
















Stafford Manor
High School

Year 9 Autumn Term 2

Core Knowledge

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



1. What are portraits?

- ❖ A **portrait** is a picture or painting that focuses on a person's face or the way they look.
- ❖ It's a way to capture and show what someone looks like, often emphasizing their facial features, expressions, and personality in a visual form.
- ❖ Portraits can be created using various art techniques, such as drawing, painting, or photography.



2. What is wire work?

- ❖ Wire work is a technique where artists use pieces of wire to shape and form various objects or sculptures.
- ❖ This can include bending and twisting the wire to create three-dimensional shapes, figures, or decorative designs.

3. What is included in an 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.

4. Key word definitions:

- ❖ **Blending**: Smoothly transitioning between colours or tones.
- ❖ **Complementary Colours**: Opposite pairs for contrast.
- ❖ **Contemporary**: Reflecting current artistic trends.
- ❖ **Depth**: Illusion of three-dimensionality in art.
- ❖ **Form**: Three-dimensional representation of an object.
- ❖ **Focal Point**: Main point of interest in art.
- ❖ **Manipulation**: Altering materials for artistic effect.
- ❖ **Pattern**: Repetitive arrangement of elements.
- ❖ **Primary Colours**: Red, blue, and yellow.
- ❖ **Proportion**: Relative size and scale in art.
- ❖ **Saturation**: Colour intensity or purity.
- ❖ **Scale**: Size of elements in relation to surroundings.
- ❖ **Secondary Colours**: Green, orange, purple.
- ❖ **Shape**: Two-dimensional defined area.
- ❖ **Tone**: Lightness or darkness of colour or grayscale.
- ❖ **Vivid**: Extremely bright and intense color.
- ❖ **Wire Work**: Sculpture technique using wire.

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. What is food safety?

- ❖ Wash hands before handling food.
- ❖ Keep food at the right temperatures.
- ❖ Avoid cross-contamination (separate raw and cooked foods).
- ❖ Use clean utensils and cutting boards.
- ❖ Cook food thoroughly to kill harmful bacteria.
- ❖ Store leftovers properly (refrigerate promptly).
- ❖ Follow "use by" and "best before" dates.
- ❖ Be aware of food allergies and sensitivities.

3. What is the key equipment needed to cook?

- | | | |
|-------------------|-----------------|------------|
| ❖ Chopping Boards | ❖ Frying Pan | ❖ Saucepan |
| ❖ Cooks Knife | ❖ Hob and Oven | ❖ Scales |
| | ❖ Measuring Jug | |

4. What does "seasonal" food mean?

- ❖ Food that grows at different times of the year

5. Key Words:

- ❖ **Bake:** Cooking with dry heat in an oven.
- ❖ **Cooking:** Food preparation using heat.
- ❖ **Cross Contamination:** Microorganism transfer during food handling.
- ❖ **Feeding on a Budget:** Economical family meal planning.
- ❖ **Food Hygiene:** Safe food handling practices.
- ❖ **Food Storage:** Proper food preservation methods.
- ❖ **Ingredients:** Individual food components.
- ❖ **Minerals:** Inorganic nutrients in food.
- ❖ **Nutrition:** Food's role in health and growth.
- ❖ **Poach:** Gentle simmering in liquid.
- ❖ **Roasting:** Cooking in an oven or over an open flame.
- ❖ **Sautee:** Quick frying in a small amount of oil.
- ❖ **Spatula:** Tool for lifting and spreading.
- ❖ **Steam:** Cooking with steam for nutrient retention.
- ❖ **Skillet:** Flat-bottomed frying pan.
- ❖ **Taste:** Perceiving food Flavors.
- ❖ **Vitamins:** Essential organic compounds in food.

DIGITAL COMMUNICATION



1. Key Word Definitions

- **Animation:** a technique used to make drawings or objects appear as if they are moving
- **Stop Motion:** Individual images are animated by showing them in quick succession.
- **KeyFrame:** Key locations for objects are selected and the computer fills in the rest.

2. What is Blender?

Blender is open source software that is used to create 3D models and animations

3. In what ways can an object be manipulated in Blender?

Move: the object can be moved

Rotate: the object can be turned

Scale: the size of the object can be changed (bigger or smaller)

Colour: the colour of the object can be changed

4. What are the benefits to key frame animation?

- Faster
- Easier to edit
- Smoother animation
- Repeatable

5. What are 3D models made from?

Vertex: a point at the corner of a shape

Edge: a line connecting two vertices

Face: a surface bounded by three or more edges

6. What are the four types of light in Blender?

Point

Sun

Spot

Area

ENGLISH

1. Who are the two lovers in the play?

- ❖ Romeo Montague and Juliet Capulet.

2. What are the themes in the play?

- ❖ Love, fate, hate, religion, family and honour.

3. What is a soliloquy?

- ❖ *Soliloquies* are used as a device in drama to let a character make their thoughts known to the audience, address it directly or take it into their confidence

4. Who are the main characters in the play?

- ❖ Romeo, Juliet, Mercutio, Tybalt, Benvolio, Friar Lawrence, The Nurse, Prince Escalus

5. Finish the quotation: 'If you ever disturb our streets again...?'

- ❖ '...Your lives shall pay the forfeit of the peace' (Prince)

6. Finish the quotation: 'Then plainly know my heart's dear love is set on...'

- ❖ '... the fair daughter of rich Capulet' (Romeo)

7. Finish the quotation: 'O happy dagger! This is my sheath...'

- ❖ '... There rust and let me die.' (Juliet)

8. What type of play is Romeo and Juliet?

- ❖ A Tragedy.

FRENCH

1. What are these verbs called? What form are they in?

Regarder, écouter, manger, danser...

- Regular er verbs in the infinitive (long form)

2. What is the present tense ending pattern for these verbs for je, tu, il, elle (singular forms)?

- je = e; tu = es; il = e; elle = e (eg je danse, tu dances, il danse)

3. What does pour, and what does sans mean?

- Pour = for (in order to); sans = without

4. What form of verb comes after pour and sans?

- The infinitive (je vais à McDo pour manger un hamburger)

5. What do these question words mean? Qui, Quand, Quoi?

- Who? When? What?

6. What do these question words mean? Combien? Comment?

- How much / how many? How?

7. What do these question words mean? Où? Pourquoi?

- Where? Why?

8. What is the present tense ending pattern for regular er verbs in the plural forms? (nous, vous, ils / elles?)

- Nous = ons; vous = ez; ils / elles = ent (eg nous dansons)

9. What is a pronoun ?

- A pronoun replaces a noun, for example, instead of John walks to school, the pronoun would be 'he' (he walks to school)

10. What do the French pronouns translate to? Je, tu, il, elle, on, nous, vous, ils, elles

- Je = I, tu = you (sing), il = he, elle = she, on = we, nous = we, vous = you (plural), ils = they (m), elles = they (f)

11. How do you construct the near future tense?

- Use aller in the present tense, plus an infinitive (eg je vais jouer au foot)]

12. What is the paradigm of aller in the present tense ?

- Je vais, tu vas, il va, elle va, on va, nous allons, vous allez, ils vont, elles vont

13. What is the usual ending for most adverbs in French?

- ment (eg normalement, rapidement)

GEOGRAPHY

1. What the key facts about China?

- 🌐 People's Republic of China
- 🌐 1.4 billion people
- 🌐 4th largest country in the world
- 🌐 Hong Kong and Macau are part of China

2. What is it like to live there?

- 🌐 Han ethnic group makes of 92% of population
- 🌐 One child policy since 1979 to 2016
- 🌐 6 of 10 Chinese people live in urban areas
- 🌐 Main language spoken is Mandarin

3. What are the key ideas of communism?

- 🌐 Nobody should own property.
- 🌐 The state should own everything
- 🌐 The state can then plan what to grow and what to make, to meet people's needs.
- 🌐 The people can work to produce these things
- 🌐 In return they will get all they need, for free.

4. What is the relief of China?

- 🌐 Lowest areas near the coast
- 🌐 Huabei Plain largest area of flat land
- 🌐 High mountain ranges
- 🌐 Tibetan Plateau
- 🌐 Sandy and stony deserts

5. Name China's main rivers.

- 🌐 River Yangtze
- 🌐 Yellow River
- 🌐 River Xi

6. What is the population distribution in China?

- 🌐 Most of the population lives in the eastern half of China
- 🌐 Due to physical geography (climate and relief)
- 🌐 100 cities have more 1million inhabitants.

7. What about the environment?

- 🌐 Major producer of carbon dioxide
- 🌐 Desertification in northern China
- 🌐 Severe pollution in major cities such as Beijing and Shanghai.
- 🌐 Major shift to renewable energy

HISTORY

1. When did the Peterloo Massacre take place?

🚫 16 August 1819

2. Who could vote in elections in 1819?

🚫 Men who owned property

3. Why were people in Manchester unhappy about the political system?

🚫 They had no MPs

4. What did radicals want?

🚫 They wanted all men to be able to vote

5. How big was St. Peter's Field?

🚫 About the size of two football pitches

6. How many people were at the meeting?

🚫 50,000

7. How many hussars were there?

🚫 600

8. What did the Manchester Yeomanry do when they arrived?

🚫 They rode into the crowd

9. How many people were killed?

🚫 17

10. What happened to Henry Hunt and other leaders after the massacre?

🚫 They were sent to prison

11. How else did the authorities try to stamp out the radicals?

🚫 Radical newspapers were shut down and meetings of more than 50 people were banned.

12. Who was given the right to vote in the 1832 Reform Act?

🚫 All men with property

13. What right was given to cities such as Manchester in the 1832 Reform Act?

🚫 They were allowed an MP

14. When were men and women given equal voting rights?

🚫 1928

MATHS

1. Key word definitions:

- 🔴 **Factor:** A number that fits exactly into another
- 🔴 **Prime:** A type of number that has exactly two factors
- 🔴 **Index Notation:** When repeated multiplication is written with powers e.g. $2 \times 2 \times 2 \times 2 = 2^4$
- 🔴 **Expression:** A statement made of numbers and terms

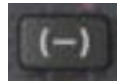
2. What do the following fraction buttons do?



Fraction



Square Root



Negative



Power of



Brackets

3. What are the first ten prime numbers?

2, 3, 5, 7, 11, 13, 17, 19, 23, 29

4. What is the lowest common multiple?

The LCM of two numbers is the first number that is a multiple of both.

5. What is the highest common factor?

The HCF of two numbers is the biggest number that is a factor of both numbers.

6. How do I expand brackets?

By multiplying the term on the outside by all of the terms on the inside.

7. What is factorising?

Factorising is the opposite of expanding brackets.
Take the HCF of all terms outside the brackets.

8. What does this symbol mean: \neq

Not equal to.

9. What effect does a fractional power have?

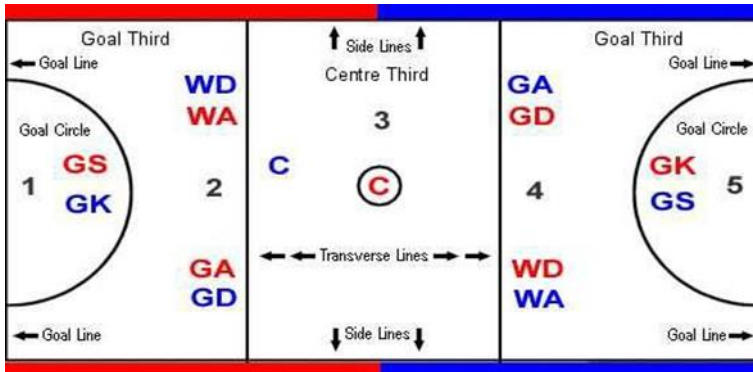
It gives the root of a number.

10. What effect does a negative power have?

It gives the reciprocal of a number.

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

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. What is Film Music?

- Music created for films

There are two types of film music:

- non-diegetic is music included only for the audience's benefit to build tension or heighten emotion of a scene, eg a battle or a love scene
- diegetic music is heard by the characters in the film and by the audience, eg if there is a scene at a party with loud music








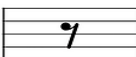
2. Film composers

Hans Zimmer, who wrote music for *Gladiator*, *The Dark Night* and *Boss Baby*







John Williams, who wrote the music for *Star Wars*, *Indiana Jones* and *Harry Potter*

John Barry, who wrote the music for 11 of the James Bond films

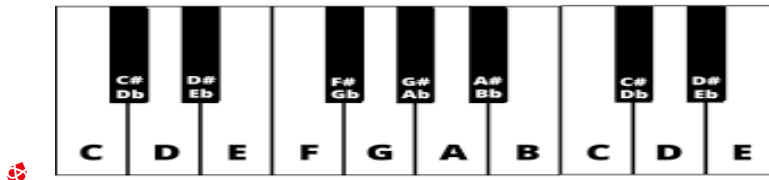
3. These are the note values which you need to know in order to know how long to play the note for. Rests are important too! Don't get the 2 beat and 4 beat rest mixed up!

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

 Pitch- How high or low a note/song is	 Tempo- How fast or slow the music is	 Slogan- A memorable phase
 Underscoring- background music for film	 Leitmotif- The musical idea	 Atonal- Music without a sense of key. Sounds chaotic

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. Film genres

- | | | |
|-----------|-----------------|---------|
| Comedy | Action | Sci-fi |
| Animation | Romantic | Crime |
| Horror | Romantic Comedy | Drama |
| Thriller | Western | Fantasy |
| Musical | Mystery | History |

7. Adverts

Why are they important?

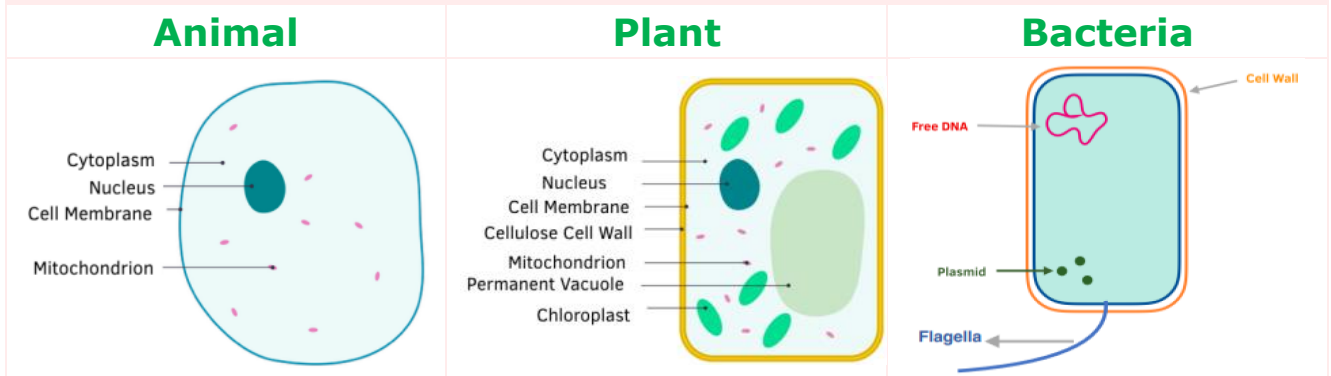
Advertising is important because it can help you reach more people within your target audience with messaging that appeals directly to them.

How can people advertise?

Online
TV
Radio
Bill boards
Word of mouth
Leaflets
Posters
Video
Email
Marketing

SCIENCE

1. Label animal, plant and bacteria cells



2. Define cellular diffusion

- Diffusion is the movement of particles from **higher** to **lower concentrations**.

3. Describe how enzymes are used in the body

- Enzymes break **large molecules** into **small molecules** so that they can be **absorbed** into the blood.

4. Describe the long-term effects of drinking alcohol

- Causes **cirrhosis** of the liver.
- Can cause **addiction**.

5. What happens during photosynthesis?

- Carbon dioxide + water → glucose + oxygen**

6. 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.

7. How are genes, chromosomes and DNA linked?

- The nucleus contains **chromosomes**, made up of **DNA**.
- Each section of a chromosome is called a **gene**.
- A gene is the code to produce a particular **protein**.

8. What is natural selection?

- Where the **best-adapted** individuals survive and reproduce.
- They then pass on the **gene** for that advantageous adaptation.

9. What is Darwin's theory of evolution?

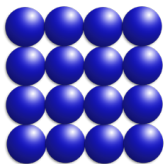
- Evolution is a change in the **inherited** characteristics of a population over **a long time** through **natural selection**.

SCIENCE

1. Draw the Particle Model for the three states of matter

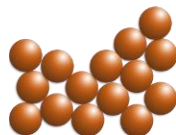
Solid:

- Regular pattern
- Particles Touching



Liquid:

- Random pattern
- Particles Touching



Gas:

- Random pattern
- Far apart



2. Identify the state changes

• **Melting:** Solid → Liquid

• **Freezing:** Liquid → Solid

• **Evaporating:** Liquid → Gas

• **Condensing:** Gas → Liquid

3. Calculate the number of protons, neutrons and electrons

• **Protons:** The smallest number (the atomic number)

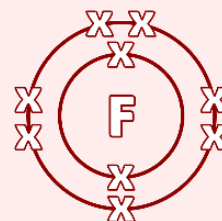
• **Neutrons:** Take the two numbers away (mass number – atomic number)

• **Electrons:** The smallest number (the atomic number)

4. How many electrons can fit on each shell?

• **1st shell:** Can contain 2 electrons.

• **2nd shell+:** Can contain 8 electrons.



5. Describe what physical & chemical reactions are

• **Physical Reaction:** *Doesn't* involve bond breaking.

• **Chemical Reaction:** **New products** are formed.

6. Describe the test for carbon dioxide

• **Limewater** turns **cloudy**.

7. Describe what malleable, ductile and brittle mean

• **Malleable:** Can be hammered into shape

• **Ductile:** Can be stretched into wires

• **Brittle:** Shatters (breaks) easily

8. Describe the test for hydrogen

• Add a **lit splint** into the gas...

• ...and you will hear a **squeaky pop** (if hydrogen is present).

9. Describe the importance of recycling

• **Conserves Earth's Natural resources.**

• We don't have to **mine** for more, meaning:

- Less **noise** / **visual** / **dust** pollution
- Less **animals'** habitats damaged

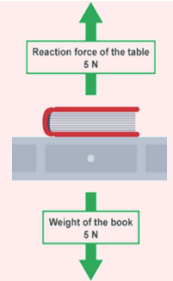
SCIENCE

1. What is the equation to calculate speed?

🔧 **Speed (m/s) = distance (m) ÷ time (s)**

2. What do force diagrams show us?

- 🔧 A force can be a **push** or a **pull**.
- 🔧 Force diagrams show us that the **longer** the arrow the **bigger** the force.
- 🔧 They also show the **direction** of the force.



3. What are the energy stores?

- | | |
|----------------------------|----------------------------------|
| 🔧 Thermal | 🔧 Magnetic |
| 🔧 Kinetic | 🔧 Gravitational Potential |
| 🔧 Chemical | 🔧 Electrostatic |
| 🔧 Elastic Potential | 🔧 Nuclear |

4. How do we calculate work done?

🔧 **Work done (J) = force (N) x distance (m)**

5. What is the conservation of energy?

- 🔧 Energy can be **stored** or **transferred**, but it *cannot* be **created or destroyed**.

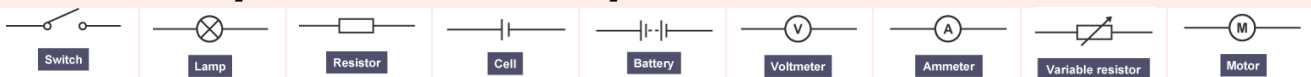
6. What are waves?

- 🔧 Waves **transfer energy** from one place to another, caused by **vibrations**. Waves **do not** transfer matter.
- 🔧 Waves travel *through* a material, such as **air**, or a vacuum, such as **space**.

7. How do you calculate pressure?

🔧 **Pressure (N/m²) = force (N) ÷ surface area (m²)**

8. How do you draw circuit symbols?



9. How do you measure current?

- 🔧 Current is measured in **amperes** (A).
- 🔧 You use an **ammeter**, placed in **series**.

10. How do you measure voltage?

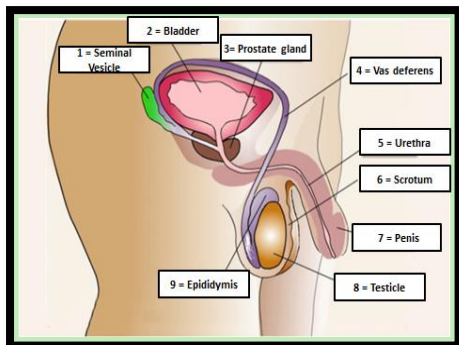
- 🔧 Voltage is measured in **volts** (V).
- 🔧 You use a **voltmeter**, placed in **parallel**.



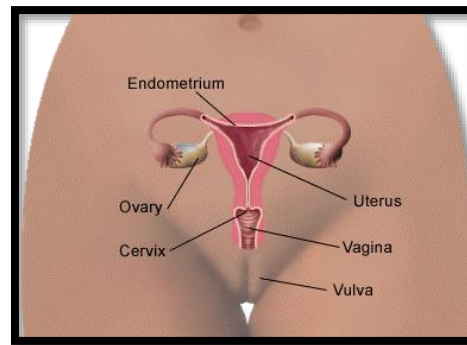
1. Factors that influence self-esteem include?

- ❖ Social Media
- ❖ Friends/Peers
- ❖ Bullies
- ❖ Celebrities
- ❖ Religion
- ❖ Education/School
- ❖ Sport
- ❖ Parents

2. The anatomy of the male reproductive system include:



3. What are the parts of the female sexual anatomy?



4. Define HPT bullying:

- ❖ **Biphobia:** An aversion towards bisexuality
- ❖ **Homophobia:** The fear or dislike of someone, based on prejudice or negative attitudes, beliefs or views about lesbian, gay or bi people.
- ❖ **Transphobia:** The fear or dislike of someone based on the fact they are transgender.
- ❖ **Xenophobia:** Prejudice or dislike of people from other countries

5. How long do people grieve for?

- ❖ How you grieve depends on many factors, including your personality and coping style, your life experience, your faith, and the nature of the loss.
- ❖ The grieving process takes time. There **is no "normal" timetable for grieving**. Some people start to feel better in weeks, months or even years. It's important to be patient and allow the process to naturally unfold.

6. What is Airbrushing?

- ❖ Airbrushing is the retouching of photos to enhance, change or remove flaws from the image.

7. Which factors increase your chances of getting cancer?

- ❖ Lifestyle choices (diet, alcohol, smoking, exercise)
- ❖ Stress (work, life events)
- ❖ Life situations (gender, ethnic group, where you live, health care, pollution)

TEXTILES

1. What is a circular weave?

Circle weaving, also known as circular weaving or round weaving, is similar to regular weaving, but it's done on a round loom instead of a rectangular loom. When you string the loom, your warp strings look like bicycle spokes, and you weave in and out of these spokes (or warp strings) in a circular direction.



2. Who is Tammy Kanat?

- ❖ Tammy Kanat is a Melbourne-based artist whose recent work has focused on tapestries woven around an oval-shaped copper frame. ... Throughout her career, Kanat has explored the representation of natural forms in tapestry – the concentric circles in these four works recall cut agate, living coral and aerial landscape scenes.



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

Circular Weave	Comes from Prince Albert from Germany.
Natural fabrics	Can be harvested from plants animals. For example cotton comes from plants and wool from sheep
Tammy Kanat	Textile Weave Artist. Tammy Kanat is a Melbourne-based artist whose recent work has focused on tapestries woven around an oval-shaped copper frame.
Embellishment	a decorative detail or feature added to something to make it more attractive.

5. Model Example



Success Criteria of gaining high marks

- Variety of colours
- Lots of layers and detail.
- Creative design and composition.
- Related back to artist
- Use of embellishment