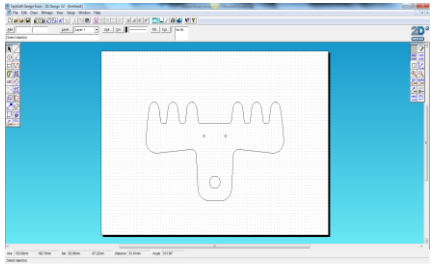

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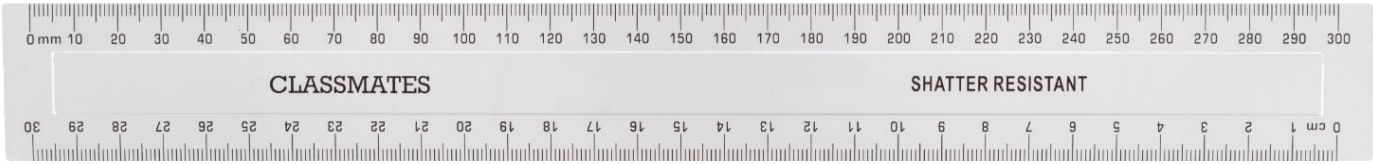

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Year 7 Textiles Knowledge Organiser

Longdendale High School

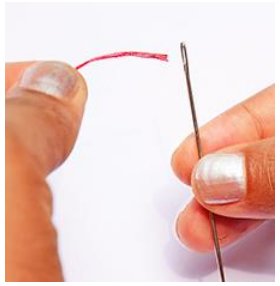
Equipment

Needle	A piece of metal with a point at one end and a hole or eye for thread at the other, used in sewing.
Pins	A piece of metal with a point at one end for holding fabric together.
Sheers	Used for cutting fabric.
Fabric	Cloth produced by weaving or knitting textile fibres.
Unpicker	A small piece of equipment with a sharp pointy end used to unpick stitches.
Tailors Chalk	Chalk used to mark fabric.
Thread	A strand of cotton, used in sewing or weaving.
Pattern	A template used to cut out the fabric.

Health & Safety

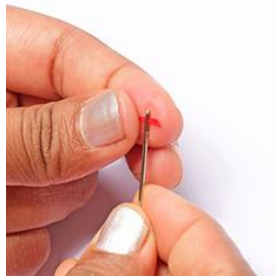
1. Work slowly to avoid sticking yourself with the needle.
2. Keep your eyes on your work.
3. Use the right tool for the job.
4. Store tools and equipment properly.
5. Cut with care.
6. Before you walk away, put things away!

How to Thread a Needle

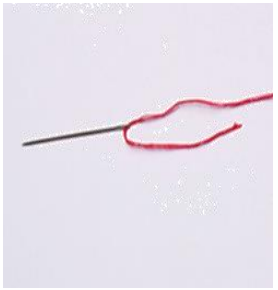


Step 1
Hold the needle in your non dominant hand and the thread in your dominant hand.

Step 2
Hold the needle in the one hand and take the eye of the needle closer to the tip of the thread in the other hand.



Step 3
Keep pushing the needle further until the end of the thread emerges well enough through the other side of the eye. Pull the end of the thread out.



Step 4
Pull the end of the thread through the eye of the needle and tie of the end of the thread in a knot.

Hand Sewing Stitches

Running Stitch

Back Stitch

Whip Stitch

Blanket Stitch

Chain Stitch

Sewing Techniques

Embroidery

Appliqué

Year 7 Textiles Knowledge Organiser

Longdendale High School

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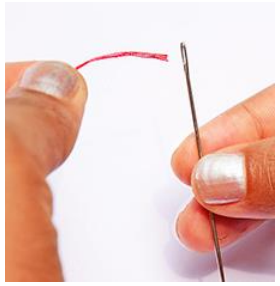

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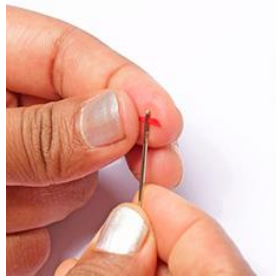

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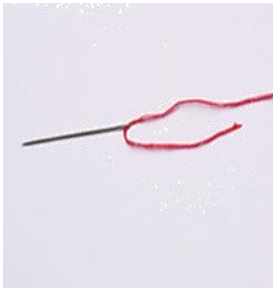

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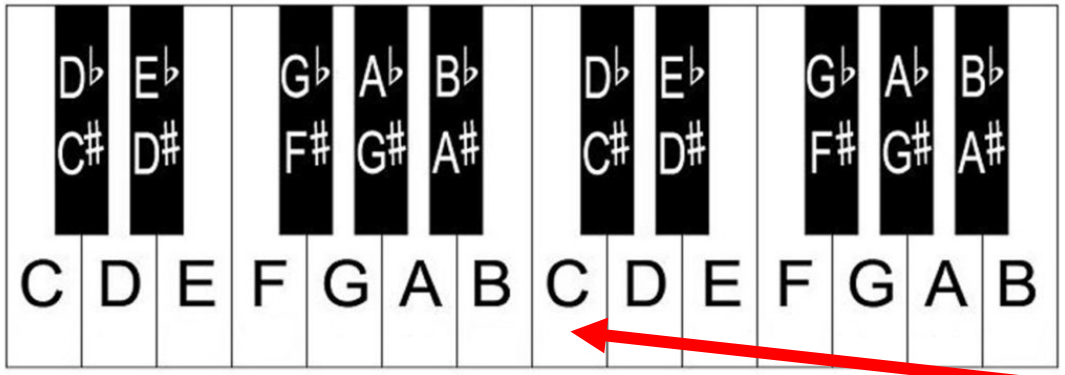
Year 7 MUSIC HT1 Knowledge Organiser

Introduction to Music

Piano Keys and Notes



Setting up the keyboard safely and quickly

C is to the left of the two black keys

Key Words: Musical Elements

Tempo = The speed of music

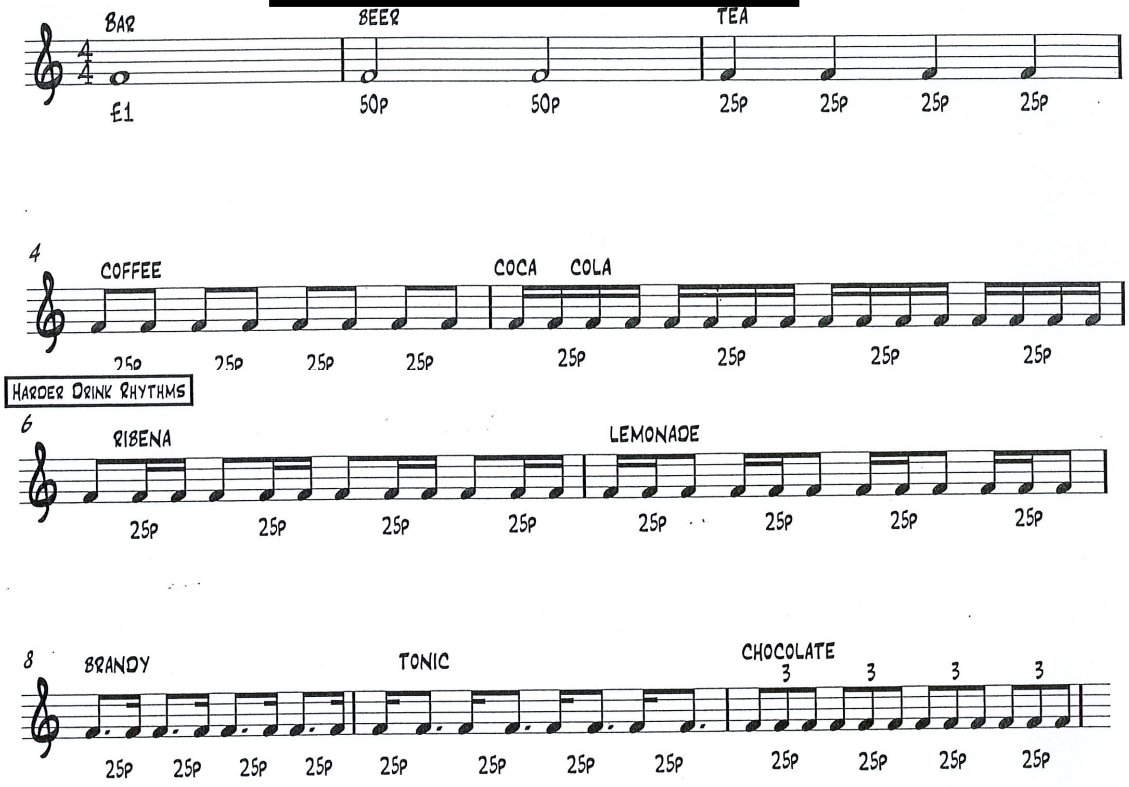
Pitch = How high or low

Dynamics = How loud or quiet

Crescendo = Getting louder

Genre = Style of music

Drink rhythms



You should:

- Be able to identify and write about some elements of music in listening activities using appropriate language
- Begin to identify different instruments, how they sound and which family they belong to
- Clap basic rhythms and recognise the difference between note lengths using 'drink rhythms'
- Recognise different keys on the keyboard and their note names