
















Stafford Manor
High School

Year 7 Summer Term 1

Core Knowledge

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

1. How to use watercolour effectively?

- ✿ Using watercolour effectively involves understanding its unique properties and techniques to create beautiful and expressive artworks. Here are some tips to help you use watercolour effectively:
 - **Quality Materials:** Invest in good-quality watercolour paints, brushes, and paper. Quality materials can significantly impact the outcome of your paintings.
 - **Water Control:** Water is essential in watercolour painting. Learn how to control the amount of water on your brush and paper to achieve various effects, from vibrant washes to delicate details.
 - **Layering:** Watercolour is translucent, allowing you to layer colours to create depth and richness. Start with light washes and gradually build up layers for more intensity and complexity.

2. What is to be expected on an artist 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.

3. Why do you need to study artists?

- ✿ **Inspiration and Creativity:** Exposure to a variety of artistic styles, techniques, and concepts can inspire students and stimulate their creativity. By studying the work of established artists, students can discover new ideas and approaches that they can incorporate into their own artistic practice.
- ✿ **Understanding Art History and Context:** Studying artists' work allows students to learn about different artistic movements, historical periods, and cultural contexts. This knowledge helps students understand the development of art over time and appreciate the diverse influences that shape artistic expression.

1. What is hardware?

Hardware is used to describe the physical parts of the computer which you can touch e.g. keyboard, mouse, printers.

2. Give at least 3 input and 3 output devices?

- ❖ Input – keyboard, mouse, games controller
- ❖ Output – monitor, speakers, printer

3. What is the Central Processing Unit (CPU)?

It is where all the searching, sorting, calculating and decision making takes place in the computer.

4. What is clock speed and how is it measured?

Clock speed is measured in cycles per second (1 cycle per second is also known as 1 hertz). During each cycle, one instruction can be processed.

5. What is a storage device used for and give an example?

A storage device is a piece of computer equipment which can be used to store data. For example, hard disk, memory stick etc.

6. What does RAM and ROM stand for?

Random Access Memory (RAM)
Read Only Memory (ROM)

7. What is the difference between RAM and ROM?

- ❖ ROM keeps its contents even when the computer is switched off (non-volatile)
- ❖ RAM loses its contents when there is no power (volatile)

8. What is the motherboard?

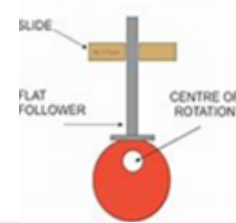
It is the main circuit board in the computer which connects all of the computer's parts together.

DESIGN TECHNOLOGY

SUMMER TERM 1 (CONTENT FROM SPRING TERM 2)

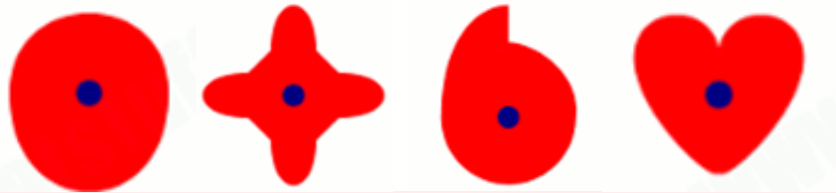
1. What is an eccentric cam?

- ❖ An eccentric cam is a cam with its rotational axis off-centre, creating irregular and unique movements in mechanical systems.



2. Other forms of cam are:

- ❖ **Egg**
- ❖ **Star**
- ❖ **Snail**
- ❖ **Heart**



3. What changes in motion occur in a cam mechanism?

- ❖ The crank/handle on the mechanism is turned moving the axle in a **rotary** motion, this in turn moves the cam which then pushes the follower up and down in a **reciprocating** motion.

4. Some examples of cams in every day life:



5. What are some Tier 3 terms I should know?

- ❖ **Automata** - Mechanical devices imitating human actions.
- ❖ **Axle** - Shaft on which a wheel rotates.
- ❖ **Crank** - Mechanical arm converting rotary to linear motion.
- ❖ **Direction** - Path along which something moves.
- ❖ **Follower** - Component moving in response to a cam.
- ❖ **Movement** - Change in position or condition.
- ❖ **Pivot/Fulcrum** - Fixed point for rotation.
- ❖ **Direction change** - where a mechanism changes the motion in one direction to another

1. What is the difference between an autobiography and a biography?

- ✿ A biography is the life history of an individual, written by someone else. An autobiography is the story of a person's life, written by that person.

2. What is an anecdote?

- ✿ It is a short amusing or interesting story about a real incident or person.

3. What is a non-fiction text?

- ✿ It is a text based on facts.

4. What does 'Direct Address' mean?

- ✿ Direct address is when you talk directly to the reader or listener, using the pronouns 'we', 'you' or 'us'.

5. Who was Anne Frank?

- ✿ Annelies Marie "Anne" Frank was a German-born Jewish girl who kept a diary documenting her life in hiding amid Nazi persecution during the German occupation.

6. What is hyperbole?

- ✿ Exaggeration

7. What are the four sentence types?

- ✿ There are four types of sentences in the English language: declarative, exclamatory, imperative, and interrogatory.

FRENCH

SUMMER TERM 1 (CONTENT FROM SPRING TERM 2)

1. What are these colours in French? Black, blue, green, grey

🌀 Noir, bleu, vert, gris

2. What is the feminine form of these colours?

🌀 Add an 'e' noire, bleue, verte, grise

3. What are these colours in French? Red, orange, yellow

🌀 Rouge, orange, jaune

4. What is the rule about adjectives that already end in 'e'?

🌀 If there is already an 'e', you can't add another one

5. What is white in French, in its masculine and feminine form?

🌀 Blanc = m blanche = f

6. How do you pronounce 'ique' in French (like in Pacifique, magnifique, Jamaïque)?

🌀 eek

7. Write Je suis, tu es, il est, elle est in English

🌀 I am, you are, he is, she is

8. How can you make a statement a question?

🌀 Raise your pitch at the end of a statement

9. Where do most adjectives go in French?

🌀 After the noun

1. What three factors affect population growth?

- Improved sanitation
- Medical improvements
- Improved nutrition

2. What maps are good for showing population distribution?

- Choropleth maps

3. How is country's birth rate and death rate measured?

- Number of births and death per one thousand people

4. What is natural increase?

- Birth rate minus death rate

5. What is a population pyramid?

- A diagram showing the population in different age groups

6. What is life expectancy?

- The average age people are expected to live within a country

HISTORY

SUMMER TERM 1 (CONTENT FROM SPRING TERM 2)

1. What did the king give barons for helping him rule?

- Land

2. Who did the barons share land with?

- Knights

3. What were knights known as?

- Lord of the manor

4. What was the punishment for breaking rules on the manor?

- Fines

5. How many people were peasants?

- 9 out of 10

6. What were the two different types of peasant?

- Freemen and villeins

7. What is a famine?

- A shortage of food that leads to starvation

8. Why were guilds important?

- They controlled the quality and price of artisans' goods and helped the artisans' families

9. Where did medieval people hope to go after they died?

- Heaven

10. What did medieval people believe the priest could do when they confessed their sins?

- Use his special powers to grant them forgiveness

MATHEMATICS

SUMMER TERM 1 (CONTENT FROM SPRING TERM 2)

1. What is discrete data?

Data that has to be counted

2. What is continuous data?

Data that has to be measured

3. What is symbol sigma used to show?

The sum of

4. What does the word frequency mean?

How many

5. How do you calculate the mean?

The sum of the values divided by the sum of the frequency

6. What is the median?

The middle of an ordered list

7. What is the mode or modal?

The most common piece of data

8. What is an outlier?

Data that doesn't fit the pattern

9. What is the range?

A measure of spread – not an average

10. A smaller range means...

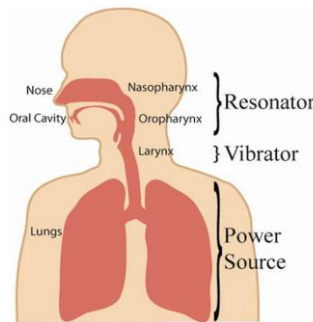
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PERFORMING ARTS








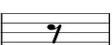
SUMMER TERM 1 (CONTENT FROM SPRING TERM 2)

1. How does the voice work?







- As you make a sound, the air comes up from the lungs, passes through the vocal cords, which are located inside the larynx and leaves via the mouth/nose. The vocal cords are separated/open as we inhale and exhale, and come together/close when we make sound.



2. These are the note values which you need to know in order to know how long to sing a note for

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

3. 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	 Duration- How long or short the note or music is
 Dynamics- How loud or quiet the music is	 Ballad- A slow tempo, sentimental or romantic song	 A Cappella- Singing with no accompaniment







4. These are the different voice types

- Soprano range:** The soprano is the highest singing voice
- Mezzo-soprano range:** The mezzo-soprano voice is the middle-range voice type for females
- Contralto range:** The contralto voice is the lowest female voice
- Tenor range:** The tenor is the highest male voice within the modal register
- Baritone range:** The baritone voice is the middle-range voice type for males and the most common male voice type
- Bass range:** The bass is the lowest singing voice







5. Music genres

Musicals	Opera	Country
Pop	R&B	Folk
Jazz	Classical	Gospel

6. Some tips on keeping your voice healthy

 Absolutely no screaming or shouting	 Warm up gently before voice use	 Avoid vocal projection
 Use soft, breathy vocal quality during speaking	 Maintain use of good breath support during speaking or singing	 Use only mid-range during singing

7. General questions about the voice

-  **What are good vocal warm-up exercises for females?** Warming up your voice before singing is crucial. Exercises like lip trills, sirens, and scales can help warm up your vocal cords and improve flexibility.
-  **How can I take care of my singing voice?** Adequate hydration, proper rest, and avoiding vocal strain are essential. Additionally, it's important to be mindful of your overall health, as it can impact your vocal performance.
-  **What are some effective breathing exercises for singers?** Diaphragmatic breathing and exercises that focus on breath control are crucial for singers. These exercises help support your voice and improve stamina.
-  **How do I maintain vocal health?** Hydration, avoiding excessive caffeine and alcohol, and giving your voice proper rest are key. If you experience persistent vocal issues, it's important to consult with a healthcare professional.
-  **How do I choose songs that suit my voice?** Select songs that match your vocal range and style. Experiment with different genres to find what complements your voice best.
-  **Any tips for live performances?** Practice, confidence, and connecting with your audience are essential. Proper stage presence and mic technique also contribute to a successful performance.

PHYSICAL EDUCATION

SUMMER TERM 1 (CONTENT FROM SPRING TERM 2)

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

Three Elements of a Warm up

- **Pulse raiser** – This allows us to increase our heart rate and the amount of blood pumped around our body which carries more oxygen to the muscles we are using.
- **Stretching** – Increased blood flow to the muscles. Increased range of motion at the joints. Reduced risk of injury.
- **Increased intensive activity** – This allows the participant to take part in activities relevant to the sport/ activity to be undertaken. Increase mental preparation.
- **Purpose of a cool down** – Return heart rate to resting levels gradually. Remove LACTIC ACID from the body (reduce muscle soreness).

2. Effects of exercise

Effects of exercise on the body – Breathing and Heart Rate increase with intensity of exercise.

Pulse rate – Pulse rate (the number of times your heart beats in a minute) can be taken at either your wrist or neck. The normal rate

=70-100BPM

How to take your pulse rate: -

Gently place 2 fingers of your other hand on this artery.

1. Do not use your thumb, because it has its own pulse that you may feel.

Count the beats for 30 seconds, and then double the result to get the number of beats per minute.

3. Fitness Tests

Key Skills: Components of Fitness/ Tests for Components of Fitness:- **Muscular endurance-** The ability to use muscles repeatedly for a long period. **1 Minute Sit-Up Test &**

1 Minute Press-Up Test

Cardiovascular/Aerobic Endurance - Being able to exercise the whole body for a long period using oxygen and nutrients efficiently. **Cooper 12-Minute Test; multi stage & Harvard Step Test**

Muscular Strength- The amount of force that muscle produces in one contraction. **Grip Dynamometer**

Flexibility- The range of movement possible at a joint. **Sit and Reach Test** **Body Composition-** The

measure of how much of your body is made up of fat-free mass, vital organs and fat. **Body Mass Index**

Agility- The ability to change direction at speed (quickly) without losing balance. **Illinois Agility Run Test**

Balance- The ability to maintain centre of mass over a base of support. **Stork Balance Test**

Co-ordination- The smooth flow of movement needed to perform a motor task efficiently and accurately using two or more body parts together.

Alternate Hand Wall Toss Test

Power- Speed X Strength **Vertical Jump Test**

Reaction time- How quickly someone can react to a stimulus. **Ruler Drop Test**

Speed- How quickly an object or human moves from 'A' to 'B'. **30m/40m Sprint Test**

1. What is gravity?

- ☼ **Gravity** is a **force** that **attracts** objects towards each other.
- ☼ **Gravity** pulls towards the **centre of an object**, for example a planet.
- ☼ All matter has a gravitational field that attracts other objects.
- ☼ The **more mass** an object has, the *greater* its **gravitational field** will be.

2. How do we calculate weight on different planets?

- ☼ **Weight = Mass × Gravitational field strength (g)**

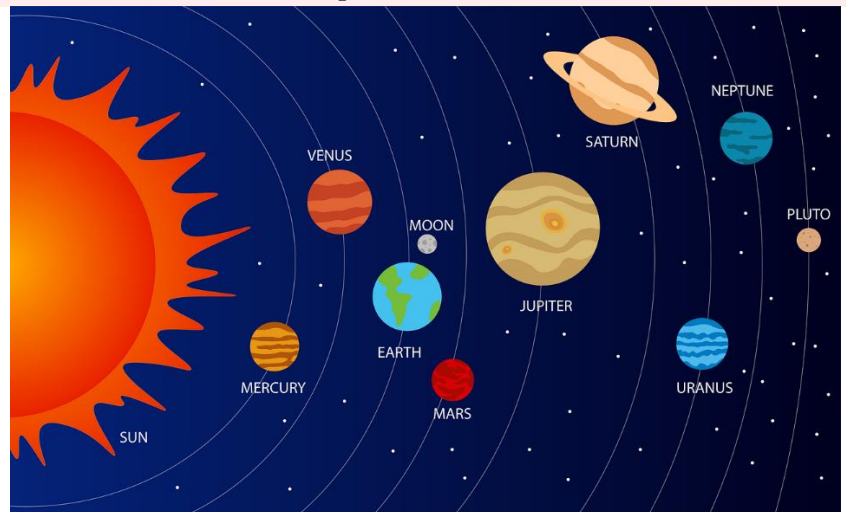
3. What are the planets in the Solar System?

The inner planets:

- ☼ **Mercury**
- ☼ **Venus**
- ☼ **Earth**
- ☼ **Mars**

The outer gas planets:

- ☼ **Jupiter**
- ☼ **Saturn**
- ☼ **Uranus**
- ☼ **Neptune**



4. What other things are there in our Solar System?

- ☼ **Comets**: Balls of **ice** and **dust** in an **elliptical** (egg shaped) orbit around the Sun.
- ☼ **Asteroids**: Comprised of **rock** and **metal**. Most of them are found in an 'asteroid belt', orbiting the Sun between **Mars** and **Jupiter**.
- ☼ **A Star**: The **sun** which was formed from massive clouds of dust and gas in space.
- ☼ **Moons**: Most planets have moons (except for Mercury and Venus). Earth has one- we call it **the Moon**.
- ☼ **Dwarf Planets**: Pluto is a dwarf planet.



SUMMER TERM 1 (CONTENT FROM SPRING TERM 2)

1. What is puberty?

- ✿ The time when sex organs begin to work.

2. List the physical signs that girls experience during puberty

- | | |
|-----------------|------------------------------------|
| ✿ Periods start | ✿ Hair grows (armpits, pubic area) |
| ✿ Breasts grow | ✿ Stretch marks |
| ✿ Hips widen | |

3. List symptoms of PMS (premenstrual syndrome)

- | | |
|---------------------------------------|------------------------------|
| ✿ Mood swings | ✿ Bloating or tummy pain |
| ✿ Feeling upset, anxious or irritable | ✿ Spotty skin or greasy hair |
| ✿ Tiredness or trouble sleeping | ✿ Changes in appetite |
| ✿ Breast tenderness | |
| ✿ Headaches | |

4. List the physical signs that boys' experiences during puberty

- | | |
|------------------|---|
| ✿ Testicles drop | ✿ Hair grows (armpits, pubic area, facial hair) |
| ✿ Erections | ✿ Voice deepens |
| ✿ Ejaculations | |
| ✿ Wet dreams | |

5. List healthy personal hygiene habits

- | | |
|-----------------------------------|-----------------------------------|
| ✿ Washing your hands | ✿ Clean hair and nails |
| ✿ Taking regular baths or showers | ✿ Take care of your feet |
| ✿ Brushing your teeth | ✿ Use anti-perspirants/deodorants |
| ✿ Wearing clean clothes | |

6. What is Female Genital Mutilation (FGM)?

- ✿ FGM means that someone changes or removes parts of the female genitals, such as the clitoris or labia.

7. What is meant by consent?

Consent is an agreement which is given willingly and freely without exploitation, threat or fear.

1. Who is Elizabeth Armstrong?

Nationality:

- ✿ Australia

Job:

- ✿ Felt maker

What does she make?

- ✿ Objects and Accessories made out of Felt
- ✿ Bags, hats, coasters, felt monsters, cushions, etc...

When did she start?

- ✿ 2008 in her own studio.



2. What materials are needed to make a felt monster?

- ✿ Felt sheets (various colours)
- ✿ Scissors
- ✿ Needle and thread (matching colours)
- ✿ Fabric glue or hot glue gun
- ✿ Stuffing
- ✿ Pins
- ✿ Marker or fabric chalk
- ✿ Googly eyes, buttons, or felt pieces for eyes and mouth

3. How do you make a felt monster?

- ✿ Design Your Monster
- ✿ Cut Out the Felt Pieces
- ✿ Attach the Features
- ✿ Sew the Body
- ✿ Stuff the Monster
- ✿ Add Final Touches

