
















Stafford Manor
High School

Year 8 Autumn Term 2

Core Knowledge

-  Art
-  Design Technology
-  English
-  French
-  Geography
-  History
-  Information Technology
-  Maths
-  PE
-  Performing Arts
-  Science
-  SEL
-  Textiles



1. What are the different drawing techniques?

- | | |
|--|--|
| <ul style="list-style-type: none">• Grid method• Symmetry drawing | <ul style="list-style-type: none">• Half a photo drawing• Graphite / oil transfer |
|--|--|

2. Mind Maps

- A **mind map** is a visual tool for organizing and connecting ideas.
- It's like drawing a picture with words and images to help plan and explore projects or brainstorm thoughts / concepts.

3. Clay Work

- Clay work involves making art and objects from soft clay.
- You shape it with your hands or tools and then fire it in a kiln to make it hard.
- It's a way to create 3D art like sculptures and pottery.

4. What makes a successful artist research page?

- A title which is the artist's name.
- Images of the artist's work.
- A copy of the artist's work which is called an artist recreation.
- Information about the artist.
- A background that links with the artist.

5. Key Word Definitions:

- **Blending**: Mixing colours or tones smoothly.
- **Clay**: A malleable material used in sculpting and pottery.
- **Collage**: Artwork created by assembling various materials.
- **Depth**: The illusion of distance or three-dimensionality.
- **Focal Point**: The main area of interest in an artwork.
- **Form**: A three-dimensional representation of an object.
- **Glaze**: A liquid finish applied to ceramics before firing.
- **Kiln**: An oven for firing clay and pottery.
- **Line**: A mark extending between two points.
- **Mind Map**: A visual representation of ideas and connections.
- **Oil Pastels**: Colour sticks used for drawing and colouring.
- **Pattern**: Repetitive arrangement of elements.
- **Pencil Crayons**: Coloured pencils for drawing and shading.
- **Saturation**: Colour intensity or purity.
- **Scale**: The size of an element compared to its surroundings.
- **Sketching Pencils**: Pencils for drawing and sketching.
- **Slab**: A flat, rolled-out piece of clay for sculpting.
- **Texture**: The visual or tactile quality of a surface.

DESIGN TECHNOLOGY

1. What is a production line?

- ❖ A production line is a system where products are made through a series of **sequential steps**, designed for efficiency and consistency in mass production.

2. Key Equipment:

- ❖ **Emery paper**: Abrasive paper used for smoothing / polishing.
- ❖ **Flat file**: A tool for shaping and smoothing surfaces.
- ❖ **Hacksaw**: A saw used for cutting metal and plastic.
- ❖ **Junior Hacksaw**: A small, handheld saw for finer cutting.
- ❖ **Pop Riveting**: Joining materials with rivets that expand to hold them together.

3. What is the difference between ferrous and non-ferrous?

- ❖ Ferrous metals have iron as their main part, and they can rust.
- ❖ Non-ferrous metals don't have much iron, so they don't rust.
- ❖ We use ferrous metals when we need strong stuff, like steel, and non-ferrous metals for lighter things, like aluminium and copper, especially in electrical stuff.

4. Key Word Definitions:

- ❖ **Abrasives**: Materials used for grinding and polishing.
- ❖ **Aluminium flat bar**: A rectangular aluminium metal piece.
- ❖ **Brazing**: Joining metals using a filler material.
- ❖ **Burr**: A rough edge or ridge often found after cutting / shaping.
- ❖ **Cold forming**: Shaping metal without heating it.
- ❖ **Ferrous**: Metals containing iron.
- ❖ **Heat treatment**: Altering metal properties through heating and cooling.
- ❖ **Malleable**: Metal that can be easily shaped and bent.
- ❖ **Mechanical fixings**: Hardware like screws, bolts, and nuts.
- ❖ **Non-ferrous**: Metals without iron, like aluminium and copper.
- ❖ **Pillar drill**: A stationary drilling machine for precision holes.
- ❖ **Polishing**: Enhancing the appearance of a surface.
- ❖ **Welding**: Joining materials by melting and fusing them together.

5. What is the difference between hot and cold forming?

- ❖ Hot forming is like shaping something when it's really hot, so it's softer and easier to change.
- ❖ Cold forming is when you shape something at room temperature, so it's harder and needs more force to change.

DIGITAL COMMUNICATION



1. Key Word Definitions

- **Scale:** Change the size
- **Rotate:** Turn
- **Skew:** Stretch an image

2. What are vector graphics?

Vector graphics are computer images, created using a sequence of commands that place lines and shapes into an image space

3. What are the common uses for vector graphics?

- Advertising campaigns
- Animations
- Websites
- Logos or signage
- Fonts

4. What are the keyboard shortcuts in Photoshop?

Ctrl T	Ctrl +	Ctrl -	Ctrl J
Free Transform	Zoom In	Zoom Out	New Layer
Ctrl C	Ctrl V	Ctrl O	Ctrl N
Copy	Paste	Open	New

5. What is the difference between .psd and .jpeg

Saving your work as a .psd file will retain the layers, type and editable properties in Photoshop.

Saving your work as a .jpeg will produce a standard image file that can be shared or used easily in other applications

6. How can you quickly correct a mistake?

Use Ctrl Z (or choose Edit > Undo) to undo your most recent action

ENGLISH

1. Name two poems by Wilfred Owen?

- ❖ Disabled, Anthem for Doomed Youth.

2. Who wrote 'Who's for the Game'?

- ❖ Jessie Pope.

3. What is propaganda?

- ❖ Bias information used by governments to persuade people.

4. What does SMILE stand for in poetry?

- ❖ Structure, Meaning, Imagery, Language, Effect (on reader)

5. What is rhetoric?

- ❖ Rhetoric is effective / persuasive speaking (speeches).

6. What is a speech?

- ❖ A way of putting across information, ideas and opinions to a large group of people

7. Give five techniques used in persuasive writing / speeches

- ❖ Simile, metaphor, emotive language, hyperbole, repetition, rhetorical question, direct address, alliteration, triplet, facts

8. What are the three examples of rhetoric?

- ❖ Ethos, Pathos and Logos.

FRENCH

1. How do you pronounce 'h' at the beginning of a word in French?

- ☒ You don't – it's always silent!

2. What are these jobs in English? Directeur, secrétaire, avocat, facteur

- ☒ Head Teacher, secretary, lawyer, postman

3. What is the feminine form of these jobs?

- ☒ Directrice, secrétaire, avocate, factrice

4. What do these adjectives mean? Prudent, ambitieux, travailleur

- ☒ Careful, ambitious, hardworking

5. What is the feminine form of the adjectives?

- ☒ Prudente, ambitieuse, travailleuse

6. What is the English for these jobs? Acteur, rédacteur, médecin, coiffeur?

- ☒ Actor, editor, doctor, hairdresser

7. What is the feminine form of these jobs?

- ☒ Actrice, rédactrice, médecin (no change), coiffeuse

8. What is the English for these jobs? Ingénieur, gérant, dessinateur, instituteur

- ☒ Engineer, manager, designer, primary school teacher

9. What is the feminine form of these jobs?

- ☒ Ingénieure, gérante, dessinatrice, institutrice

10. What do you usually add to an adjective to make it feminine?

- ☒ an 'e' for example: grand (m)  grande (f)

11. How does beau become feminine? It is IRREGULAR

- ☒ Belle

12. If a masculine adjective ends in x (heureux), it changes to an 'se' ending in the feminine form – true or false?

- ☒ True (heureuse)

13. Write 11-20 in French

- ☒ Onze, douze, treize, quatorze, quinze, seize, dis-sept, dix-huit, dix-neuf, vingt

14. What do these question words mean ? Combien? Quand? Où? Quel / Quelle? Comment ?

- ☒ How many ? When ? Where ? Which ? How?

GEOGRAPHY

1. Explain the factors that influence global development.

- ❖ Poverty
- ❖ Education
- ❖ Access to clean water
- ❖ Food

2. How can we measure development?

- ❖ Development indicators:
- ❖ Life expectancy
- ❖ Birth rate
- ❖ Death rate
- ❖ Infant mortality rate

3. Why is the world unequal?

- ❖ Landlocked
- ❖ Conflict and wars
- ❖ Natural hazards
- ❖ Shortage of doctors

4. How can a lack of water cause inequality?

- ❖ Diarrhoea
- ❖ Cholera
- ❖ Lack of access

5. Why do people leave their own country?

- ❖ Climate change
- ❖ Persecution
- ❖ Education
- ❖ War and conflict
- ❖ Quality of life (freedom)

6. What are the three most important things on Earth?

- ❖ Food
- ❖ Water
- ❖ Health

7. Why are there global variations in health and healthcare?

- ❖ Lack of healthcare
- ❖ Lack of doctors
- ❖ Poverty

HISTORY

1. What are the years for the reign of Elizabeth I?

🚫 1558 - 1603

2. What religion was Elizabeth?

🚫 Protestant

3. Which country sent the Armada to England in 1588?

🚫 Spain

4. What happened to some English Catholics when the Armada was approaching?

🚫 They were arrested and put in prison

5. What happened to England's population in the sixteenth century?

🚫 It nearly doubled

6. What was Elizabeth, the Countess of Shrewsbury's house called?

🚫 Hardwick Hall

7. What job was common among the poor?

🚫 Spinning

8. How were vagrants who begged punished?

🚫 They were whipped

9. What did bad weather cause at the end of Elizabeth's reign?

🚫 Poor harvests and higher food prices

10. Which European countries dominated the Atlantic sea routes in the sixteenth century?

🚫 Spain and Portugal

11. Where did Martin Frobisher claim territory for the Queen?

🚫 North America

12. Who was the first Englishman to sail around the world?

🚫 Francis Drake

13. Which company did the queen grant a charter to in 1600?

🚫 The East India Company

14. During Elizabeth's reign, 136 new what, were opened?

🚫 Grammar schools

15. What was Nicholas Hilliard famous for painting?

🚫 Miniatures

16. What sort of music did Thomas Tallis write for the queen?

🚫 Church music

MATHS

1. Key word definitions:

- 🔴 **Solve:** Calculate the value of an unknown number
- 🔴 **Inverse:** The opposite operation
- 🔴 **Construct:** To draw accurately
- 🔴 **Bisector:** A line that cuts through at exactly half way

2. Which operations are inverses of each other?

Add and
Subtract

Multiply and
Divide

Square and
Square Root

3. What is the order of operations?

You should perform calculations in this order:

1. Brackets or Powers
2. Multiply or Divide
3. Add or Subtract

When you are solving an equation follow the order *backwards*.

4. What is a perpendicular bisector?

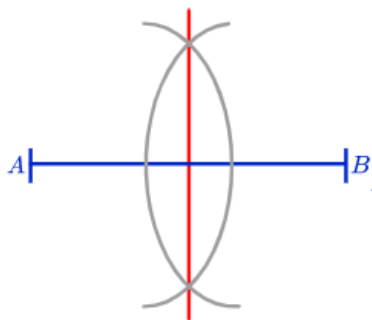
A line that cuts through at exactly 90° , exactly half way.

5. What is a locus?

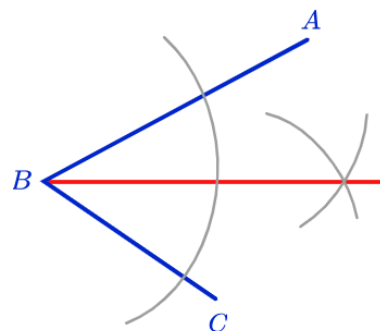
A path of points joined together with a line (or lines)

6. What do the main types of construction look like?

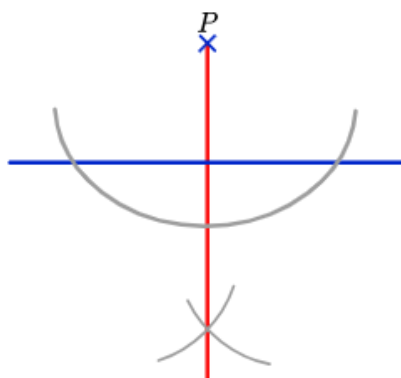
Perpendicular Bisector



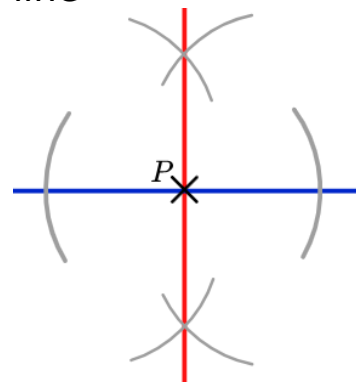
Angle Bisector



Perpendicular from a point to the line



Perpendicular to a point on the line



PHYSICAL EDUCATION

1. Key Skills

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

Tackling techniques – tackling, jockeying and forcing the player onto their weaker foot.

2. Formations



Strategies and Tactics:

Attacking – using the width is very important when attacking. It is important teams keep possession and play one and two touch to move the ball quickly. Also, another effective strategy is to ‘switch’ the play using a lofted pass.

Defending – players are normally marked man to man, but can be marked zonal from corners.

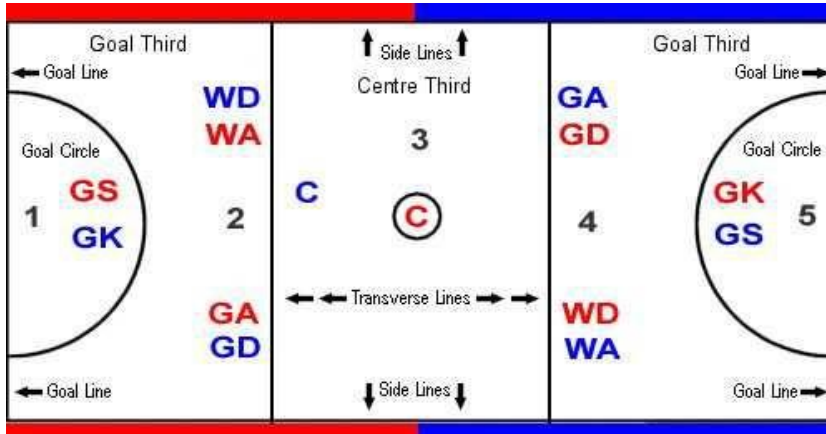
3. Key Terms

Key Content and Terms to learn:

Passing, dribbling, shooting, heading, attacking, defending, possession, width, depth, different formations

PHYSICAL EDUCATION

1. Netball Court



POSITIONS AND RESPONSIBILITIES

Goal Shooter (GS) – To score goals and work in and around the circle with the GA. Marks the GK.

Goal Attack (GA) – To feed the ball to the GS and to score goals. Marks the GD.

Wing Attack (WA) – To feed the ball into the circle and to help move the ball down to the teams attacking third. Marks the WD.

Centre (C) – To take the centre pass and to act as a link between defence and attack. Moves the ball down the court. Marks the opposite C.

Wing Defence (WD) – To look for interceptions and move the ball down into attack. Marks the WA.

Goal Defence (GD) – To get the ball from the attack and help pass it back down the court. To prevent the GA from scoring. Marks the GA.

Goal Keeper (GK) – To work with the GD and to prevent the GA/GS from scoring. Marks the GS.

2. Key Terms

Key content and Terms to learn

Passing and receiving
Attacking
Defending
Footwork
Contact

Shooting – Accuracy
Dodging
Penalty
Obstruction
Tactical

3. Rules

Rules: The game starts with a centre pass and the ball must be caught in the centre third.

You must comply with the footwork rule e.g. a 1-2 landing.

You only have 3 seconds to release the ball.

When defending you must be 1 metre away from the player. If too close you get a penalty against you and you must stand with the player.

There must be no contact with an opposing player. If you do contact them it is a penalty against you and you must stand with the player.

Only GS and GA may score a goal.

You must stay in the correct area of the court for your position. If you go offside it's a free pass to the opposite team.

Teams take it in turns to take a centre pass.

The ball must be touched in each third of the court.

PERFORMING ARTS

1. These are the instruments used in Jazz and Blues music


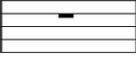



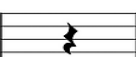

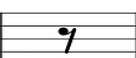


2. Where did Blues Music come from?

The blues started as simple work songs among the black slaves in the U.S.A. when they sang **WORK SONGS** and **FIELD HOLLERS** which often used a **CALL AND RESPONSE** pattern. In their religious services, they sang **SPIRITUALS**. After the American Civil War and the freeing of the slaves in 1865, a new type of black music developed – a type of music about the conditions of the slaves, who, though free, were often unemployed and poor. This came to be known as **THE BLUES**. **Blues songs are short** – usually having three lines of verse, the second being a repeat of the first. Their subjects **include slavery and eventual freedom, drugs, unemployment, poverty, unhappiness, suicide, and unrequited love** – hence the associations of a “blues” sound with unhappiness.

The Blues also helped the development of other popular music styles such as jazz, swing, rhythm ‘n’ blues and early rock ‘n’ roll.

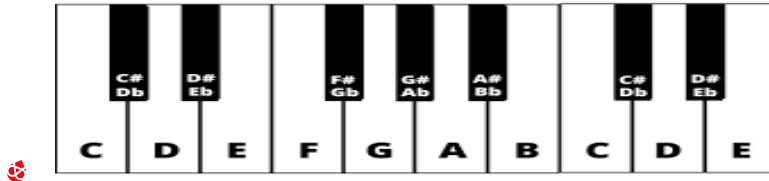
3. These are the note values which you need to know in order to know how long to play the note for. Rests are important too! Don't get the 2 beat and 4 beat rest mixed up!

note value	=	notes		rests	=	rest value
4 beats	=				=	4 beats
2 beats	=				=	2 beats
1 beat	=				=	1 beat
$\frac{1}{2}$ beat	=				=	$\frac{1}{2}$ beat

4. These key words are really important this term and within KS3-4 Music lessons

<p>🌀 Pitch- How high or low a note/song is</p>	<p>🌀 Tempo- How fast or slow the music is</p>	<p>🌀 Riff/Ostinato- Short repeated pattern</p>
<p>🌀 Improvisation- Music created on the spot</p>	<p>🌀 Blues scale- A series of notes used in Blue's Music</p>	<p>🌀 Blues notes- sharpened or flattened notes in a melody</p>

5. It is important that you know where the notes are on the keyboard. Also sharps and flats are very important.



Sharps (#) go the **right** of the note and make it slightly higher.

Flats (b) go to the **left** of the note and make it slightly lower

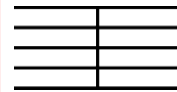
6. Here are some symbols that you will need to know



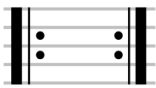
Treble Clef- Found at the start of the music



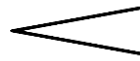
A slur- To play the music smoothly. Not to be confused with a tie



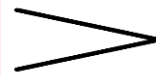
Bar line- Separates the music



Repeat signs



Gradually get louder



Gradually get quieter

7. The 12 Bar blues

B. The Twelve Bar Blues

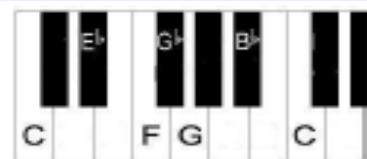
Some or all of these chords can be SEVENTH CHORDS (7)

CHORD I	CHORD I	CHORD I	CHORD I
CHORD IV	CHORD IV	CHORD I	CHORD I
CHORD V	CHORD IV	CHORD I	CHORD I

C. The Blues Scale

BLUES SCALE – a series of notes often used within improvisations in blues music (*the Blues Scale on C is shown to the right*).

BLUE NOTES – additional or extra sharpened or flattened notes in a melody.



SCIENCE

1. What happens during photosynthesis?

☘ **Carbon dioxide + water → glucose + oxygen**

2. What do exothermic and endothermic mean?

- ☘ Photosynthesis is **endothermic** because it **takes in energy**.
- ☘ Respiration is **exothermic** because it **releases energy**.

3. How are leaves and roots adapted?

- ☘ **Root hair cells**: Large surface area to absorb lots of water.
- ☘ **Palisade cells**: Lots of chloroplasts for lots of photosynthesis.

4. How are food and water transported in plants?

- ☘ The **xylem** transports water from the roots up the plant.
- ☘ The **phloem** transports food from the leaves to the plant.

5. What is aerobic respiration?

☘ **Glucose + oxygen → Carbon dioxide + water**

6. What is anaerobic respiration?

☘ **Glucose → lactic acid**

7. What is the difference between respiration and breathing?

- ☘ **Breathing** is the **mechanical** process of taking fresh air into the lungs.
- ☘ **Respiration** is the **chemical** process which takes place in every cell to release **energy** from glucose.

8. How does smoking affect the lungs?

- ☘ **Tar**: Coats the lungs so **less oxygen** can be taken in.
- ☘ **Nicotine**: **Addictive** substance that makes you want more.
- ☘ **Carbon monoxide**: Toxic gas that **stops oxygen** from getting into the blood so **respiration** cannot occur.

9. How is the heart structured?

- ☘ **Deoxygenated** blood flows out of the right side of the heart to the lungs to collect oxygen.
- ☘ **Oxygenated** blood flows into the heart from the lungs into the **left atrium → left ventricle → the body**

10. What is in our blood?

- ☘ **Red blood cells**: Transport oxygen around the body.
- ☘ **White blood cells**: Fight pathogens (germs).
- ☘ **Platelets**: Clot to prevent blood loss.
- ☘ **Plasma**: The liquid part of the blood.

SCIENCE

1. Describe what physical & chemical reactions are

- ✿ **Physical Reaction:** *Doesn't* involve bond breaking / bond forming.
- ✿ **Chemical Reaction:** **New products** are formed. Involves bond breaking and bond forming.

2. Describe what oxidation and reduction are

- ✿ **Oxidation:** **Adding** oxygen (during a chemical reaction)
- ✿ **Reduction:** **Removing** oxygen (during a chemical reaction)

3. Describe what a displacement reaction is

- ✿ Where a **more reactive** element **swaps** with a **less reactive** element in a compound.

4. Identify the hazard symbols



Health Hazard



Toxic



Corrosive



Flammable



Harmful to environment

5. Describe what an indicator is

- ✿ A chemical that **changes colour** in different pH's (acid/alkali/neutral)
- ✿ Measured with a pH meter/probe

6. Describe what neutralisation is

- ✿ Where an **acid** reacts with an **alkali** to make a **salt** and **water**.
- ✿ The pH becomes **7**.

7. Describe the test for carbon dioxide

- ✿ Bubble the gas through **limewater**.
- ✿ Carbon dioxide turns limewater **cloudy**.

8. Identify the salt endings during neutralisation

- ✿ Hydro**chloric** acid forms a **chloride** salt.
- ✿ **Nitric** acid forms a **nitrate** salt.
- ✿ **Sulfuric** acid forms a **sulfate** salt.

9. Identify the by-products during neutralisation

- ✿ **Pure Metal:** Hydrogen gas.
- ✿ **Metal Hydroxide:** Water.
- ✿ **Metal Carbonate:** Carbon dioxide and water.



1. Define Health and Wellbeing

- The absence of physical illness, disease and mental distress.

2. Mental Health can be thought of as:

- How we feel about ourselves and the people around us
- Our ability to make and keep friends
- Our ability to learn from others and to develop emotionally
- Our ability to overcome everyday difficulties and problems



3. Define Body Image

- How you see yourself when you look in the mirror or when you picture yourself in your mind. It is also how you feel about your body, including your height, shape, and weight.

4. What are the four types of child abuse

- Physical abuse
- Sexual abuse
- Neglect
- Emotional abuse

5. How is the best way to deal with bullying?

- Be assertive
- Tell them to stop
- Stick with friends
- Seek adult support
- Talk about the issue
- Be resilient



6. What are the five food groups?

- Fruit and vegetables.
- Carbohydrates (potatoes, bread, rice, pasta)
- Proteins (beans, pulses, fish, eggs, meat)
- Dairy and alternatives.
- Oils and spreads.



7. How can stress levels be reduced?

- Think positive
- Learn to relax
- Be creative
- Take time for yourself
- See friends
- Get active
- Talk about it



TEXTILES

1. Christmas decoration

Why do we have a Christmas Tree?

- ❖ The idea first spread to England through Queen Victoria's mother—but it was Victoria's consort Prince Albert who brought them into the mainstream in 1848. Who brought it back from his heritage from Germany.



2. Who is Laura Howard?

- ❖ **Hi! I'm Laura "Lupin" Howard, a crafty lady living near Bristol (in south-west England).** I drink a lot of tea, am partial to a nice bit of cake and am completely obsessed with felt. When I'm not busy making things, I'm usually writing about making things...
- ❖ I used to run an online shop (Lupin Handmade) selling my hand-stitched felt creations along with colourful craft supplies. I loved sending parcels to customers around the world



3. What is a Natural fabric

- ❖ Textiles also called fabrics can be made from either **Natural** or **Synthetic** fibres.
- ❖ **Natural fabrics**
- ❖ Can be harvested from plants animals. For example cotton comes from plants and wool from sheep
- ❖ **Synthetic fabrics** (manmade)
- ❖ These are made from polymers (long chains molecules). These mainly come from oil and coal-
- ❖ nonrenewable fossil fuels

4. Keywords

Keyword	Definition
Christmas Tree history	Comes from Prince Albert from Germany.
Natural fabrics	Can be harvested from plants animals. For example cotton comes from plants and wool from sheep
Laura Howard	A textile Artist trying to raise awareness of endangered animals through her Artwork
Embellishment	a decorative detail or feature added to something to make it more attractive.

5. Model Example



Success Criteria

Variety of stitches

- Blanket stitch
- Back stitch
- Running stitch

Presentation

→ Felt neatly cut out and same size

Embellishment

Need to add beads for berries.