
















Stafford Manor
High School

Year 8 Summer Term 1

Core Knowledge

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

1. How to use a craft knife safely?

- ✦ Use a craft knife that is appropriate for the task. Different knives are designed for different types of cuts and materials.
- ✦ Ensure your work surface is flat, stable, and at a comfortable height.
- ✦ Use a cutting mat to protect the surface and extend the life of your knife blade.
- ✦ A sharp blade requires less force and is safer to use. Replace dull blades regularly.
- ✦ Hold the knife firmly but not too tightly, with your index finger on top for better control.
- ✦ Keep your other hand clear of the cutting path.
- ✦ Always cut away from your body and hands to reduce the risk of accidental injury.
- ✦ Hold or tape down the material you are cutting to prevent it from slipping.

2. How to create a 3D Cardboard shoe?

- Creating a 3D cardboard trainer (sneaker) can be a fun and rewarding project. You will need:
 - Cardboard sheets
 - Craft knife or scissors
 - Cutting mat
 - Glue (hot glue gun or strong craft glue)
 - Templates or reference images
- Transfer the template designs onto the cardboard using a pencil and ruler. Ensure all parts are accurately measured and drawn.
- Carefully cut out all the parts using a craft knife or scissors. Use a cutting mat to protect your work surface.
- Add any additional details like the laces, eyelets, and decorative elements. You can cut thin strips of cardboard for laces or use other materials like string. For the eyelets, you can punch small holes.
- Once the trainer is assembled, you can decorate it with markers, paint, or any other materials to give it a finished look. Add colors, patterns, and textures to make it more realistic.

5. Key Word Definitions:

- ✦ **Modelling:** The process of shaping a pliable material, such as clay or wax, to create a 3D form.
- ✦ **Assemblage:** Creating a 3D artwork by combining various objects and materials, often found or repurposed items.
- ✦ **Sculpting:** Carving, cutting, or assembling materials like stone, wood, or metal to create a three-dimensional object.
- ✦ **Scale:** The overall size of a 3D artwork in relation to its environment or the human body.

1. What are the 2 different types of digital graphic?

- ❖ Raster/bitmap
- ❖ Vector

2. What is Graphics software and give an example?

- ❖ Graphics software helps you make and edit pictures or designs. You can draw, paint, change photos, or even create 3D shapes.
- ❖ Examples of software include Adobe Photoshop and Photopea.

3. How do layers work in graphics software?

- ❖ Each layer can contain different elements such as images, text, shapes, or adjustments.
- ❖ By using layers, you can work on individual parts of your project independently of the others.

4. What does a selection tool do?

A tool that helps you pick out part of a picture so you can do something special with it—like moving it, changing its colour, or adding effects—without affecting the rest of the image.

5. What does a retouching tool do?

Improving parts of a picture by cleaning up small problems and making the overall image look better and more professional. For example, if there's a scratch, or some other small flaw in the image, retouching tools help you remove or fix those issues.

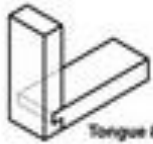
6. What does a painting tool do?

They are used to add colour or create new designs on your images, kind of like using brushes and paint in real life, but on your computer.

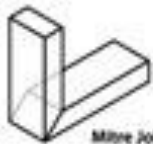
DESIGN TECHNOLOGY

SUMMER TERM 1 (CONTENT FROM SPRING TERM 2)

1. Different wood joints



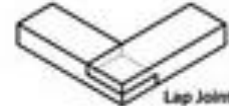
Tongue & Dado Joint



Mitre Joint



Dovetail Joint



Lap Joint

Tongue & Dado Joint

Mitre Joint

Dovetail Joint

Lap joint

2. Tools and equipment used

- ✂ **Tenon saw** – for cutting the straight lines of the finger joints
- ✂ **Coping saw** – for cutting all other lines
- ✂ **Mallet and Chisel** – for clearing waste material other than sawn
- ✂ **Pillar drill** - used to create holes in materials
- ✂ **Abrasive paper** – to remove all rough edges

3. Combining different material groups

- ✂ When combining materials from different groups, i.e. timber and plastics, an adhesive must be used that will adhere to both materials. This could be a CS glue (super glue) or some form of two-part epoxy resin.

4. What are some Tier 3 terms I need to know?

- ✂ **Mdf** – Medium density fibre board
- ✂ **Plywood** – a layered man-made board
- ✂ **Acrylic** – a thermoforming polymer easy to work with
- ✂ **Epoxy resin** - a two- part compound that is often used to join different material groups

5. CAD/CAM and the Laser cutter

- ✂ The increased use of CAD/CAM in industry has helped to reduce waste in the manufacturing process as well as improve the quality and consistency of production lines.

1. What does the word 'atmosphere' mean in fiction?

- It refers to the 'mood' of a place – the way it makes you feel.

2. What is Gothic literature?

- Gothic literature is a genre of fiction which first became popular during the 18th century. The term 'Gothic' originates from the name of an ancient Germanic tribe (The Goths) who are thought to have contributed to the fall of the Roman Empire.

3. Who wrote The Tell-Tale Heart and what are the story's main themes?

- Edgar Allen Poe wrote the story. The themes are madness, time and guilt.

4. What is Frankenstein about?

- The novel follows the ambitious scientist Victor Frankenstein, who, driven by a desire to overcome death and unlock the secrets of life, creates a human-like creature from reanimated body parts. The story unfolds through a series of letters and narratives, recounting Victor's journey and the consequences of his creation.

5. What is the poem The Raven about?

- Poe uses symbols such as a talking raven, and the narrator's chamber to share the story while representing his narrator's struggle with grief.

6. What does the word malevolent mean?

- Wishing to do evil to others.

7. What is a trope?

- It is a recurring theme – a motif.

1. What does pourquoi mean?

- 🔗 Why

2. What does quand mean?

- 🔗 when

3. what does où mean?

- 🔗 where

4. What does comment mean?

- 🔗 how

5. What do que and quoi mean?

- 🔗 What?

6. Two ways you can ask a question in French?

- 🔗 Take a statement and raise the tone of your voice at the end
- 🔗 Put 'est-ce que' in front of the statement

7. What does 'qui' mean ?

- 🔗 who

8. What do quel, quelle, quels, quelles mean?

- 🔗 which

9. What is the difference between quel, quelle, quels, quelles?

- 🔗 Quel = masculine singular; quelle = feminine singular; quels = masculine plural; quelles = feminine plural

1. What are the layers of the Earth?

- Inner core
- Outer core
- Mantle
- Crust

2. What is the oceanic crust?

- The crust found under the oceans which is thin but dense

3. What is the continental crust?

- The part of the crust that is formed on land, it is older part of the crust and thick and lighter than the oceanic crust.

4. How did the Pacific 'ring of fire' get its name?

- Majority of the world's active volcanoes are found along the edge of the Pacific Coast.

5. What are the different types of plate movements which cause tectonic hazards?

- Constructive plate
- Destructive plate
- Conservative plate

6. What is the difference between focus and epicentre?

- The focus is the point underground where the earthquake occurs and the epicentre is the point on the earth's surface directly above the focus.

7. The movement of earth that causes shaking.

- Earthquakes

8. The point underground where an earthquake occurs.

- Focus

9. The point on the surface directly above where an earthquake occurs.

- Epicentre

10. The name of the large crater of a super volcano.

- Caldera

1. Who became King after Charles II?

- James II

2. Why did Parliament not like James II?

- He was a Catholic

3. Who did Parliament ask to invade England and replace James II?

- William and Mary

4. What's the Bill of Rights?

- An agreement of promises William and Mary made with Parliament

5. When was the Battle of the Boyne?

- 1690

6. Which clan was massacred at Glencoe?

- The MacDonald clan

7. Who ruled after William and Mary?

- Queen Anne

8. What was the Act of Union, 1707?

- England, Wales and Scotland were united with one Parliament

9. What was the Act of Settlement?

- A law that stated that after Anne's death the throne would pass to the nearest Protestant heir

10. Where did King George I come from?

- Hanover, a region in Germany

11. What was a Jacobite?

- A person who supported James and wanted to remove George I

12. When was the first Jacobite rebellion?

- 1715

13. When was the second Jacobite rebellion?

- 1745

14. At which battle were the Jacobites wiped out?

- Battle of Culloden

MATHEMATICS

SUMMER TERM 1 (CONTENT FROM SPRING TERM 2)

1. What is a power?

A power is shorthand for repeated multiplication

2. How are powers written?

Powers are written as floating numbers

3. Give the name of two powers

x^2 is squared, x^3 is cubed

4. What are the first five powers of two?

2, 4, 8, 16, 32

5. What are the first five powers of three?

3, 9, 27, 81, 243

6. What are the first five powers of four?

4, 16, 64, 256, 1024

7. What are the first five powers of five?

5, 25, 125, 625, 3125

8. What is the opposite of a power?

A root

9. What is a surd?

A surd is the exact answer to a root.

10. What is standard form?

Standard form is used to write very big or very small numbers more easily.

PERFORMING ARTS

SUMMER TERM 1 (CONTENT FROM SPRING TERM 2)

1. Facts about a singer songwriter

Singer-songwriters are popular musicians who write and perform their own works. They often accompany themselves on acoustic guitar or piano. Singer-songwriters compose the music, write the lyrics, sing, play the musical instruments, and often manage themselves. For them, the song is more important than their performance of it.

The term became popular in the 1960s. It referred to a specific type of performers who wrote certain kinds of music and lyrics.

2. Famous singer songwriters

- ✿ Damon Albarn
- ✿ Marc Almond
- ✿ Badly Drawn Boy (Damon Gough)
- ✿ Gary Barlow
- ✿ Natasha Bedingfield
- ✿ James Blunt
- ✿ David Bowie
- ✿ Sarah Brightman
- ✿ Mick Jagger
- ✿ Elton John
- ✿ Zayn Malik
- ✿ Steve Marriott
- ✿ Brian May
- ✿ Freddie Mercury
- ✿ George Michael

3. The role of a composer

- ✿ A composer **writes musical compositions**.
- ✿ Composers use creativity and knowledge of music theory to write and transcribe musical scores.
- ✿ Scores can be for television, films, computer games or stage productions.
- ✿ A composer will reflect moods within the music which have been specified by directors or producers.

PHYSICAL EDUCATION

SUMMER TERM 1 (CONTENT FROM SPRING TERM 2)

1. What are the key skills in badminton

- ✦ **Ready Position:** Balanced, side-on, racket up, on toes.
- ✦ **Grip:** Shake hands with racket, wrap fingers around tape.
- ✦ **Serving:** Types—short/backhand, long, flick. Backhand serve lands near opponent's service line; racket starts below waist.
- ✦ **Underarm Clear (Long Serve):** High shot to backcourt; start sideways, use wrist whip for power.
- ✦ **Overhead Clear:** Defensive shot to backcourt; start sideways, racket up, contact shuttle in front.
- ✦ **Drop Shot:** Soft shot landing near the net

2. What are the main tactics

- ✦ **Hitting into space** – moving partner around the court
- ✦ **Shot selection** – selecting the right shot for the right situation
- ✦ Targeting opponents' **weaknesses**.

3. Rules

- ✦ **Serve:** Diagonal, right to right, must cross service line.
- ✦ **Scoring:** Play to 21, win by 2. Point won every rally.
- ✦ **Serving:** Winner of the point serves next. Even = right, odd = left.
- ✦ **Court:** Singles = long/thin, Doubles = short/wide.

4. Fitness and the importance of the warm up/ cool down

- ✦ **Pulse Raiser:** Increases heart rate and oxygen flow to muscles.
- ✦ **Stretching:** Boosts blood flow, flexibility, and prevents injury.
- ✦ **Intensive Activity:** Prepares body and mind for the sport.
- ✦ **Cool Down:** Lowers heart rate, removes lactic acid, reduces soreness

5. How to measure pulse rate:

- ✦ Place two fingers (not thumb) on the artery, count beats for 30 seconds, then double.

6. Fitness Tests

- ✦ **Muscular Endurance:** Repeated muscle use
- ✦ **Cardiovascular Endurance:** Sustained whole-body exercise
- ✦ **Muscular Strength:** Max force in one contraction
- ✦ **Flexibility:** Joint movement range
- ✦ **Body Composition:** Fat-free mass vs. fat
- ✦ **Agility:** Quick direction change
- ✦ **Balance:** Stability control
- ✦ **Coordination:** Smooth multi-body part movement
- ✦ **Power:** Strength × Speed
- ✦ **Reaction Time:** Response speed (Ruler Drop Test).
- ✦ **Speed:** Movement from A to B (30m/40m Sprint).

1. Describe the stages of the menstrual cycle

- ✿ **Days 1-5: Menstruation:** The lining of the uterus breaks down.
- ✿ **Days 6-13: The Uterus Thickens:** The lining of the uterus begins to re-grow and an egg cell starts to mature.
- ✿ **Day 14: Ovulation:** The mature egg cell is released from the ovary (**ovulation**) and moves towards the uterus.
- ✿ **Days 15-28: Lining Maintained:** The thickness of the uterus lining is maintained until fertilisation occurs. If it does not occur, the cycle repeats.

2. Describe the role of hormones in the menstrual cycle

- ✿ **Follicle stimulating hormone (FSH)** causes the maturation of an egg in the ovary.
- ✿ **Luteinising hormone (LH)** stimulates the release of the egg.
- ✿ **Oestrogen** is involved in repairing and thickening the uterus lining.
- ✿ **Progesterone** maintains the lining of the uterus.

3. Explain how to dispose of plastics

- ✿ **Recycle:** Conserves Earth's natural resources **but** takes time and money.
- ✿ **Burn it:** Quick **but** can produce toxic gases or greenhouse gases.
- ✿ **Bury it in landfills:** Quick **but** landfills fill up because they are non-biodegradable (don't break down).

4. 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**

5. 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.



SUMMER TERM 1 (CONTENT FROM SPRING TERM 2)

1. The definition of health and wellbeing is:

- ✿ "A complete state of physical, mental and emotional wellbeing not merely the absence of disease."

2. List examples of events that may cause 'Ups and Downs' to our daily wellbeing:

- | | |
|--|---|
| <ul style="list-style-type: none">✿ Playing sport✿ Time outside✿ Seeing friends✿ Being proud of an achievement✿ Positive thinking✿ Eating a healthy meal✿ Overcoming a setback | <ul style="list-style-type: none">✿ Playing a favourite game✿ A difficult lesson✿ Having an argument✿ Getting tired✿ Having a detention✿ Checking social media |
|--|---|

3. What is resilience?

- ✿ The skill that helps people to recover quickly from difficulties; to persevere and 'bounce back'.

4. How can the use of social media improve your emotional wellbeing?

- | | |
|---|--|
| <ul style="list-style-type: none">✿ Meet people around the world✿ Sharing interests✿ It's fun✿ It's an easy/quick/cheap way to communicate✿ Can express yourself creatively | <ul style="list-style-type: none">✿ Gives you confidence to be who you want to be✿ Access to support groups✿ Time to think about what to type/say✿ Wellbeing apps/support |
|---|--|

5. How can the use of social media negatively impact your emotional wellbeing?

- | | |
|---|---|
| <ul style="list-style-type: none">✿ Peer pressure✿ Cyber-bullying✿ Expected to always be available✿ exclusion from certain groups✿ People behave differently online✿ Upsetting content | <ul style="list-style-type: none">✿ Fear of missing out (FOMO),✿ Jealousy✿ Pressure to look a certain way✿ sleep deprivation |
|---|---|

6. Unhealthy mental health coping strategies means:

- ✿ Behaviour's people use to deal with difficult emotions which have long-term negative consequences, such as self-harm and eating disorders.

7. Health mental health coping strategies include

- | | |
|---|---|
| <ul style="list-style-type: none">✿ Listen to music✿ Exercise✿ Talk to someone✿ Stress balls | <ul style="list-style-type: none">✿ Mindfulness apps online✿ Read a book✿ A relaxing bath |
|---|---|

TEXTILES

SUMMER TERM 1 (CONTENT FROM SPRING TERM 2)

1. Key word definitions:

- ✿ **Emotion:** A strong feeling deriving from one's circumstances, mood, or relationships with others.
- ✿ **Natural fabrics:** Can be harvested from plants animals. For example, cotton comes from plants and wool from sheep.
- ✿ **Kandinsky:** Wassily Kandinsky pioneered abstract painting in the early 20th century. He believed that geometric forms, lines, and colours could express through music and emotion.
- ✿ **Embellishment:** A decorative detail or feature added to something to make it more attractive.

2. What should be included in your Kandinsky fabric piece?

- ✿ Variety of sewing techniques
- ✿ Tonal range in shapes
- ✿ Creative design and composition.
- ✿ Related back to artist
- ✿ Multiple printing techniques

3. Model example:

