








# Stafford Manor High School

## **Year 7 Summer Term 1**

### **Core Knowledge**

-  Art
-  Design Technology (DT)
-  Digital Communications
-  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.

# 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:

- ❖ **Mixing Bowl:** Combine ingredients, mix batters, or marinate meats.
- ❖ **Palette Knife:** Spread frosting, lift delicate items, or decorate.
- ❖ **Saucepan:** Heat liquids, make sauces, soups, or boil veggies.
- ❖ **Scales:** Measure ingredients by weight accurately for baking or candy making.
- ❖ **Steel Rule:** Measure ingredients precisely or make accurate cuts.
- ❖ **Whisk:** Beat eggs, whip cream, or mix batters.

## 3. What is good food hygiene?

- ❖ **Wash Your Hands:** Wash hands before & after handling food.
- ❖ **Separate Raw and Cooked Foods:** Use separate utensils for raw and cooked foods.
- ❖ **Cook Thoroughly:** Ensure food, especially meat, is cooked properly.
- ❖ **Store Food Properly:** Refrigerate perishable foods promptly.
- ❖ **Check Expiry Dates:** Check expiry dates on foods before using.

## 4. Key Word Definitions:

- ❖ **Bacteria:** Tiny organisms that can be harmful if they get into food.
- ❖ **Food Hygiene:** Keeping food clean and safe to eat.
- ❖ **Food Safety:** Ensuring that food is free from harmful substances or bacteria.
- ❖ **Ingredients:** The different foods or items used to make a dish.
- ❖ **Melting Point:** The temperature at which a solid turns into a liquid.
- ❖ **Method:** The way or steps used to prepare or cook something.
- ❖ **Salting:** The taste sensation that comes from salt.
- ❖ **Sour:** The taste sensation that comes from acidic foods.
- ❖ **Sweet:** The taste sensation that comes from sugary foods.
- ❖ **Temperature:** How hot or cold something is.
- ❖ **Texture:** How something feels when you touch or eat it.

# DIGITAL COMMUNICATION



## 1. What is an event?

An event is an action or occurrence that is detected by a computer

## 2. What is an event handler?

An event handler is a part of a program that runs when a specific event happens.

## 3. What is the event handler that looks for a specific action by the player?

onplayer

## 4. What character should you add to a coordinate to use relative coordinates?

~ (tilde)

## 5. How many dimensions are measured in each coordinate?

3 (X, Y, Z)

## 6. What is absolute world position?

A position in the game based on the world origin (0,0,0)

## 7. What is relative player position?

A position in the game based on where the player is currently standing (~0, ~0, ~0)

## 8. What should you press to see the players absolute world position?

F1

## 9. What is a variable?

A variable holds information about the player, object or game

## 10. Name four types of variable

Number, String, Boolean, Position

# ENGLISH

## 1. Which two animals roam the grounds of Stoke Moran?

- A cheetah and a baboon

## 2. What is a periodical?

- a magazine or newspaper published at regular intervals.

## 3. What did Holmes find unusual when he visited Helen's room? List three things.

- The bell rope didn't work; the bed was fastened to the floor and there was an internal vent.

## 4. How would you define a complex sentence?

- A complex sentence is a sentence with one independent clause and at least one dependent clause

## 5. Who narrates the Sherlock Holmes stories?

- Dr Watson

## 6. List the 'character types' usually found in detective fiction? (There are five of them)

- The detective, the villain, the police force, the client, the assistant.

## 7. What was responsible for the death of Julia Stoner?

- A snake

# FRENCH

**1. What is the masculine definite article (word for the)?**

le

**2. What is the feminine definite article (the)?**

la

**3. What is the plural definite article (the)?**

les

**4. When do you use l' as the definite article (the)?**

When the (singular) noun starts with a vowel (l'idée)

**5. What does the verb 'faire' mean?**

To do, to make; doing, making

**6. Write I do (I make) / am doing (am making), you do (you make) / are doing (are making), he does (he makes) / is doing (is making), she does (she makes) / is doing (is making) in French (singular paradigm of verb faire)**

Je fais, tu fais, il fait, elle fait

**7. What does 'quoi' mean?**

what

**8. What do these expressions mean? Faire les devoirs; faire le ménage; faire le lit**

to do homework; to do housework; to make the bed

**9. What do these expressions mean? Faire les courses; faire la cuisine; faire le modèle**

to do the shopping; to do the cooking; to make the model

**10. What are these colours in English? Bleu, rouge, jaune, vert**

Blue; red; yellow; green

**11. What do these words (nouns) mean? Une vague; le sable; le ciel; le papillon**

Wave (in the sea); sand; sky; butterfly

**12. What do these words (adjectives) mean? Fâché(e); heureux / heureuse**

Angry; happy

# GEOGRAPHY

## 1. What is a landscape?

- The visible features of an area of land

## 2. What are the three layers used to describe a landscape?

- Physical layer
- Biological layer
- Human layer

## 3. What processes shape physical landscapes?

- Erosion and weathering
- Transportation
- Deposition

## 4. What are the different types of weathering?

- Freeze thaw weathering
- Chemical weathering
- Biological weathering

## 5. What is a V-shaped valley and how is it formed?

- Deep river valley shaped like a V, formed by vertical erosion and freeze thaw weathering.

## 6. Name the various features of a river.

- Source
- Mouth
- Tributary
- Confluence
- Waterfall
- gorge

# HISTORY

## 1. When did the Black Death arrive in Britain?

🚫 1348

## 2. What is the name of the swellings people suffered when they caught the Black Death?

🚫 Buboos

## 3. True or False? People knew what caused the Black Death so they could treat it easily.

🚫 False – no-one knew at the time what caused the disease

## 4. Define malnutrition

🚫 Not having proper nutrition due to not having enough to eat

## 5. During which years did England suffer a famine?

🚫 1315 - 22

## 6. What are the theories of what caused the Black Death?

- 🚫 Bubonic plague - Rats carrying fleas which then bit people
- 🚫 Pneumonic plague – coughing and sneezing

## 7. Why did some doctors use bleeding to treat the Black Death?

🚫 To balance a person's humours – they believed people had four liquids in their bodies that became unbalanced and would make you sick

## 8. What happened to wages after the Black Death?

🚫 They increased

## 9. What was the aim of the Statute of Labourers?

🚫 To keep wages low

## 10. In which year did the Peasants' Revolt take place?

🚫 1381



# MATHS

## 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?

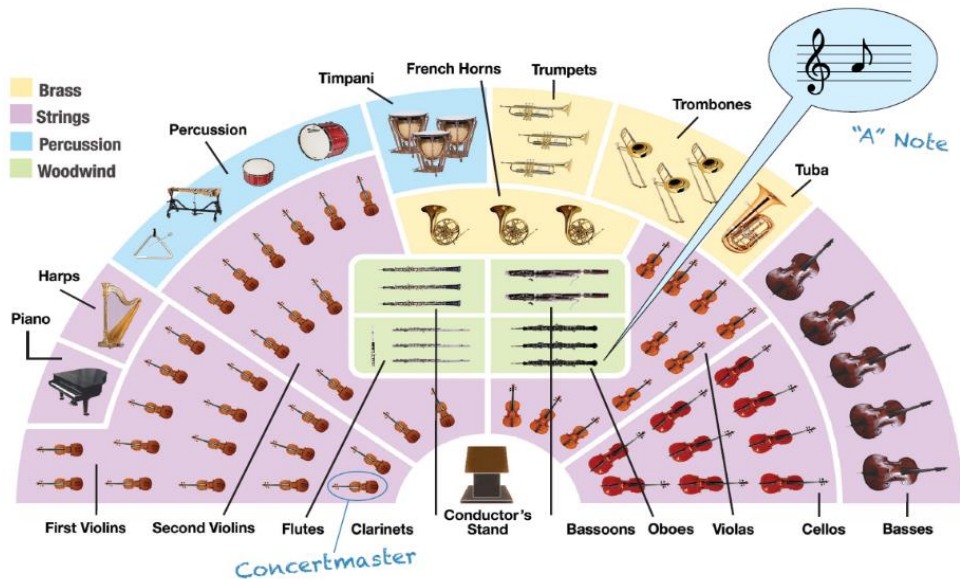
A measure of spread – not an average

## 10. A smaller range means...

... more consistent data

# PERFORMING ARTS

## 1. How is the Orchestra made up?



## 2. The Orchestra Families

The orchestra comprises four main instrument families: strings, woodwinds, brass, and percussion, each adding unique qualities to the ensemble's sound.

String	Woodwind	Brass	Percussion
<ul style="list-style-type: none"> <li><b>Violin:</b> Highest-pitched.</li> <li><b>Viola:</b> Slightly larger, deeper.</li> <li><b>Cello:</b> Rich, sonorous.</li> <li><b>Double Bass:</b> Largest, lowest-pitched.</li> </ul>	<ul style="list-style-type: none"> <li><b>Flute:</b> Bright, airy.</li> <li><b>Oboe:</b> Distinct, nasal.</li> <li><b>Clarinet:</b> Versatile, expressive.</li> <li><b>Bassoon:</b> Deep, resonant.</li> </ul>	<ul style="list-style-type: none"> <li><b>Trumpet:</b> Bright, powerful.</li> <li><b>French Horn:</b> Mellow, rich.</li> <li><b>Trombone:</b> Sliding pitch.</li> <li><b>Tuba:</b> Largest, lowest-pitched.</li> </ul>	<ul style="list-style-type: none"> <li><b>Timpani:</b> Tuned kettledrums.</li> <li><b>Snare Drum:</b> Sharp, staccato.</li> <li><b>Bass Drum:</b> Deep, resonant.</li> <li><b>Cymbals, Tambourine, Triangle,</b> etc</li> </ul>

## 3. Facts about the Orchestra

- Origins:** The modern orchestra, rooted in the Baroque era, evolved over centuries, with its name derived from the Greek word for "to dance."
- Conductor:** Crucial in leading and interpreting, conductors like Hector Berlioz in the 19th century set tempo and shape performances.
- Instrument Count:** A symphony orchestra typically exceeds 100 musicians, with sections carefully balanced for harmony.
- Sheet Music:** Musicians follow composer instructions in individualized sheet music, guiding their performance.
- String Section:** Core to the orchestra, the string section, often divided into first and second violins, sits nearest the conductor.
- Woodwind and Brass Sections:** Crafted from various materials, brass (e.g., trumpets, trombones) and woodwind (e.g., flutes, clarinets) sections contribute diverse timbres.
- Percussion Section:** Providing rhythm and accents, the percussion section includes timpani, snare drum, cymbals, and more.
- Rehearsals:** Essential for perfection, rehearsals refine details, interpretations, and ensure a unified sound.

# PHYSICAL EDUCATION

## 1. Rounders

### Skills

Key Words	Coaching Points
Throwing and Catching	<p>Underarm throw- Grip the ball as in overarm throwing. Put weight on you back foot – swing arm backwards.                      Swing forward – step onto front foot. Release ball with a flick of the wrist. The ball is rolled off the fingers, not the palm.</p> <p>Over arm throw Having collected the ball in both hands, stand sideways to the target. The throwing arm is taken back behind the head. Pull the non-throwing arm through. Throwing arm swings forward keeping the elbow at least level with top of throwing shoulder. The wrist should be outside the line of, and behind, the elbow. Release the ball with both feet on the ground and the chest facing the target. Swing the throwing arm through so that both arms end up behind the opposite hip. Keep the head and eyes facing the target.</p>
Fielding and Positions	<p>Long barrier -Approach the ball at speed and as you get into line with the ball, twist your upper body, leading with the shoulder furthest from the ball. Bend both knees, so that the knee of the leg nearest to the ball touches the ground, but it is also next to the back of the heel of the other leg. With fingers down and head forward, pick up the ball and then stand back up ready to deliver an overarm throw.</p>
Batting	<p>Sideways on. Feet shoulder width apart. Knees bent. Batting arm back straight, Bat up at 90 degrees to arm. Keep head still. Watch the ball at all times. Transfer weight from back to front foot. Follow through in direction you want the ball to go.</p> <p>Advanced: Right hander-Hit ball early to hit to the left to hit late to hit more to right.</p>

## 2. Rules

1. You must start in the batting box and not step out of it.
2. You only get 1 ball bowled at you, after which you must run whether you hit it or not.
3. You must keep in contact with a post once you have decided
4. A no ball is – above the batters head, below the knee, the wrong side of the body, too wide and too close into the body.
5. If you hit a ball behind, then you must wait at first post until the ball comes forward of the batting box. You may then run on.
6. If you hit the ball and get all the way round you score 1 rounder, if you get to 2nd post, you score ½ a rounder. If you do not hit the ball but get all the way round you score ½ a rounder. You also score ½ a rounder if you get 2 no balls bowled at you. You also score ½ a rounder if you get 2 no balls bowled at you.
7. You get ½ a rounder for obstruction if the fielders get in the way of your run to a post to stop

# SCIENCE:

## DIET AND HEALTH

### 1. State what the main nutrients are used for

- ❖ **Carbohydrate**: To provide energy for **respiration**.
- ❖ **Protein**: For **growth** and **repair**.
- ❖ **Fats**: To provide and store **energy** and insulate against cold.
- ❖ **Minerals** and **vitamins**: Needed to maintain health.
- ❖ **Fibre**: To keep the food *moving* through the gut.

### 2. Describe the impacts of an unhealthy diet

- ❖ Eating too much: **Obesity**, heart disease & type II **diabetes**.
- ❖ Eating too little: **Anorexia**, Kwashiorkor, Rickets, Scurvy.

### 3. State the test for starch, fat, protein and glucose

- ❖ **Starch**: Starch turns **iodine** solution from yellow to blue/black
- ❖ **Fat**: Rub the food on paper and it will leave a **greasy** mark.
- ❖ **Protein**: Protein turns **biuret** solution from blue to lilac.
- ❖ **Glucose**: Glucose turns **benedict's** solution from blue to red.

### 4. Describe what happens during digestion

- ❖ **Mouth**: Teeth break down food (**mechanical**) and saliva contains enzymes (**chemical**).
- ❖ **Stomach**: Contains hydrochloric acid to kill bacteria and break down food.
- ❖ **Small intestine**: Digestion finishes, and broken-down food is absorbed into the blood.
- ❖ **Large intestine**: Water is absorbed back into the body.

### 5. Describe how enzymes are used in the body

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

### 6. State the role of protease, lipase and amylase

- ❖ **Amylase**: Breaks down starch into sugar (glucose).
- ❖ **Lipase**: Breaks down lipids into fatty acids and glycerol.
- ❖ **Protease**: Breaks down protein into amino acids.

### 7. State the effect of stimulants, depressants and painkillers

- ❖ **Stimulants**: Speed up reaction times.
- ❖ **Depressants**: Slow down reaction times.
- ❖ **Painkillers**: Block pain signals from reaching the brain.

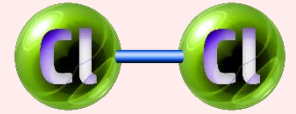
### 8. Describe the long-term effects of drinking alcohol

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

# SCIENCE: THE PERIODIC TABLE

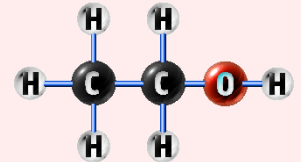
## 1. Describe what an element is

- ❖ An element is a substance that **cannot be broken down** into any other substance.
- ❖ Made up of only **one type of atom**.



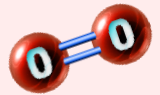
## 2. Describe what a compound is

- ❖ A compound is a substance that contains atoms of **two or more different** elements, and these atoms are **bonded together**.



## 3. Describe what a mixture is

- ❖ A mixture consists of **two or more different** substances, **not bonded together**.
- ❖ You can have a mixture



## 4. State the charge & mass of a proton, neutron and electron

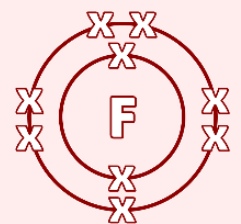
- ❖ **Protons** are **positive** and have a mass of **1**.
- ❖ **Neutrons** are **neutral** and have a mass of **1**.
- ❖ **Electrons** are **negative** and have a mass of **almost 0**.

## 5. 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)

## 6. How many electrons can fit on each shell?

- ❖ **1<sup>st</sup> shell:** Can contain 2 electrons.
- ❖ **2<sup>nd</sup> shell+:** Can contain 8 electrons.



## 7. Why does our Periodic Table look different now?

- ❖ **Similarity:** Both in **groups** based on chemical **properties**.
- ❖ **Difference 1:** His was in order of atomic **weight**. Ours is in order of atomic **number**.
- ❖ **Difference 2:** His had **gaps**, ours doesn't.

## 8. Describe what an isotope is

- ❖ **An isotope** is an atom with the **same number of protons** and a **different number of neutrons**.



## 1. What is the difference between Immigration and Emigration?

- ❖ **Immigration:** Arriving to a new country to live permanently.
- ❖ **Emigration:** Leaving the country that you live or were born in.

## 2. List factors that make up a person's identity

- |  |  |
|--|--|
| <ul style="list-style-type: none"><li>❖ Nature v Nurture</li><li>❖ Influences on it</li><li>❖ Social Norms</li><li>❖ Culture</li></ul> | <ul style="list-style-type: none"><li>❖ Religious Practices</li><li>❖ Heritage</li><li>❖ Physical Appearance</li><li>❖ Hobbies and Interests</li></ul> |
|--|--|

## 3. Define Nature V Nurture

- ❖ **Nature:** Factors of a person's identity that are influenced by genetics/DNA.
- ❖ **Nurture:** Factors of identity that are influenced by a person environment and upbringing.

## 4. Name the legislation that protects people from discrimination?

- ❖ The Equality Act 2010

## 5. List the 9 protected characteristics:

- |   |   |
|---|---|
| <ul style="list-style-type: none"><li>❖ Age</li><li>❖ Sex/Gender</li><li>❖ Disability</li><li>❖ Race</li><li>❖ Religion or belief</li></ul> | <ul style="list-style-type: none"><li>❖ Gender reassignment</li><li>❖ Pregnancy and Maternity</li><li>❖ Sexual Orientation</li><li>❖ Marriage and Civil Partnership</li></ul> |
|---|---|

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## 7. What is a stereotype?

- ❖ A fixed idea about a particular type of person or thing. Stereotypes are often harmful to the people or things they refer to.

# TEXTILES

## 1. What is a Felt Monster?

- ❖ Felt monsters are designed and created to use imagination and creativity. They are a form of stress release and can be really good fun in creating your own little monster.

## 2. Artist information – Elizabeth Armstrong

### Who is Elizabeth Armstrong

**Nationality** = Australia

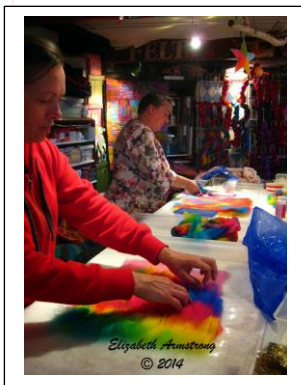
**Job** = Felt maker

### **What does she make?**

Objects and Accessories made out of Felt (Bags, hats, coasters Felt monsters, cushions).

### **When did she start?**

2008 in her own studio.



## 3. Mental Health

- ❖ Mental health **includes our emotional, psychological, and social well-being**. It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make healthy choices. <sup>1</sup>. Mental health is important at every stage of life, from childhood and adolescence through adulthood.
- ❖ **How is mental health linked with Felt monsters?**
- ❖ Felt monsters are a tool to support with anxiety/ emotions and resilience.