

March–April

# Year 7

**KNOWLEDGEABLE  
AND EXPERT  
LEARNERS**



Self  
Quizzing

Flash  
Cards

Mind  
Maps

Brain  
Dumps

enjoylearn**succeed**

# INDEPENDENT LEARNING BOOKLET

**NAME:** .....

**TUTOR GROUP:** .....

## CONTENTS

- Using Class Charts Instructions
- Accessing SENECA
- Independent Learning log
- Mind Map instructions
- Subject Knowledge Organisers

You will need an A4 application booklet.

### **HOMEWORK:**

- Your teacher will set specific tasks, with a deadline, on Class Charts
- Instructions for your homework and how to access it are in this booklet
- You must complete and hand in the work by the deadline

### **INDEPENDENT LEARNING EXPECTATIONS AND REWARDS:**

- You should complete 1 task per day, 5 days a week.
- The tasks will be set on Class Charts to help you keep track of what you need to do.
- You must bring your ILB and application book to school every day.
- You can choose the subject/topic you want to work on.
- Your tutor will check your ILB regularly to see how you are getting on.
- You will be rewarded for going above and beyond expectations.

# SUBJECT KNOWLEDGE ORGANISERS CONTENTS

Art	8
Computer Science	9-10
Product design	11
Food Technology	12
Textiles	13
Performing Arts	14
English	15
French	16-17
Geography	18-19
German	20-21
History	22
Maths	23
Music	24
RE	25
Science	26-27
PSHCE	28

# USING CLASS CHARTS



All of your homework will be set by your teachers using the Class Charts System. You should check Class Charts every day to make sure you are up to date, and that you meet all your deadlines. Below, shows you how to log on and track your homework.

## Logging in to Class Charts

1. Enter your email address and password into the fields provided

Access code \*  
Your access code

Please enter the access code supplied by your teacher.

Remember me

2. Click on the Log in button



3. Enter your date of birth if prompted and click on the OK button

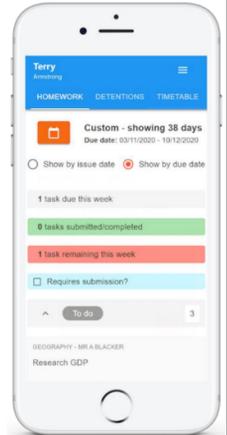
Date of birth

Please enter your date of birth below.

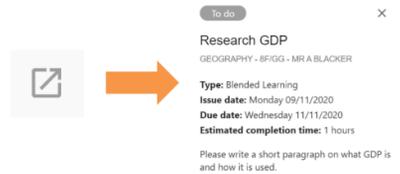
Date of Birth  
12/06/2009

## Homework

- Select the homework tab on our account.
- This will display a list of the homework tasks which you have been given.
- To change the date range for displayed homework tasks, click on the orange Date button.
- To display tasks in the order they are expected to be handed in, click on the Due date button.
- To mark a homework task as completed, view the homework task of your choice in more detail and tick the Completed checkbox.



To view a homework task in more detail, click on the expand icon in the bottom right hand corner of the homework tile. A popup will appear that contains the a description of the homework task, the estimated completion time and any links or attachments that may have been included.



## Keeping track of homework

To track your homework use the three banners above the homework status. This shows the the number of homework tasks that are due that week, how many of those tasks you have completed and how many tasks you still need to complete.

1 task due this week

0 tasks submitted/completed

1 task remaining this week

To only see homework tasks that require an attachment submission, tick the checkbox labelled Requires submission.

Requires submission?

If you are viewing the Homework tab via a desktop or laptop, expanding a homework status category will display a table overview of each homework task for the selected date range.

To do 3								
Homework	Teacher	Lesson	Issued	Due	Estimated time	Type	Feedback	
<input checked="" type="checkbox"/>	Research GDP	Mr A Blacker	8F/Gg	Monday 09/11/2020	Wednesday 11/11/2020	1 hours	Blended Learning	
<input checked="" type="checkbox"/>	Write a soliloquy	Mr J Kato	8y/En2	Tuesday 10/11/2020	Tuesday 17/11/2020	30 minutes	Homework	
<input checked="" type="checkbox"/>	Create a poster on French food	Mrs A Abell	7YEL/Fr	Friday 06/11/2020	Thursday 19/11/2020	45 minutes	Homework	Feedback

## Homework attachment submissions

For certain homework tasks, you may be asked by your teacher to upload your work as an attachment. When viewing a homework task in more detail, you will see the Upload attachment button if your teacher is expecting your work to be uploaded. To submit a homework attachment, click on the Upload attachment button and select the files of your choice. Successfully uploaded files will then appear above the button

To do

Write a book review  
RECREATION - C8R/RC5 - MRS A ABELL

Type: Homework  
Issue date: Friday 20/03/2020  
Due date: Friday 27/03/2020  
Estimated completion time: 10

Completed?

Write a 500 word review on the book of your choice.

My attachments

My book review.doc

You can upload a maximum of 5 attachments, each up to 250mb in size.

Supported file formats: doc, docx, pdf, xls, xlsx, ppt, pptx, pub, txt, png, jpeg, jpg, gif, rtf, mp3, odt, odp, csv, mp4, mov, m4a, sb3

RECREATION - MRS A ABELL

Write a book review

Issued: Friday 20/03/2020  
Due: Friday 27/03/2020

If your teacher leaves feedback on one of your homework attachments, you will see a Feedback icon appear on the associated homework task.

To view the feedback, click on the expand icon in the bottom right hand corner of the homework tile. Your teacher's feedback will appear directly below your homework attachment

To do

Completed

Submitted late

Not submitted

Submitted

To-Do: These are homework tasks that you need to complete. Once you have completed them, tick the checkbox

Completed: These are homework tasks that you have ticked as completed but have not been marked by your teacher

Late: These are homework tasks that have been handed in past the deadline.

Not submitted: These are homework tasks that were not handed in on time.

Submitted: These are homework tasks that have been handed in on time.

# HOW TO ACCESS SENECA



Seneca learning is a free online platform that will help you revise for all your subjects.

1.

Go to  
<https://senecalearning.com/en-GB/>

2.

Click 'Log In' at the top right hand corner.



Login

Sign up

3.

Select 'Continue with Microsoft'.



Continue with Microsoft

4.

Enter your school email and password.

5.

Select the course(s) you want to work on

If you need any help accessing SENECA please speak to your class teacher, or Miss Holmes.

You can also scan this QR code for a video walkthrough of how to log in as a student

SCAN HERE



# INDEPENDENT LEARNING LOG



## MIND MAPS

### Expectation this ½ term: Mind maps

1. Create 1 Mind Map a Day

- This should be done once a day , for approximately 20 minutes.
- All your Mind Maps should be evidenced in your application booklet.
- Use this log to track how what subjects you have done (see example)

Week Beginning	Monday	Tuesday	Wednesday	Thursday	Friday
<b>EXAMPLE:</b>	English: KG1 & 2	Science: KG2 & 4	History: KG4 & 5	PSHCE: KG 1 & 2	Drama: KG 1 & 3
23/02/2026					
ILB CHECK (10 Mind Maps) 02/03/2026					
9/03/2026					
ILB CHECK (20 Mind Maps) 16/03/2026					
23/03/2026					

# MIND MAPS – INSTRUCTIONS

1.



## Identify knowledge

Select a topic you wish to cover.

Decide which type of mind map you are creating

- **Retrieval:** No material
- **Concept:** Material needed

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2.



## Topics & Subtopics

Place the main topic in the centre of your page and identify subtopics that will branch off.

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3.



## Branch off

Branch of your subtopics with further detail.

E.g. Key terms, definitions, examples or descriptions.

Try not to fill the page with too much writing.

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4.



## Review

Is the information on your mind map accurate?

**Green pen:** Do you need to add anything?

**Green pen:** Do you need to correct anything?

---

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5.



## Revisit it

Use it to help you prioritise your revision; you can **RAG** rate it.

Use it to help you summarise the topic, or use your mind map to teach someone else a topic.

**Knowledge Group 1: Mask Designs**

1	<b>Mask</b>	A covering for all or part of the face, worn as a disguise, or to amuse or frighten others.
2	<b>Positive space</b>	Refers to the subject or areas of interest in an artwork, such as a person's face or figure in a portrait.
3	<b>Negative space</b>	Negative space is the space around and between the subject of an image.

**Knowledge Group 2: Relief Sculpture**

1	<b>Relief Sculpture</b>	Sculpture in which images are slightly raised off a flat background (like a piece of cardboard).
2	<b>Cardboard construction</b>	The action of building a sculptural form by assembling pieces of cardboard.
3	<b>Quirky (base)</b>	Having or characterised by peculiar or unexpected traits or aspects.
4	<b>Oil Pastel</b>	Vibrant, creamy sticks made of pigment mixed with a non-drying oil and wax binder, combining aspects of crayons and paints.

**Knowledge Group 3: Artists/Periods**

1	<b>Kimmy Cantrell</b>	Self-taught ceramicist from Atlanta who uses asymmetry to challenge definitions of beauty.
2	<b>Pablo Picasso's African Period</b>	A period from 1906-1909 when Picasso painted in a style which was strongly influenced by African sculpture, particularly traditional African masks.

### Algorithms Basics

<b>Algorithm</b>	An algorithm is a step by step set of rules or instructions that need to be followed to solve a problem.
<b>Problem Solving</b>	Problem solving is identifying a problem, analysing it, and finding the most effective solution.
<b>Variable</b>	A variable is a stored value that can be changed whilst the program is running.
<b>Flowchart</b>	A graphical way of showing an algorithm.

### Input, Process, Output Model

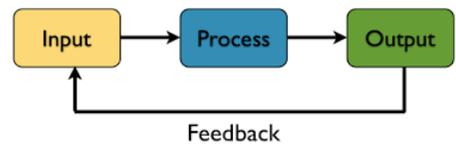
<b>IPO Model</b>	The IPO model is a widely used approach in systems analysis and software engineering.
<b>Input</b>	Inputs provide or give data to the computer.
<b>Process</b>	Processes are a series of actions or steps taken to achieve a particular end.
<b>Output</b>	Outputs information produced by a computer process.

### Key Vocabulary

<b>Sequence</b>	Sequence is the order in which instructions are processed.
<b>Selection</b>	Selection is a decision or choice within your computer program.
<b>Iteration</b>	Iteration is when you repeat a set of instructions.
<b>Comparison</b>	> Greater than < Less than == Equal to    != Not equal to
<b>Linear Search</b>	Linear searches check each item in order from the start of the list.
<b>Bubble Sort</b>	Bubble sorts compare pairs of items in a list.

### Computational Thinking - 4 Steps

<b>Decomposition</b>	Decomposition is breaking down a large problem into smaller problems.
<b>Pattern Recognition</b>	Pattern Recognition involves finding similarities or patterns among decomposed problems.
<b>Abstraction</b>	Abstraction is the process of removing unnecessary detail from a problem and picking out the important bits.
<b>Algorithmic Thinking</b>	Algorithmic Thinking is a logical way of getting from the problem to the solution.



### Data Types and Calculation Symbols

<b>Integer</b>	Used to represent a whole number.
<b>Real / Float</b>	A number with a fractional part or a decimal.
<b>String</b>	Used to represent text or a collection of characters.
<b>Calculate</b>	+ Addition    - Subtraction * Multiply    / Divide

### Flowchart Symbols

<b>Start / End</b>	
<b>Input / Output</b>	
<b>Process / Assign</b>	
<b>Decision / IF</b>	
<b>Direction of Data Flow</b>	

## Flowchart Symbols

	To begin and end the flowchart.
	To calculate the result of a user input.
	To enter data or to display the result.
	To make choices based on some data.

## Basic Turtle Commands

Command	What does it do?
Turtle.Show()	Show Turtle.
Turtle.Hide()	Hide Turtle.
Turtle.Speed = 8	Set speed to 8.
Turtle Move(100)	Move 100 pixels.
Turtle.Turn(90)	Turn 90°
Turtle.Angle = 180	Turn to 180°
Turtle.PenUp()	Turtle stops drawing.
Turtle.PenDown()	Turtle start to draw.

## Repetition and Tessellations

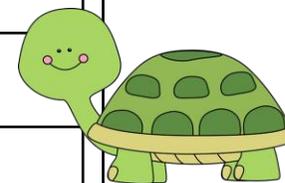
Repetition	FOR loops are one way to repeat sections of code. <pre>For x = 1 To 360   Turtle.Move(1)   Turtle.Turn(360/360) EndFor</pre>
Tessellation	A tessellation is repeating a pattern without leaving any gaps. There are two types of tessellations regular and semi regular. Can you find out what they are? 

## Graphics Window Commands

Command	What does it do?
BrushColor = Red	Changes fill colour to Red.
FillRectangle(,, ,)	Draw and fill a rectangle
FillTriangle(,,,,)	Draw and fill a triangle
FillEllipse(,, ,)	Draw and fill a circle

## Key Vocabulary

<b>Algorithm</b>	A step by step sequence for how to solve a problem.
<b>Flowchart</b>	A flowchart is a step by step method to solving a problem.
<b>Intellisense</b>	This is the area of Small Basic where hints and tips and displayed while we write code.
<b>Cartesian Co-ordinates</b>	Location of a fixed point to state how far along and how far up it is.
<b>Iteration</b>	Iteration is the process of looping or repeating sections of a program



1. Process; Tools & Equipment

1	<b>Coping Saw</b> 	Hand held tool used to cut intricate shapes in woodworking
2	<b>Tenon Saw</b> 	Used to <b>cut</b> straight lines in wood, but not deep cuts due to the 'back' on the top of the blade.
3	<b>Hegner Saw</b> 	A piece of machinery used to cut intricate curves and joints
4	<b>Try Square</b> 	Used to check and mark right angles in constructional work
5	<b>File</b> 	Hardened steel in the form of a bar or rod with many small cutting edges raised on its surfaces; used for smoothing or shaping objects.
6	<b>Steel Rule</b> 	Manufactured from stainless steel and features metric or imperial (or both) scales along its length. One end is usually flat whilst the other end is usually round.
7	<b>Bandface</b> 	A vertical bandfacer used for sanding, finishing & finishing tasks. (making surfaces flat).

2. Design Styles

1	<b>Memphis</b>	A design style that focusses on giving objects human features (Anthropomorphic) from simplistic geometric forms
2	<b>De Stijl</b>	A design style that takes its form from primary colours (Red, Blue and Yellow)
3	<b>Art Deco</b>	A design style that takes its influence from 'sunburst motifs' and 'ziggurat' (stepped pyramids)

3. Materials; Softwoods

A term for the wood which is produced by **coniferous** trees, they can take up to **20 years** before these trees can be used.

1	<b>Pine</b>	Furniture
2	<b>Spruce</b>	Roofing
3	<b>Cedar</b>	Cladding

3. Materials; Hardwoods

**Hardwoods** are usually have **broad leaves**, come from **deciduous** or broad-leaved trees and take many years to grow to maturity before they can be used (**100 Yrs**)

1	<b>Teak</b>	Exterior furniture
2	<b>Oak</b>	Interior furniture / Beams in old cottages
5	<b>Beech</b>	Kitchen items & musical instruments.

3. Materials; Manufactured Boards

Manufactured boards are timber sheets which are produced by **gluing wood layers or wood fibres** together. Often made use of **waste wood materials**

1	<b>Medium Density Fibreboard (MDF)</b>	Wood particles are combining with glue, and formed into panels by applying high temperature and pressure.
2	<b>Plywood</b>	Consists of two or more layers of wood glued and pressed together with the direction of the grain alternating.
5	<b>Chipboard</b>	Made from compressed wood chips and glues, often coated or veneered to give desired appearance

4. Wood Joints

1	<b>Comb/Finger Joint</b> 	Consists of a series of alternate notches and square pins of the same width which are subsequently glued.
3	<b>Dowel Joint</b> 	Used to reinforce Butt Joints by drilling holes and inserting round lengths of wood.
4	<b>Screw Joint</b> 	A type of joint that is fastened by means of a threaded metal rod and a screwdriver.

Sand down all wood (**P80,P120,P240,P320,P400**)

Apply **woodstain** as a finish will add **colour** to wood, but still allow the natural appearance of the wood to be seen – You will still see the wood **grain**.

Impact screwdrivers and hand drills are **not** the same. To make a screw joint you will first need a **pilot hole**, then a **countersink**.

1. Equipment

1	<b>Sieve</b> 	We use it to get air into a mixture and get any lumps out of flour.
2	<b>Colander</b> 	Used to drain water out of food e.g pasta, washing vegetables
3	<b>Chopping board</b> 	Used to prepare food on for hygiene and to protect the kitchen surface.
4	<b>Wooden spoon</b> 	Used to stir hot things as it doesn't melt or conduct heat.
5	<b>Peeler</b> 	Takes the skin off food e.g carrots.
6	<b>Cooling rack</b> 	Used to put hot things on to let them cool down faster as the air can get all around.
7	<b>Measuring jug</b> 	Used to measure liquid. Read at eye level for accuracy.
8	<b>Table spoon</b>	A spoon bigger than a teaspoon and dessert spoon.
9	<b>Cooker</b> 	Consists of three parts (cooker, hob and grill)
10	<b>Saucepan</b> 	Used to heat up things on the hob.
11	<b>Garlic crush</b> 	Used to crush peeled garlic cloves to make a paste.

2. Macronutrient components

1	<b>Macronutrients</b>	Macronutrients are the nutrients we need in larger quantities that provide us with energy. E.g. fat, protein and carbohydrate
2	<b>Balanced</b>	A balanced meal includes a variety of foods from different food groups, ensuring you get a wide range of nutrients.
3	<b>Portion size</b>	One portion of fruit/vegetables is roughly the size of your hand
4	<b>Carbohydrates</b>	Two types (sugar & starch). These foods provide us with energy. Wholemeal options aid digestion and keep us feeling full e.g. wholemeal bread
5	<b>Protein &amp; Alternatives</b>	Protein is an essential macronutrient that your body needs for growth, cell repair.
6	<b>Fruit &amp; Vegetables</b>	Fresh, local, fruit and vegetables are best and can be very good value. Eat a variety of 5 different colours to maximise vitamin benefits. Helps immunity against germs.
7	<b>Water</b> 	We should drink 6-8 glasses a day. We lose water through urine and sweat. We get it from food and drink.
8	<b>Oils and spreads</b>	While some fat is essential, we often consume too much saturated fat and need to prioritize unsaturated fats
8	<b>Sugar</b> (not included on Eatwell guide)	Can lead to tooth decay, diabetes 11, obesity and strokes
9	<b>Seasonal</b>	Eating produce (fruits, vegetables, etc.) when it's naturally in harvest and ripe during the particular season it's grown in

3. Kitchen Processes

1	<b>Washing and drying up</b>	Always wash up in hot soapy water and dry thoroughly before putting away.
2	<b>Weighing &amp; Measuring</b>	Weighing and measuring has to be accurate for the recipe to be successful. Grams and litres
3	<b>Coloured chopping boards</b>	Red= raw meat Green= salad & fruit Brown=vegetables Blue= fish Yellow= cooked meat. Used for safe food preparation
4	<b>Hygiene &amp; Safety</b>	Rules to follow to ensure you make the products safely and hygienically

4. Key Vocabulary

1	<b>Food Miles</b>	The total distance food travels from its source (where it's grown) to the plate
2	<b>Sustainable</b>	Sustainable food is food that is grown and produced in ways that are good for the environment, good for people, and good for animals.
3	<b>Temperature control</b>	Changing the temperature to ensure your food to cooked correctly. High for boiling and low heat for simmering.
4	<b>Fairtrade</b>	Ensures that people who produce goods e.g. farmers in developing countries, are paid a fair price and have decent working conditions
5	<b>Food miles</b>	The distance food travels from where it is grown to our plates. Represents the CO2 emissions produced.

1. Tools & equipment

1	<b>Pins</b> 	Used to hold pieces of material together before sewing.
2	<b>Needles</b> 	Used to sew material together by hand. In this project for tacking your material before using the sewing machine.
3	<b>Ruler</b> 	Helps you mark out your fabric in straight lines before cutting.
4	<b>Material Scissors</b> 	Scissors that are designed to cut fabric only. Cutting paper with blunt the blades.
5	<b>Tailors Chalk</b> 	A special chalk that is used to mark out material. The chalk rubs away easily without leaving a mark.
6	<b>Thread</b> 	Thread is used to sew material together. It comes in lots of colours and can be used on the sewing machine or with a needle by hand.
7	<b>Tie dye</b>	Restrict method of dying fabric. Elastic bands are used to stop the flow of dye from one section of the fabric to the other forming a pattern
8	<b>Sewing Machine</b> 	An electronic machine that sews materials together.

2. Sewing Machine Components

1	<b>Bobbin</b> 	The small circular thread holder that goes in the bottom of the sewing machine to stop your stitches coming undone.
2	<b>Bobbin Case</b> 	Holds the bobbin in place in the sewing machine. Must be put in with the arm to the top.
3	<b>Bobbin Winder</b> 	Located on the top of the sewing machine and used to wind up the bobbin. When clicked in it will stop the sewing machine sewing.
4	<b>Foot Peddle</b> 	Operates the sewing machine, must be out on the floor. DO NOT PULL UP BY THE WIRE.
5	<b>Stitch Selector Buttons</b> 	Changes the style of the stitches. 1 is used for straight stitching.
6	<b>Reverse button</b> 	Puts the sewing machine in reverse. Should be used at the start and the finish of a line of stitching to stop the stitching coming undone.
7	<b>Sewing machine feet (zipper foot)</b> 	A foot that is attached to the sewing machine to sew a zip into fabric.
8	<b>Sewing machine needle plate</b> 	Helps you line up your material correctly and produce a nice even straight stitch.

3. Process; Sewing machine sewing

1	Thread up the sewing machine with the thread you wish to sew with.
2	Bring up the bobbin thread (fishing) Select your stitch.
3	Place your material under the pressor foot and lower the lever at the back to hold in place. Then lower your needle into the fabric.
4	Hold your material steady with both hands and place your foot on the foot peddle. Let the machine take the fabric.
5	Do three stitches forward and three back to lock your thread (tie a knot) then complete your line of stitching repeating the three stitches forward and three back at the end.

4. Materials

1	<b>Denim</b>	A natural fabric that is made from cotton and in some cases elastane (if it has a stretch) Usually dyed using indigo dye
2.	<b>Cotton</b>	A natural fabric that is made from cotton fibres. Can be dyed many different colours.

Key Vocabulary

1	<b>Puller</b>	Metal part of a zip pulled to open and close
2.	<b>Teeth</b>	The interlocking parts of a zip that are raised. They open and close when the puller is moved up and down.
2	<b>Tack stitch</b>	A temporary stitch used to hold fabric in place before you sew on the sewing machine.

## Bollywood – What is it?

<b>Origins</b>	<b>Combines two names: Bombay (the city now called Mumbai) and Hollywood. Based in Mumbai, India and is one of the worlds largest film industries.</b>
<b>What does it look like?</b>	<b>A FUSION of Classical Indian dance, folk dances, Jazz, Hip Hop, Arabic and Latin.</b>

## KEY VOCABULARY

1	Action	The movement performed
6	Formations	The shape that you and your dancers make in the space. E.g. diamond, circle, zig zag.
7	Gesture	A movement done by the body which is not weight bearing, e.g., clapping, pointing, waving.
8	Warm up	Increases your heart rate so that oxygen travels in your blood faster to your muscles. E.g. Jogging on the spot or star jumps. It also stretches your muscles and mobilises your limbs. E.g. lunges to each side. This prevents injury during and after dancing
9	Fusion	A mix of different dance styles

## Choreographic Devices : Ways in which a choreographer makes the movement created look more interesting

1	Levels	Using different areas of space (high, middle, low)
2	Directions	Facing and travelling different wats when performing movements.
3	Formations	Where the dancer stand on stage in relation to others on stage– Creates a pattern
4	Canon	Group of dancers performing a movement one after the other, similar to Mexican wave
5	Unison	Group of dancers performing movement at exactly the same time

## DANCE PERFORMANCE SKILLS - DREAMS

<b>1.D</b>	<b>DYNAMICS</b>	How the movement is performed e.g. sharp, soft, heavy and having a variation to suit the dance.
<b>2.R</b>	<b>RHYTHM AND TIMING</b>	Picking out beats in music / Performing movements at the correct time as beat suggests or as other dancers are moving. "Being in time"
<b>3.E</b>	<b>EXECUTION AND COMMITMENT</b>	Making sure you finish off all your movements fully and fully immerse yourself into the mood and your character when performing.
<b>4.A</b>	<b>AWARENESS OF SPACE</b>	Having an awareness (knowing) of where other dancers are in relation to you , maintain formation and knowing the correct pathways to transition from one formation to another. Having An awareness (knowing) of set and props on stage. Important to prevent collisions.
<b>5.M</b>	<b>MOVEMENT MEMORY</b>	Being able to remember the movements choreographed without thinking or stalling.
<b>6.S</b>	<b>STAMINA</b>	Ability to keep going with high energy throughout rehearsal / performance without sowing fatigue.

## Bollywood Movements

1	Hamsasya	Place you forefinger and thumb together. Rotate your hands (this is sign of knowledge, peace and meditation).
4	Triple Step / One Two Three step	<u>3 counts</u> Flat of right foot Toes of left foot Flat of right Repeat on left side
5	Limp Step	Put toes of right foot on the floor Press down on toes lifting left foot slightly off the floor Repeat on left foot
6	Side Lunge	Start feet together Lunge to the right with your leg, twisting your body to face the right. Keep your head to facing the front. Bring your feet back to the middle. Do the same on the left.
7	Around the World	Right foot on the floor Place ball of left foot on floor and push off it 4 times so that you turn your body around in a full circle Repeat on left foot
8	Step & Touch	Start feet together Step out to the right Touch ball of left foot on floor next to right Step out to left Touch ball of right foot on floor next to left
9	Turn	Start feet together Take right foot and cross it over in front of left foot Place ball of foot on the floor Simply unwind in a spin (This is all one action)
10	Shrugging Shoulders	Shrug your shoulders up and down <u>Progressions</u> 1) Gradually lift/raise arms up above shoulders 2) Can you do any of this at double speed?
11	Arm Pulse / Sprinkler	Put one arm behind your head and the other out to the said. Then pulse out and in.
12	Adja	A gesture where the palms face the ceiling and the fingers move inwards as if saying "come here".

## Plot Summary

1	<b>Act 1:</b>	In, Venice, Antonio is unhappy. Despite owing his best friend a lot of money, Bassanio asks Antonio to fund his trip to Belmont to woo Portia. Shylock (who is Jewish) is angry at Christians' treatment. He lends Antonio money to support Bassanio. He demands a pound of Antonio's flesh if he doesn't pay him back promptly. In Belmont, Portia longs for a good husband but her father has set up a test for any suitor- they must choose between a casket of gold, silver or lead one of which will contain Portia's portrait.
2	<b>Act 2:</b>	In Venice, Jessica (Shylock's daughter) is rescued from her house by Lorenzo (her lover) and his friends. She takes money from her father. In Belmont, the Prince of Morocco chooses a gold casket. The Prince of Aragon chooses silver. Neither is right and Portia remains single.
3	<b>Act 3:</b>	In Venice, Antonio's ships have sunk meaning he can't pay Shylock; Shylock demands his pound of flesh. In Belmont, Bassanio makes the correct choice of a lead casket. Portia is pleased and they marry. Gratiano (Bassanio's friend) and Nerissa (Portia's lady in waiting) also agree to marry. Portia and Nerissa decide to dress up as men to travel to Venice and help Antonio.
4	<b>Act 4:</b>	In Venice, Shylock refuses to show mercy in the trial leaving Antonio facing death. Dressed as a lawyer, Portia enters the court and tells Shylock that spilling Antonio's blood would be criminal; Shylock is forced to become Christian. Portia and Nerissa, still disguised, trick their husbands into giving away their wedding rings.
5	<b>Act 5:</b>	In Belmont, the main characters are reunited. Portia and Nerissa reveal themselves and chastise their husbands saying they have been unfaithful for giving away their wedding rings. Antonio's ships arrive in Venice miraculously.

## Themes

1	<b>Love</b>	Love is presented as complicated in the play. E.g., Portia is tied by her father's test of caskets and Bassanio tries to use money to woo Portia,
2	<b>Mercy</b>	The question of who is or is not merciful in the play runs throughout the play. E.g., Shylock shows no mercy to Antonio through pursuing his 'pound or flesh'.
3	<b>Prejudice</b>	The Venetians are intolerant towards Shylock and the other Jews in Venice. Being anti-Semitic seems to bond people together in the play.

## Conventions of a Comedy play

1	<b>The struggle of young lovers</b>	The lovers of the play overcome hurdles to be together.
2	<b>Mistaken identities and disguises</b>	Twins are often mistaken for each other, and characters are hidden behind disguises.
3	<b>Separation and reconciliation</b>	Characters are often separated at the start of the play, but become reunited by the end.
4	<b>Comical servants and fools</b>	These characters often complete tasks incorrectly or mock the actions of others.
5	<b>A blocking figure</b>	A typically elderly figure (such as a parent) who prevents the young lovers from being together.
6	<b>Idyllic settings</b>	A magical realm, or a foreign country, where the action takes place.
7	<b>Puns</b>	A play on words.
8	<b>Ends in marriage</b>	The play ends happily, usually with the marriage of key characters.

## Key Vocabulary

1	<b>Money Lending (Usury)</b>	Charging interest on money lent (usury) was considered against Christian values.
2	<b>Antisemitism</b>	Many European countries restricted the rights of Jewish people and were prejudiced towards them.
3	<b>Prejudice</b>	Having a negative or unfair opinion about someone before you know them properly.
4	<b>Bond</b>	A legal agreement.
5	<b>Patriarchy</b>	Wealthy fathers decided who their daughters should marry & women had little control over their personal lives.
6	<b>Religious conversion</b>	When a person changes their religious beliefs. They might do this because of personal beliefs or for marriage.
9	<b>Merchant</b>	A person who buys and sells goods or products to make money. Merchants can sell things in a shop, at a market, or even trade with other countries.

## Sentence Starters

1	à mon avis	in my opinion
2	je dirais que	I would say that

## Times of the Day

1	le matin	in the morning
2	l'après-midi	in the afternoon
3	le soir	in the evening
4	la nuit	at night

## Who with

1	avec ma famille	with my family
2	avec mon père	with my dad
3	avec ma mère	with my mum
4	avec mon frère	with my brother
5	avec ma soeur	with my sister
6	mon beau père	my step-dad
7	ma belle mère	my step-mum
8	mon demi-frère	my stepbrother
9	ma demi-soeur	my step-sister

## Connectives

1	et	and
2	ou	or
3	où	where
4	parce que	because
5	car	because
6	mais	but
7	pourtant	however
8	aussi	also

## Frequency

1	tous les jours	every day
2	de temps en temps	from time to time
3	une fois par semaine	once a week
4	deux fois par mois	twice a month
5	ne...jamais	never
6	toujours	always
7	souvent	often
8	quelquefois	sometimes

## Possessives

1	mon/ma/mes	my
2	ton/ta/tes	your
3	son/sa/ses	his/her
4	notre/nos	our

## Intensifiers

1	un peu	a bit
2	assez	quite
3	très	very
4	vraiment	really
5	beaucoup	a lot
6	trop	too
7	tellement	so
8	plutôt	rather

## Describe Myself and Others

1	beau/belle	handsome/beautiful
2	joli/jolie	pretty
3	vieux/vieille	old
4	heureux/heureuse	happy
5	travailleur/travailleuse	hardworking
6	fou/folle	crazy
7	gentil/gentille	kind
8	embêtant/embêtante	annoying
9	méchant/méchante	nasty/mean/naughty
10	paresseux/paresseuse	lazy
11	drôle	funny
12	triste	sad

## Adjectives

1	amusant	fun
2	intéressant	interesting
3	passionnant	exciting
4	utile	useful
5	incroyable	incredible
6	ennuyeux	boring
7	fatigant	tiring
8	cher	expensive

Present Tense		
1	Je suis	I am
2	J'ai	I have
3	Je fais	I do/make
4	Je vais	I go
5	Je joue	I play
6	Je mange	I eat
7	Je bois	I drink
8	Je lis	I read
9	J'achète	I buy
10	Je trouve	I find
11	Je pense	I think
12	c'est	it's

Near Future Tense – I am going to...		
1	Je vais être	be
2	Je vais avoir	have
3	Je vais aller	go
4	Je vais faire	do
5	Je vais jouer	play
6	Je vais regarder	watch
7	Je vais manger	eat
8	Je vais acheter	buy
9	Je vais boire	drink
10	Je vais voyager	travel
11	ce sera	it will be

Introducing Opinions		
1	J'aime	I like
2	Je n'aime pas	I don't like
3	J'adore	I love
4	Je déteste	I hate
5	Je préfère	I prefer
6	Je voudrais	I would like

Days		
1	lundi	Monday
2	mardi	Tuesday
3	mercredi	Wednesday
4	jeudi	Thursday
5	vendredi	Friday
6	samedi	Saturday
7	dimanche	Sunday
8	un jour	one day
9	une semaine	a week
10	une quinzaine	a fortnight

Weather Phrases		
1	il fait beau	It's nice
2	il fait chaud	It's hot
3	il fait froid	It's cold
4	il y a du vent	It's windy
5	il y a du soleil	It's sunny
6	il y a du brouillard	It's foggy
7	il y a des nuages	It's cloudy
8	il y a des orages	It's stormy
9	il neige	It's snowing
10	il pleut	It's raining
11	il gèle	It's freezing

Il y a – there is/are		
1	un homme	a man
2	une femme	a woman
3	un garçon	a boy
4	une fille	a girl
5	une famille	a family
6	des enfants	children
7	des gens	people
8	des adultes	adults

Seasons & Compass		
1	le nord	the north
2	le sud	the south
3	l'est	the east
4	l'ouest	the west
5	au printemps	in spring
6	en été	in summer
7	en automne	in autumn
8	en hiver	in winter

Prepositions		
1	dans	in
2	sous	under
3	sur	on
4	entre	between
5	devant	in front of
6	derrière	behind
7	à côté de	next to
8	en face de	opposite
9	loin de	far from
10	près de	near to

**1. Life in a hot desert**

<b>Desert</b>	A dry region of little rainfall, extreme temperatures, and sparse vegetation. They can be cold deserts, hot deserts or coastal deserts.
<b>Hot desert</b>	Hot deserts have high average temperatures and very low rainfall. Some examples are the Sahara Desert and the Mojave Desert.
<b>Temperature</b>	As there is little humidity and cloud cover, temperatures can become extremely hot during the day and cold at night.

**2. How do plants and animals adapt**

<b>Biodiversity</b>	The number/variety of different plant and animal species in an ecosystem.
<b>Nocturnal</b>	Most active at night.
<b>Camel</b>	Camels have many adaptations that help them survive in the harsh hot desert climate.
<b>Plant adaptations</b>	Many desert plants can expand during a rainfall event to store water in their stems. When it rains in the desert, these plants can increase as much as 50% through water absorption.

**3. How may desert climate change**

<b>Sahara</b>	A vast desert in northern Africa extending east from the Atlantic coast to the Red Sea
<b>Sahel region</b>	The vast semi-arid region of Africa separating the Sahara Desert to the north and tropical savanna to the south. 
<b>Desertification</b>	The process by which fertile land becomes desert, typically as a result of drought, deforestation, or inappropriate farming.
<b>Famine</b>	A drastic, wide-reaching food shortage. The Sahel region is particularly vulnerable to food scarcity (lack of food).
<b>Great Green Wall</b>	A plan to build a strip of trees across the north of Africa. There has been evidence that this is reducing the risk of desertification and improving farming.

**4. Introduction to Mojave desert**

1	<b>Location</b>	The Mojave desert is located on the continent of North America in the country of the U.S.A. The desert covers parts of the states of Nevada, California and Arizona.
2	<b>Climate</b>	The desert reaches temperatures of 35°C and months where the highest amount of rainfall is just over 1mm.

**5. Human activity- Tourism to a desert**

<b>Las Vegas</b>	A city in southern Nevada best known for the Strip, a street lined with mega-resorts and casinos.
<b>Visitor numbers</b>	In the last five years, Las Vegas averaged above 40 million tourists visiting each year. 2020 saw that number drop due to the pandemic.
<b>Activities</b>	There are a number of activities that draw tourists to Las Vegas. Some popular experiences are helicopter rides to the Grand Canyon, walking the famous strip and shopping for luxury goods.

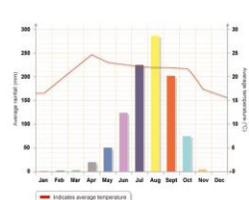
**6. Is Las Vegas sustainable?**

<b>Sustainable</b>	Something that can be continued without harming the environment. For example, solar power or reusable cups.
<b>Unsustainable</b>	Not sustainable. For example, petrol cars, wasting water and electricity.
<b>Water scarcity</b>	A lack of water. Las Vegas consumes the most water per person compared to any other city in the world. They are also running out of water.
<b>Green incentives</b>	Businesses are given benefits to create a more green and environmentally friendly city.

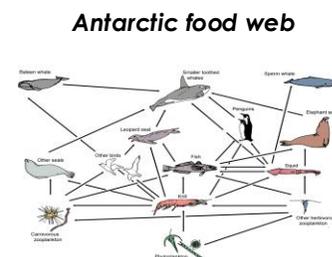
**Where do we find Antarctica?**

<b>Antarctica</b>	A continent lying mostly within the Antarctic Circle and centred on the South Pole. 98% percent of Antarctica is covered by an icecap averaging 1 mile in thickness.
<b>Desert</b>	A dry region of little rainfall, extreme temperatures, and sparse vegetation.
<b>Antarctic Treaty</b>	The Antarctic Treaty was signed in 1959 by 12 countries and sets out the rules to manage the continent and surrounding waters.
<b>Expedition</b>	A journey with a focus on exploration and discovery. Norwegian explorer, Roald Amundsen, first reached the South Pole in 1911.

**The climate in Antarctica**

<b>Weather</b>	Weather describes the day-to-day conditions of the atmosphere.
<b>Climate</b>	Climate describes average weather conditions over longer periods and over large areas.
<b>Climate graph</b>	Climate graphs are a combination of a bar and line graph showing temperature and rainfall. <b>Example</b> 

**Plant and animal adaptations**

<b>Adaptations</b>	Physical and behavioural changes that help animals survive in certain conditions.
<b>Food web</b>	The sequence of events in an ecosystem, where one organism eats another and then is eaten by another organism. 
<b>Apex predator</b>	A predator at the top of the food chain with no natural predators of their own. E.g Orca

**Human activities in Antarctica**

<b>Scientific research</b> 	Eighteen countries operate year-round scientific research stations on the continent and the surrounding islands. There are unique opportunities to study things that are not found anywhere else in the world.
<b>Tourism</b> 	Tourists visit during the summer to enjoy the spectacular scenery and abundant wildlife. Figures show that 73,991 people travelled to Antarctica between October 2019 and April 2020.
<b>Fishing</b> 	Some legal fishing is allowed off the coast of Antarctica but it is closely monitored. Approximately 400,000 tonnes of Antarctic krill was caught in 2019 alone.

**Protecting Antarctica**

<b>Antarctic Treaty</b>	The Antarctic Treaty now has 54 countries who have signed and committed to the protection of Antarctica and its waters through international law.
<b>Microplastics</b>	Small particles of plastic that are less than 5mm in size. They are often found in the marine environment.
<b>Illegal fishing</b>	Fishing that breaks international laws, boundaries and quantity of catch. Antarctic toothfish is often caught illegally due to its high price.
<b>Pollution</b>	The contamination of soil, water, or the atmosphere by the discharge of harmful substances. Pollution is finding its way to Antarctica more frequently in various forms.

**Climate change and Antarctica**

<b>Climate change</b>	The planet's average surface temperature has risen about 1.18°C since the late 19th century. This is attributed to human activities and is known as anthropogenic (human caused) climate change.
<b>Sea level rise</b>	Antarctica has the potential to contribute more than a metre of sea-level rise by 2100 and more than 15 metres by 2500.

Present Tense		
1	Ich bin	I am
2	Ich habe	I have
3	Ich mache	I do/make
4	Ich gehe	I go
5	Ich spiele	I play
6	Ich esse	I eat
7	Ich trinke	I drink
8	Ich lese	I read
9	Ich schwimme	I swim
10	Ich fahre	I travel

Future Tense – I will		
1	Ich werde sein	I will be
2	Ich werde haben	I will have
3	Ich werde machen	I will make
4	Ich werde gehen	I will go
5	Ich werde spielen	I will play
6	Ich werde essen	I will eat
7	Ich werde trinken	I will drink
8	Ich werde lesen	I will read
9	Ich werde schwimmen	I will swim
10	Ich werde fahren	I will travel

Es gibt		
1	ein Mann	a man
2	eine Frau	a woman
3	ein Junge	a boy
4	ein Mädchen	a girl
5	eine Familie	a family
6	die Kinder	children
7	die Leute	people
8	eine Gruppe	friends

Seasons & Compass		
1	Nord	the north
2	Süd	the south
3	Ost	the east
4	West	the west
5	im Frühling	in spring
6	im Sommer	in summer
7	im Herbst	in autumn
8	im Winter	in winter

Introducing Opinions		
1	Ich mag	I like
2	Ich mag ... nicht	I don't like
3	Ich liebe	I love
4	Ich hasse	I hate
5	Ich möchte	I would like
6	gern	like
7	Ich finde	I find
8	Ich denke	I think

Weather Phrases		
1	Es ist sonnig	it's sunny
2	Es ist heiß	It's hot
3	Es ist kalt	It's cold
4	Es ist windig	It's windy
5	Es ist neblig	It's foggy
6	Es ist wolkig	It's cloudy
7	Es ist stürmisch	It's stormy
8	Es regnet	It's raining
9	Es schneit	It's snowing
10	Es donnert und blitzt	There is thunder and lightning

Colours		
1	rot	red
2	blau	blue
3	gelb	yellow
4	grün	green
5	lila	purple
6	braun	brown
7	schwarz	black
8	weiß	white
9	orange	orange
10	rosa	pink
11	hell-	light
12	dunkel-	dark
13	bunt	colourful

Prepositions		
1	in	in
2	unter	under
3	auf	on
4	zwischen	between
5	vor	in front of
6	hinter	behind
7	neben	next to
8	gegenüber	opposite
9	mit	with

**Sentence Starters**

1	Meiner Meinung nach	in my opinion
2	Ich finde	I find

**Times of the Day**

1	am Morgen	in the morning
2	am Nachmittag	in the afternoon
3	an Abend	in the evening
4	in der Nacht	at night

**Who with**

1	mit meiner Familie	with my family
2	mit meinem Vater	with my dad
3	mit meiner Mutter	with my mum
4	mit meinem Bruder	with my brother
5	mit meiner Schwester	with my sister
6	mit meinem Stiefvater	with my step-dad
7	mit meiner Stiefschwester	with my step-sister
8	mit meinem Halbbruder	with my half-brother
9	mit meinen Freunden	with my friends

**Connectives**

1	und	and
2	oder	or
3	denn	because
4	weil	because
5	aber	but
6	obwohl	although
7	auch	also
8	jedoch	however

**Frequency**

1	jeden Tag	every day
2	einmal pro Woche	once a week
3	manchmal	sometimes
4	immer	always
5	nie	never
6	am Wochenende	at the weekend
7	oft	often
8	am Montag	on Monday
9	Heute	today
10	morgen	tomorrow

**Possessives**

1	mein/meine/mein	my
2	dein/deine/dein	your
3	sein/seine/sein	his
4	ihr/ihre/ihr	her

**Intensifiers**

1	ein bißchen	a bit
2	ziemlich	quite
3	sehr	very
4	nur	only
5	viel	a lot
6	zu	too
7	wirklich	really
8	nicht so	not so

**Adjectives**

1	lustig	funny
2	interessant	interesting
4	nützlich	useful
5	nutzlos	useless
6	langweilig	boring
7	schlecht	bad
8	nervig	annoying
9	toll	great
10	schwierig	difficult
11	einfach	easy

**Describe Myself and Others**

1	faul	lazy
2	freundlich	friendly
3	launisch	moody
4	musikalisch	musical
5	sportlich	sporty
6	frech	cheeky
7	niedlich	cute
8	groß	big/tall
9	klein	small/short
10	dick	fat
11	schlank	slim
12	mittelgroß	mid-height

**1. How new was the 'New World'?**

1	Different societies and cultures?	<ol style="list-style-type: none"> <li>1. South and Central America: Maya, Aztecs, Incas</li> <li>2. North America: Divided into many tribes. Cahokia was the largest settlement with 40,000 inhabitants at its peak</li> </ol>
2	What were these societies like?	<ol style="list-style-type: none"> <li>1. Incas: Built roads and bridges, developed a postal service, performed brain surgeries, created their own calendar</li> <li>2. Aztecs: Had multiple gods which required thousands of human sacrifices each year. Everyone was educated up to age of 17. Had their own written language. Women had an important role in society.</li> </ol>
3	How did Europeans discover the Americas?	<ol style="list-style-type: none"> <li>1. Christopher Columbus voyaged west on behalf of Spain in 1492 to look for new routes to the East, discovering fertile lands full of new foods and precious metals. The Caribbean</li> <li>2. Many Europeans followed in his footsteps to discover the new continent and take riches back.</li> </ol>

**2. What impact did Europeans have on the Americas?**

1	How were the natives treated?	<ol style="list-style-type: none"> <li>1. The Aztecs and Incas were slaughtered and enslaved by the Spanish conquistadors (1521) due to their superior weaponry and technology</li> </ol>
2	What happened to the conquered people?	<ol style="list-style-type: none"> <li>1. European diseases like Smallpox wiped out millions of natives who had no immunity to them.</li> <li>2. Languages and cultures like those of the Aztecs were lost as they were forced to convert to Christianity</li> </ol>
3	Why were slaves used?	<ol style="list-style-type: none"> <li>1. Natives who were captured were used as slaves to farm and dig for gold</li> <li>2. Too few survived so slaves were brought from Africa as well</li> </ol>

**3. Why did some Europeans go to the Americas?**

1	Who were the Conquistadors?	<ol style="list-style-type: none"> <li>1. Spanish and Portuguese explorers and warriors who travelled West and went on to discover Mexico, Florida and Brazil</li> </ol>
2	What were their rewards?	<ol style="list-style-type: none"> <li>1. Conquistadores like Hernan Cortes brought back huge quantities of gold</li> <li>2. They set up great empires and gained huge power by taking over the empires of the Incas and Aztecs, with cities like Tenochtitlan under their possession.</li> </ol>
3	How was North America settled?	<ol style="list-style-type: none"> <li>1. Many Northern Europeans went to North America to escape religious persecution and set up their own societies.</li> <li>2. This involved having to fight and defeat native inhabitants.</li> </ol>

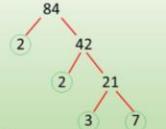
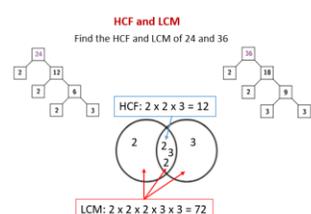
**4. What impact did the 'New World' have on the old World?**

1	How did Europe become more powerful?	<ol style="list-style-type: none"> <li>1. The riches from the new World gave Europe a huge advantage over Asia and the Middle East</li> <li>2. Direct trade routes with China and India were created with increased wealth as well</li> </ol>
2	How did global empires emerge?	<ol style="list-style-type: none"> <li>1. Spain and Portugal now had huge riches which combined with their ship technology to allow them to gain territory from China and India all the way to South America</li> <li>2. Soon Britain and France also began to take advantage of Europe's new riches and superiority on the seas to gain territories.</li> </ol>
3	What role did pirates play?	<ol style="list-style-type: none"> <li>1. England employed privateers under Queen Elizabeth I to try take gold and other precious items from Spanish and Portuguese and bring them back home.</li> <li>2. These pirates became very rich and caused tension between European countries</li> </ol>
4	Which parts of the world were badly impacted	<ol style="list-style-type: none"> <li>1. Africa's population suffered greatly from the discovery as millions were enslaved and traded by Europeans to work in the 'New World'</li> <li>2. Empires like the Mughal and Ottoman went into decline as they could not compete</li> </ol>

**Key Term**      **Definition**

<b>Aztecs</b>	Indigenous people who controlled an empire around Mexico until 1521
<b>Conquistadores</b>	The Spanish and Portuguese invaders who took control of South America and the Caribbean
<b>El Dorado</b>	A mythical city or empire blessed with huge amounts of gold that Europeans searched for during the 1500s
<b>Incas</b>	Indigenous people who controlled an advanced empire around modern day Peru and the Andes
<b>Indigenous people</b>	Cultural and social groups that share ancestral connections to lands where they live
<b>New World</b>	Name given to The Americas and West Indies by Europeans
<b>Privateers</b>	Ships with guns employed by Kings and Queens to capture other boats and goods from merchants
<b>Smallpox</b>	A deadly disease that spread from Europe to the New World devastating indigenous populations
<b>Tenochtitlan</b>	The capital of the Aztec empire which had a population of about 200,000
<b>Treaty of Tordesillas</b>	1494 agreement that divided the 'New World' between Spain and Portugal

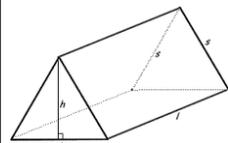
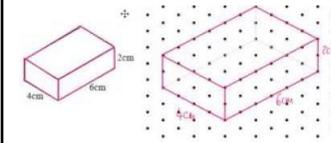
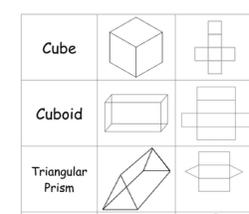
**Number – Factors, Multiples & Primes**

1	Find the highest common factor (HCF) & lowest common multiple (LCM)	<p><b>LCM by Listing out the Multiples</b> Find the LCM of 5 and 6 Multiples of 5: 5, 10, 15, 20, 25, <u>30</u>, 35, ... Multiples of 6: 6, 12, 18, 24, <u>30</u>, 36, ... Least Multiple common in both numbers is 30</p> <p><b>HCF by Listing out the Factors</b> Find the HCF of 24 and 36 Factors of 24: 1, 2, 3, 4, 6, 8, <u>12</u>, 24 Factors of 36: 1, 2, 3, 4, 6, 9, <u>12</u>, 18, 36 Highest common factor is 12</p>
2	Express a number as a product of its prime factors	<p>• Example: Write 84 as a product of its prime factors</p>  <p>• <math>84 = 2 \times 2 \times 3 \times 7</math> • <math>84 = 2^2 \times 3 \times 7</math></p>
3	Use Venn diagrams to find the HCF and LCM	<p><b>HCF and LCM</b> Find the HCF and LCM of 24 and 36</p>  <p>HCF: <math>2 \times 2 \times 3 = 12</math> LCM: <math>2 \times 2 \times 2 \times 3 \times 3 = 72</math></p>

**Number - Decimals**

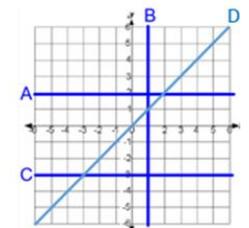
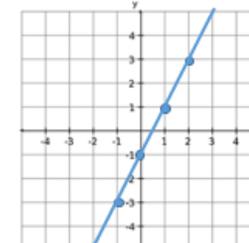
1	Round to a given number of decimal places	Round 5.68 to 1dp = 5.7
2	Round to any significant figure	Round 346 to 1sf = 300

**Geometry & Surface Area**

1	Find the surface area cubes & cuboids	<p>Find the area of each surface and add together.</p> <p>Surface Area = <math>2lw + 2lh + 2wh</math></p>
2	Find the surface area of triangular prisms & cylinders	<p><math>Cylinder = 2\pi rh + 2\pi r^2</math></p> <p><math>Triangular\ prism = bh + 2ls + lb</math></p> 
3	Draw 3D shapes on isometric shapes	
4	Draw nets of 3D shapes	

3	Estimate answers to calculations involving decimals	$\frac{7.19 \times 19.7}{0.46} \approx \frac{7 \times 20}{0.5} = 280$
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**Algebra – Coordinates, Straight line graphs**

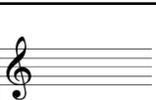
1	Draw lines in the form $y=3, x=2, y=x$	<p>A: <math>y = 2</math> B: <math>x = 1</math> C: <math>y = -3</math> D: <math>y = x</math></p> 												
2	Plot simple linear graphs from a table of results, in the form $y = mx + c$	<p>Draw the graph of <math>y = 2x - 1</math></p> <table border="1"> <tr> <th>x</th> <td>-2</td> <td>-1</td> <td>0</td> <td>1</td> <td>2</td> </tr> <tr> <th>y</th> <td>-5</td> <td>-3</td> <td>-1</td> <td>1</td> <td>3</td> </tr> </table> 	x	-2	-1	0	1	2	y	-5	-3	-1	1	3
x	-2	-1	0	1	2									
y	-5	-3	-1	1	3									
3	Find the gradient of a straight line	<p><math>\frac{\text{Change in } y}{\text{Change in } x}</math></p>												
4	Identify the equation of a straight line graph	<p><math>y = mx + c</math> m is gradient and c is y intercept</p>												

**Key Vocabulary**

1	Linear graph	A straight line graph.
2	Surface area	The area of each surface of a 3D shape added together.
3	Gradient	The slope of a line. The higher the gradient the steeper the line.

**1. Notation**

Writing music down so players can easily read the pitch and duration of the notes they are supposed to play.

1		Crotchet = 1 Beat
2		Quaver = ½ Beat
3		Minim = 2 Beats
4		Semibreve = 4 Beats
5		Rest = Rest for 1 beat (Crotchet rest)
6		Rest = Rest ½ beat (Quaver rest)
7		Treble Clef = A symbol that is placed on every line of <b>music</b> to show the notes which will be sung or played by voices and instruments that can achieve higher notes.
8		Bass Clef = Signifies low to medium pitches being read on the staff.
9		Staff/ Staff = The <b>Staff</b> is the five lines which the notes are written on.
10		Time signature- Indicating how many beats in a bar

**2. Riffs**

1	<b>Riff</b>	A repeated musical pattern in Pop/rock/jazz music
2	<b>Ostinato</b>	A repeated musical pattern in classical music
3	<b>Catchy</b>	Something that gets stuck in the listeners head
5	<b>Chord</b>	A group of 2 or more notes played together
6	<b>Chord Sequence</b>	A pattern of chords
7	<b>Major</b>	Happy sounding
8	<b>Minor</b>	Sad sounding
9	<b>12 bar blues</b>	A popular pattern of chords originating in blues music
10	<b>Intervals</b>	The gaps between the notes of the chord.

**3. Key vocab Song structure**

1	<b>Intro</b>	The section of the music that introduces the song.
2	<b>Verse</b>	A section that repeats in a song, it has the same music, but different lyrics.
3	<b>Chorus</b>	The main section of a song, it will repeat both the lyrics and the music in the same way..

**3. Key Vocabulary**

1	<b>Dynamics</b>	The volume of the music (Loud or quiet)
2	<b>Rhythm</b>	A pattern on sounds of different lengths and what makes music move and flow.
3	<b>Structure</b>	Gives shape and balance to the music
4	<b>Melody</b>	The main tune
5	<b>Instrumentation</b>	The instruments used in the piece
6	<b>Texture</b>	The layers of instruments. Thick- lots of instruments Thin- A few instruments
7	<b>Harmony</b>	A multiple of pitches being played at the same time.
8	<b>Timing</b>	Playing with the pulse of the music
9	<b>Pulse</b>	The background "heartbeat" of a piece of music.
10	<b>Tempo</b>	The speed the music is played (fast or slow)
11	<b>Pitch</b>	How high or low the note is
12	<b>Tonality</b>	Major (Happy) or Minor (Sad) sounding. Determined by the Key of the music.

Knowledge Group 1			Knowledge Group 3			Key word	Definition
1	What are the five pillars?	5 things Muslims are committed to	1	What is a prophet?	A person to whom God revealed truth. They are not a god	Adhan	Call to prayer at the mosque
2	What does Sawm mean?	Fasting during Ramadan	2	Who is the most important Prophet in Islam?	Prophet Muhammad (PBUH)	Five Pillars	Muslims are committed to these five things
3	What does Zakat mean?	Giving to charity	3	What are the Hadith?	An account of Muhammad's life. Muslims read it for how to act in their own lives.	Haafiz	Someone who has learnt the Qur'an off by heart
4	What does Salah mean?	Prayer- 5 times a day	4	Who was Muhammad (PBUH)?	Seal of the prophets. God revealed the Qur'an to him	illiterate	Unable to read or write
5	What does Hajj mean?	Pilgrimage to Mecca	5	What is the Night of Power?	When the Quran was revealed to Muhammad (PBUH)	Islam	A religion based on the teachings of Prophet Muhammad (PBUH)
6	What is the Shahadah?	The declaration of faith				Mecca	Holy place of pilgrimage
Knowledge Group 2			Knowledge Group 4			Monotheism	Belief in one God.
1	What does pilgrimage mean?	Going on a special religious journey	1	Who is the founder of Islam?	Prophet Muhammad (PBUH)	Mosque	Muslim place of worship
2	Where do Muslims go on Hajj?	To Mecca in Saudi Arabia	2	What is the name of the Islamic holy book?	Qur'an	Prophet	God reveals truths to these people
3	Why is Mecca special?	Its where the Prophet started the religion	3	Where do Muslims go to worship?	Mosque	Prophet Muhammad (PBUH)	The final and complete revelation was from this man. (PBUH) is a sign of respect
4	What is the Kaaba?	The black stone in the centre of Mecca	4	Muslims are monotheistic, what does that mean?	They believe in one God	Qur'an	The Holy Book of Islam
5	How often should Muslims go on Pilgrimage?	At least once in their lifetime	5	What is a Haafiz?	Someone who knows the Quran off by heart	Ramadan	The period of fasting
6	Name two things Muslims do at Mecca	Throw stone at Jamarat Walk the Kaaba 7 times Walk between Safa and Marwa	6	What is the role of a prophet?	They are a messenger of God and reveal truth	Suhoor	Muslims eat this meal before sunrise during Ramadan
						suras	Verses in the Qur'an
						Wudu	Special way of washing

- Islam is the second-largest religion in the world, following Christianity.
- Indonesia has the largest following of the Islamic religion - 12.6%. Pakistan, India and Bangladesh also have large Muslim populations.
- Muslims make up .9% of the US population.
- It is the fastest growing religion in the world today
- It is misrepresented in the media

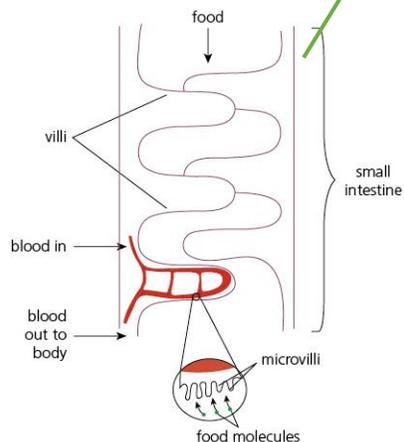
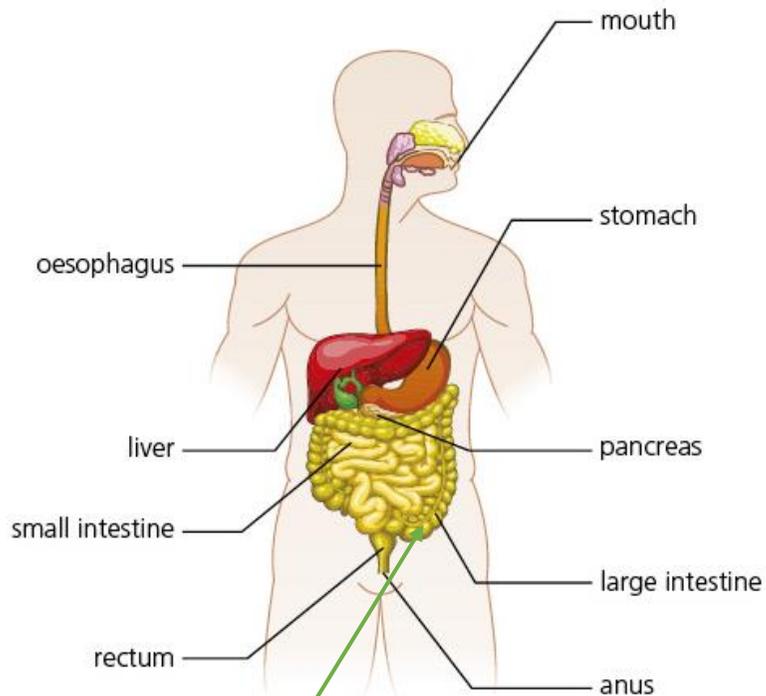
**Chemical Digestion**

	Enzyme or chemical	Where is it made?	Action
1	<b>Amylase</b>	Mouth, pancreas, small int.	Breaks down starch to <b>glucose</b>
2	<b>Protease</b>	Stomach, pancreas, small int.	Protein to amino acids
3	<b>Lipase</b>	Pancreas, small int.	Fats/Lipids to fatty acid and glycerol
4	<b>HCl/acid</b>	Stomach	Optimum for Protease
5	<b>Bile</b>	Liver, stored in gall bladder	Neutralizes stomach acid so optimum for enzymes

**Nutrients (Food Groups)**

1	<b>Carbohydrate</b>	Energy source
2	<b>Lipid (fats)</b>	Stored energy source and insulation
3	<b>Protein</b>	Growth & Repair
4	<b>Vitamins &amp; Minerals</b>	Only small amounts needed to keep your body healthy
5	<b>Water</b>	Needed to allow chemical reactions to take place
6	<b>Fibre</b>	Keeps food moving through gut

**Digestive System**



Digested food absorbed into blood in small intestine.

Walls are folded and have villi to increase surface area for greater absorption

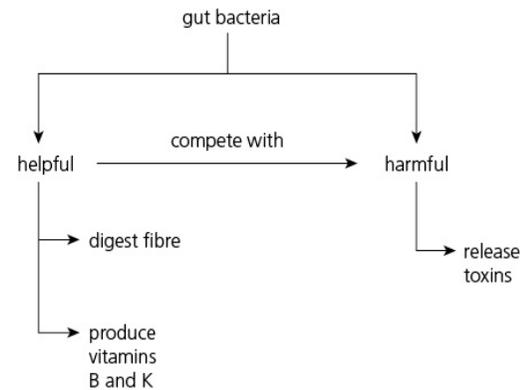
Thin walls so absorption by diffusion is quicker

Good blood supply to speed up absorption

**Key Vocabulary**

<b>Enzyme</b>	A protein molecule that is a biological catalyst
<b>Balanced diet</b>	Contains all the food groups in the correct proportions.
<b>7 major components of a balanced diet</b>	Carbohydrates, fats and oils, proteins, vitamins, minerals, fibre and water.
<b>Deficiency disease</b>	Disease caused by a lacking a component of a healthy lifestyle.
<b>Obesity</b>	A disease in which a person has a lot of fat
<b>Gut Bacteria</b>	Bacteria that digests some carbohydrates, reduces the chance of harmful bacteria causing disease and provides vitamins B and K.

**Gut bacteria**



Worked example

Calculating pressure

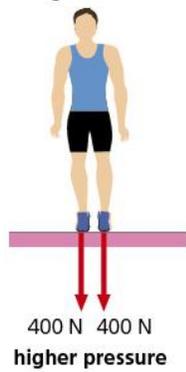
An object feels a force of 15 N on an area of 3 m<sup>2</sup>. Calculate the pressure on the object.

Equation	pressure = force ÷ area $P = F \div A$
Values	$P = ?$ $F = 15 \text{ N}$ $A = 3 \text{ m}^2$
Enter values	$P = 15 \div 3$
Result	$P = 5$
Y(units)	$P = 5 \text{ N/m}^2$

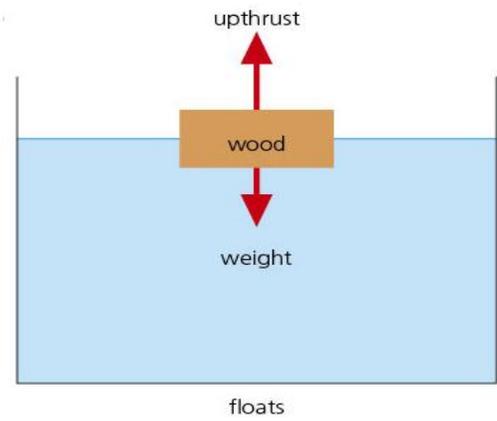
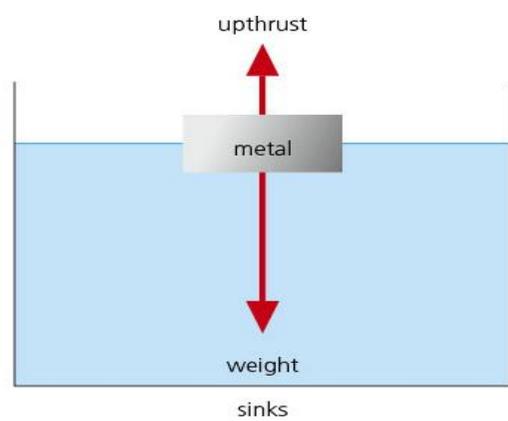
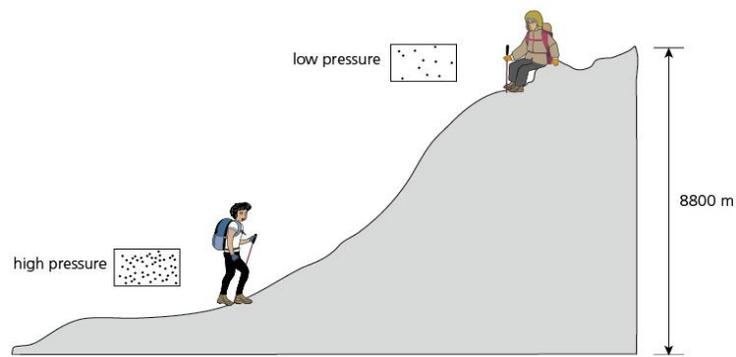
Pressure in liquids

- 1 Particles in liquids are already touching which means liquids cannot be compressed.
- 2 Liquids transfer pressure that is applied to them.
- 3 As water gets deeper the pressure increases because there are more water particles above, meaning there is more weight pushing down.

weight = 800 N



weight = 800 N



Key Vocabulary

1	Fluid	Substances that flow
2	Liquid and Gases	States of matter that are fluids
3	Upthrust	Force caused by an object pushing down on an object
4	Atmosphere	A thin layer of gases around the earth
5	Pressure	The force exerted on 1m <sup>2</sup>
6	Pressure	Force divide by area
7	Atmospheric pressure	The pressure that the air exerts on you all of the time

**Types of relationships: Marriage**

1	<b>What is the minimum legal age for marriage?</b>	18
2	<b>What are legal rights in a marriage?</b>	Automatic parental rights over their child. Live together in matrimonial homes. Claim certain tax allowances aimed at married couples.
3	<b>Why might 2 people get married?</b>	They believe that marriage provides stability for a family. Marriage may be important to their religion, culture or tradition. Want to legally declare their love. Want additional rights and protections by law. Chosen to remain committed.
4	<b>Freedom to consent</b>	Marriage must always be FREELY entered into with the consent of both PEOPLE. This means each person has the right to choose if, when and who they marry and can WITHDRAW their consent if they change their mind.
5	<b>Alternatives to legal marriage</b>	civil partnership, unregistered marriages and cohabiting.
6	<b>Rights in alternatives to legal marriage</b>	Don't have the same legal duty regarding financial support. No automatic right to other's assets, put in place an agreement. Don't get certain tax allowances aimed at married couples.

**Managing relationships: Strong emotions**

1	<b>What are strong emotions</b>	Emotions are the names given to a person's feelings.
2	<b>Challenging or difficult emotions</b>	All emotions are important and normal. Everybody feels all emotions throughout their lives. Whilst it is ok to feel all emotions (there are no 'bad' emotions), there are good and bad ways of dealing with and expressing these emotions.
3	<b>Examples of coping strategies</b>	Go for a run, talk to someone, pray, listen to music, go for a walk, write in a journal, ask for help

**Misogyny and Misandry**

1	<b>What is sexism</b>	When a person is treated unfairly or judged based on their sex
2	<b>How to challenge sexism</b>	Be critical of the media, report it
3	<b>How to protect yourself from sexism</b>	Have high self-worth and develop this, have high expectations of yourself and others

**The impact of family on future relationships**

1	<b>The environment provided by families and carers</b>	A commitment to providing a loving and safe environment for a child is important. For example, through positive interactions with parents and carers, a child will learn they are valued, and they will value themselves. This will help to shape how they interact with others, inside and outside of the family.
2	<b>Suggestions to resolve family disagreements</b>	Make sure you communicate your thoughts to each other. Set clear boundaries that perhaps were not there before. Forgive each other (and mean it). Be aware of the external influences. Do something special together. Understand why the relationship break down.

**Family planning: Parents and carers**

1	<b>What is a family?</b>	Family- a group of people connected by blood, marriage or adoption
2	<b>Traditional family types</b>	Nuclear family- a couple and their children Stepfamily- a family formed through remarriage that involves a child or children Extended family- a family that extends beyond parents, such as grandparents
3	<b>Non-traditional family types</b>	Same-sex parents- people of the same sex raising children together. Children can be biological or adopted.
4	<b>The purpose of a family</b>	Help us with our basic needs (e.g. food, clothing and shelter). Keep us safe (e.g. healthcare, teaching road safety). Help us learn new things (e.g. discover our talents or show us how to behave in different situations). Provide security and stability, including during times of change (e.g. starting a new school). Give us a sense of belonging and self-esteem (e.g. spending time together, celebrating achievements). Give us love and emotional support (e.g. when we are unhappy or worried about things).
5	<b>The purpose of parents</b>	Build and develop Education Provide Stability



