
















**Stafford Manor**  
High School

# **Year 7 Autumn Term 2**

## **Core Knowledge**

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

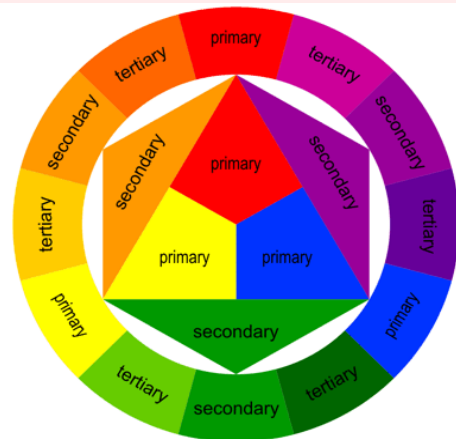


## 1. What are the formal elements?

- ❖ **Line:** Line creates the whole image. Use line creatively to construct tone, texture and shape.
- ❖ **Tone:** Light to dark/dark to light. Use lighting to create shadow to make a 3D shape which creates tone.
- ❖ **Colour:** Create the mood of the image with using colour. Happy colours are bright, dull colours create mood.
- ❖ **Shape:** Create shape using line and tone. Do this efficiently and this will create a whole image.
- ❖ **Texture:** Something you look at that creates the appearance of being able to touch it.
- ❖ **Form:** Use tone and shape correctly to create form. This will make your image look 3D.

## 2. What is colour theory?

- ❖ You can make all other colours from the 3 Primary colours. Red, Yellow and Blue.
  - ❖ 2 primary colours mix a secondary colour.
  - ❖ You can use the colour wheel to see warm and cool colours, complimentary colours and tertiary colours.



## 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:** Mixing colours or tones smoothly.
- ❖ **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.
- ❖ **Line:** A mark extending between two points.
- ❖ **Saturation:** Colour intensity or purity.
- ❖ **Typography:** Artistic use of written words.
- ❖ **Viewfinder:** Tool for framing and composition.

# 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:

- ❖ **Chisel:** A cutting tool with a sharp, flat edge.
- ❖ **Coping Saw:** A fine-toothed saw for intricate cutting.
- ❖ **Mallet:** A hammer-like tool for woodworking.
- ❖ **Pillar Drill:** A stationary drilling machine for precision holes.
- ❖ **Steel Rule:** A ruler made of steel for precise measurement.
- ❖ **Tenon-Saw:** A fine-toothed saw for woodworking.

## 3. What is the difference between CAD and CAM?

- ❖ CAD (**Computer-Aided Design**) is about creating digital drawings and plans on a computer.
- ❖ CAM (**Computer-Aided Manufacturing**) is about using a computer to make real things from those digital plans.
- ❖ So, CAD is like drawing, and CAM is like building.

## 4. Key Word Definitions:

- ❖ **Acrylic:** A type of plastic material known for its transparency and versatility.
- ❖ **Bench Vice:** A clamping tool to secure materials during work.
- ❖ **Carpenters Square:** A tool for measuring and marking right angles.
- ❖ **Disc Sander:** A machine for smoothing and shaping wood.
- ❖ **Hardwoods:** Dense, durable wood types like oak and beech.
- ❖ **Hand Vice:** A small, handheld clamping device.
- ❖ **Perpendicular:** At a 90-degree angle to a surface or line.
- ❖ **Polymers:** Materials made of long chains of molecules.
- ❖ **Polystyrene:** A lightweight plastic material.
- ❖ **Polythene:** Another type of plastic often used in bags and packaging.
- ❖ **Resin:** A material used for casting and molding.
- ❖ **Softwoods:** Lighter, less dense wood types like pine and spruce.
- ❖ **Thermoforming:** A process of heating and shaping plastics.
- ❖ **Thermosetting:** Materials that harden when heated.
- ❖ **Timbers:** Wood used in building and construction.
- ❖ **Urea Formaldehyde:** A type of adhesive used in woodworking





# DIGITAL COMMUNICATION



## 1. Key Word Definitions

- **Plagiarism:** Copying someone else's work without giving them credit for it
- **License:** A fee you pay to use software or media

## 2. Tool Icons

			
Bold	Centre Justify	Text Colour	Bullet Points

## 3. What software is most appropriate to write a letter?

A word processor e.g. MS Word

## 4. What software is most appropriate to make presentations?

Presentation software e.g. MS Powerpoint

## 5. What software is most appropriate to work with numbers?

Spreadsheet software e.g. MS Excel

## 6. What are four tips for creating a successful blog?

1. Research your topic thoroughly
2. Reference any sources properly
3. Credit the author of photos or videos
4. Suitably format your blog using formatting tools

## 7. Should you believe everything you see on the Internet?

No, it is easy to create websites containing false information

## 8. What can you do to verify information?

1. Check the author and the source
2. Check when the information was written
3. Do your own research into the 'facts'

# ENGLISH

## 1. What is a protagonist?

- The main character in a story, usually a hero.

## 2. What is an antagonist?

- The character that opposes the hero, usually a villain.

## 3. What is a myth?

- A myth contains non-human characters with superpowers, usually tell of miraculous events that are rooted in religious beliefs.

## 4. What is a legend?

- It contains human characters with realistic human qualities, a legend teaches a moral lesson.

## 5. What is rhetoric?

- Rhetoric is effective / persuasive speaking (speeches).

## 6. What does Ethos mean?

- This is where an audience gives its respect to a speaker who it believes has a high moral character

## 7. What does Pathos mean?

- This refers to the emotions and deeply felt values of listeners

## 8. What does Logos mean?

- This helps a speaker to present an argument in a fair and logical way and helps a listener to better understand a speaker's purpose.

# FRENCH

## 1. What do je, tu, il and elle mean ? Where would you use them?

- I, you, he, she ; with the short form of verbs (subject pronouns)

## 2. What do these SSCs sound like? a i e

- ah ee uh

## 3. Where is the SSC e (uh) in these words? Secret, promenade, mercredi, fenêtre?

- Secret, promenade, mercredi, fenêtre

## 4. What does c'est mean?

- It is

## 5. When would there be a liaison? C'est un chien; c'est calme? Why ?

- C'est un chien French has to flow; so you sound the t, and join it to the u

## 6. What is une idée ? Une règle ? Une chose ? Une chambre ?

- An idea ; a ruler ; a thing; a bedroom – they are all feminine

## 7. What is un animal ? un portable ? un chien ?

- A pet ; a phone ; a dog – they are all masculine

## 8. What does avoir mean?

- To have; having

## 9. How do you say / write I have, you have, he has, she has?

- J'ai; tu as; il a; elle a

## 10. How do you pronounce the SSC 'au'?

- Au = oh

## 11. How do you pronounce the SSC 'u'?

- U = uooo (but tighter – you have to move your lips)

## 12. What is the indefinite article?

- The word(s) for a = un (m), une (f), des (pl)

## 13. How do you pronounce the SSC 'ou'?

- Ou = oo

## 14. What kind of words are these? Rapide, cher, moderne?

- Adjectives

## 15. What do the adjectives mean?

- Quick, expensive, modern

# GEOGRAPHY

## 1. What is the United Kingdom?

- 🌐 Group of islands
- 🌐 Wales
- 🌐 Scotland
- 🌐 England
- 🌐 Northern Ireland

## 2. What is the Land's End to John O'Groats challenge?

- 🌐 A cycle route from the last bit of land in Southwest England to the very top of Scotland.

## 3. How does the UK contribute to Europe?

- 🌐 Channel tunnel
- 🌐 Trade
- 🌐 Travel
- 🌐 Space and research
- 🌐 Education

## 4. What is the local environment?

- 🌐 A small area such as a housing estate or park

## 5. What does re-wilding the local environment mean?

- 🌐 Restoring and protecting natural processes and ecosystems

# HISTORY

## 1. Why was Jerusalem an important city for Christians?

- ✚ Jesus was crucified there

## 2. Which group stopped Christian pilgrims visiting Jerusalem in 1071?

- ✚ Seljuk Turks

## 3. Who called on Christians to win back Jerusalem from Muslims in 1071?

- ✚ The Pope

## 4. Which group of people led the First Crusade?

- ✚ Noblemen

## 5. What were people who joined the crusade without weapons known as?

- ✚ Non-combatants

## 6. When did the crusaders arrive in Constantinople?

- ✚ Autumn 1096

## 7. What two problems did crusaders face in summer 1097?

- ✚ Heat and lack of food supplies

## 8. How long was the siege of Nicea?

- ✚ Six weeks

## 9. How long did the siege of Antioch last?

- ✚ A year and a half

## 10. How long did it take the crusaders to march from Antioch to Jerusalem?

- ✚ Eight months

## 11. When did the crusaders arrive at Jerusalem?

- ✚ 7 June 1099

## 12. When did the crusaders start their attack on Jerusalem?

- ✚ 14 July 1099

## 13. What did the commander of the Muslim forces agree to hand Jerusalem to Christians in return for?

- ✚ Safety of his family and close advisors

## 14. Were the crusaders respectful towards the inhabitants once they had control?

- ✚ No – they killed thousands of men, women and children



# MATHS

## 1. Key word definitions:

- ❖ **Polygon:** A 2d shape made of straight lines
- ❖ **Parallel:** Lines that are the same distance from each other
- ❖ **Perpendicular:** Lines that meet at 90 degrees.

## 2. What are the names of the common polygons?

3 sides	4 sides	5 sides	6 sides	8 sides
triangle	quadrilateral	pentagon	hexagon	octagon

## 3. What are the angle facts?

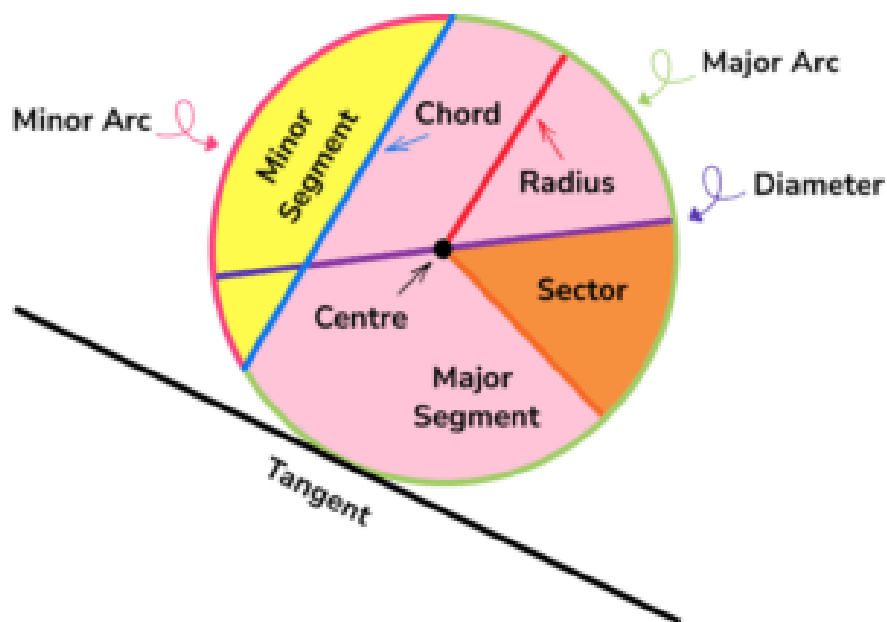
Angles in a triangle add up to  $180^\circ$

Angles in a quadrilateral add up to  $360^\circ$

Angles on a straight line add up to  $180^\circ$

Angles around a point add up to  $360^\circ$

## 4. What are the parts of a circle called?



## 5. What are the four types of triangle?

Right angled, Isosceles, Equilateral, Scalene

## 6. Key word definitions:

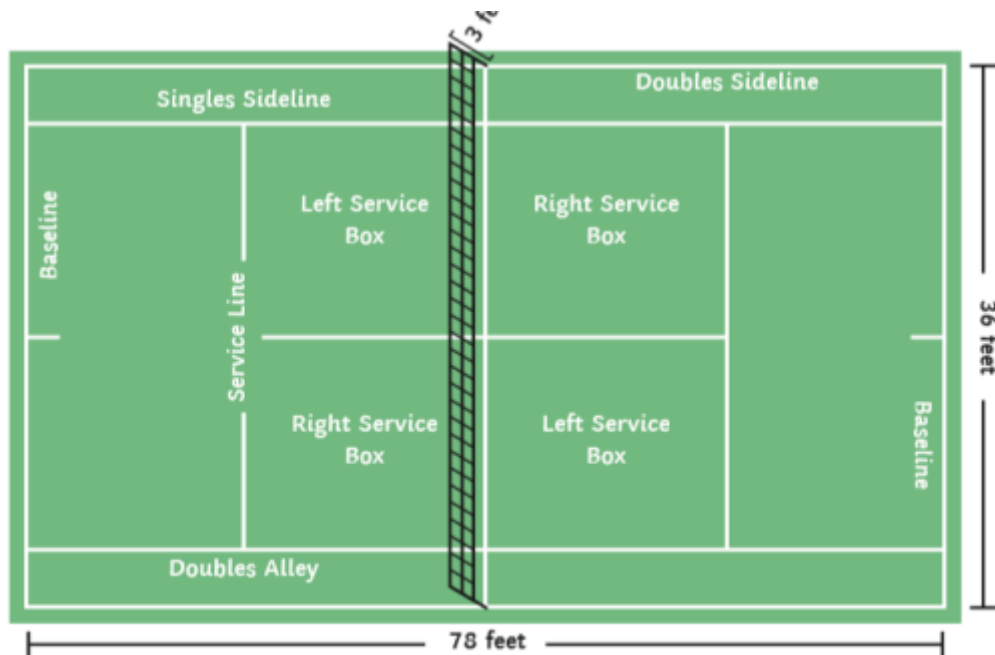
- ❖ **Face:** The flat surface of a shape
- ❖ **Edge:** The line where two faces meet
- ❖ **Vertex:** The point where three or more edges meet

## 7. What do the exterior angles of every shape add up to?

$360^\circ$

# PHYSICAL EDUCATION

## 1. Tennis Court Area



## 2.

### Key Terms

Forehand – Playing a shot to the side of your dominant hand

Backhand – Playing a shot to your non-dominant side.

Fault – where a point is lost through a mistake on the first serve.

Point – where a player wins a rally

Serve- the start of a game in tennis

Volley – Hitting the ball without it bouncing

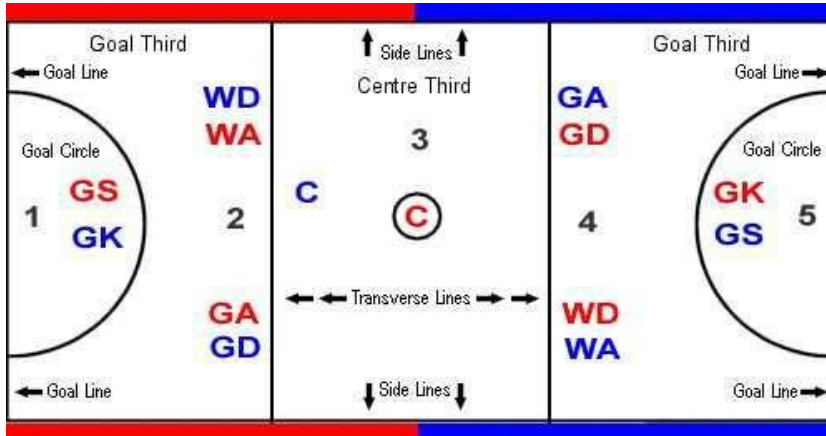
Let – the ball hitting the net on a serve

## 3.

Skill	Description
stroke technique	A method used to hit the ball including forehand, backhand, volley, lob and overhead.
movement on court	The ability to move around the court so that the player is in the best position to hit the ball.
decision making	The ability to choose the correct shot to use.
ready position	A skill and a starting position to get the body ready to return the serve and hit a stroke.
match play	A technique used to understand the basics of the game, the rules, scoring and the court.

# 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 notes on the staff which you need to learn from memory

TREBLE CLEF  
RH (ALL NOTES ABOVE MIDDLE C)  
EVERY GOOD BOY DESERVES FUN F A C E

LH (ALL NOTES BELOW MIDDLE C)  
BASS CLEF  
GREAT BIG DOGS FRIGHTEN AMY ALL COWS EAT GRASS

MIDDLE C (SAME NOTES)  
B C D

2. 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

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

Pitch- How <b>high or low</b> a note/song is	Tempo- How <b>fast or slow</b> the music is	Duration- How <b>long or short</b> the note or music is
Dynamics- How <b>loud of quiet</b> the music is	Texture-How <b>many instruments</b> are playing	Structure- The <b>overall plan</b> of the piece

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



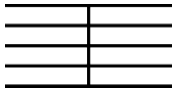

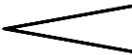

C# Db D# Eb F# Gb G# Ab A# Bb C# Db D# Eb

C D E F G A B C D E

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

## 5. Here are some symbols that you will need to know

 <p>Treble Clef- Found at the start of the music</p>	 <p>A slur- To play the music smoothly. Not to be confused with a tie</p>	 <p>Bar line- Separates the music</p>
 <p>Repeat signs</p>	 <p>Gradually get louder</p>	 <p>Gradually get quieter</p>

## 6. Some tips on peer assessing

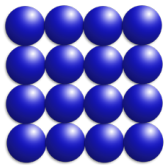
What did the student do well?	What could they improve on?
The notes were accurate	The notes were not always played accurately
The timing was accurate	The timing needs a little work to ensure they are fully in time
They performed with confidence	More confidence when performing in front of other people
The rhythm was correct	The rhythm changed a little
The song sounded like it should do	Have a listen to the original again
They used the correct fingers	Think about what fingers to use so you keep the flow of the music
They used the right hand for the melody	Use the right hand only for the melody part
They can play some left hand chords	Try to add some left hand chords

# SCIENCE

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

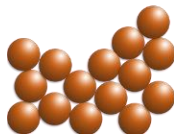
### Solid:

- 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. Describe the difference between pure and mixture

• **Pure**: Only one chemical (e.g. pure water)

• **Mixtures**: More than one chemical not bonded together (e.g. salt water)

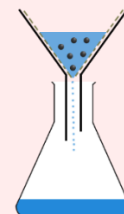
## 4. Describe the words soluble and insoluble

• **Soluble**: Something that will dissolve (e.g. salt)

• **Insoluble**: Something that will not dissolve (e.g. sand)

## 5. Describe how to separate insoluble solids

- Use **Filtration**.
- Pour the mixture into filter paper in a filter funnel.
- The liquid will pass through and the insoluble solid will remain on the paper.



## 6. Describe how to separate soluble solids

- Use **crystallisation** / heating.
- **Heat** the mixture to evaporate (half of) the water.
- Leave to **cool** and **dry** on a windowsill.

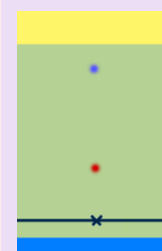


## 7. Describe what happens in the condenser during distillation

- The gas is surrounded by **cold water**.
- The gas **cools** and **condenses** (turns back into a liquid).

## 8. Describe how to set up a chromatogram

- Draw a **line** on the chromatography paper in **pencil (insoluble)**.
- Add the paper to a column so that it touches the **water**.
- Wait until the water reaches the **top** of the paper.
- Remove the paper from the column.



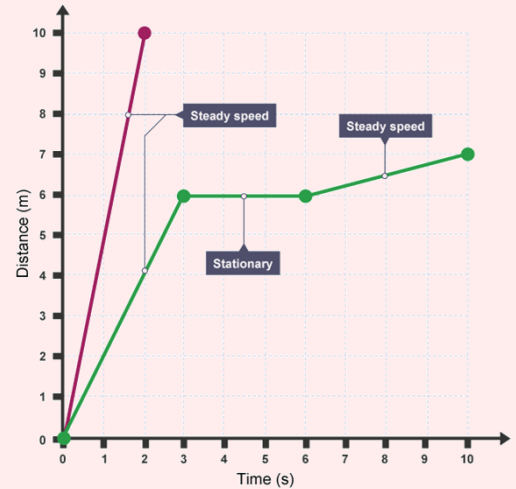
# SCIENCE

## 1. What is the equation to calculate speed?

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

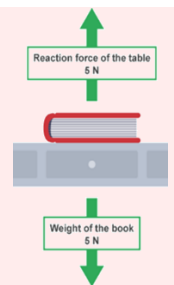
## 2. What do distance-time graphs show us?

- ❖ **Distance travelled** is plotted on the vertical (y) axis.
- ❖ **Time taken** is plotted on the horizontal (x) axis.
- ❖ If the line is **horizontal** (→), the object is not moving.
- ❖ The **steeper** the line, the **faster** the object is moving.



## 3. 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.



## 4. How do we calculate resultant forces?

- ❖ If two forces are going in the same direction, **add them**.
  - $3\text{N}\rightarrow$  and  $6\text{N}\rightarrow = 3+6 = 9\text{N}\rightarrow$
- ❖ If two forces are going in the opposite directions, **subtract them**.
  - $\leftarrow 3\text{N}$  and  $6\text{N}\rightarrow = 6-3 = 3\text{N}\rightarrow$

## 5. What are the effects of balanced forces?

- ❖ If forces are balanced on a **stationary object**, it will remain **still**.
- ❖ If forces are balanced on a **moving object**, it will move at the **same speed** and in the **same direction**.

## 6. What are the effects of unbalanced forces?

- ❖ If forces are unbalanced on a **stationary object**, it will start moving.
- ❖ If forces are unbalanced on a **moving object**, it will either **speed up** or **slow down**.

## 7. What equation links force, spring constant and extension?

**Force** = **spring constant** x **extension**



## 1. Define the changes that happen to girls and boys during puberty:

- ❖ **Physical Changes:** Changes that happen to the body.
- ❖ **Social Changes:** Changes to the way you interact with others.
- ❖ **Emotional Changes:** Changes in the way you think.

## 2. Puberty (Girls): What are the four phases of the menstrual cycle and how long does it last?

- ❖ Menstrual Cycle Phase
- ❖ Follicular Phase
- ❖ Ovulation Phase
- ❖ Luteal Phase
- ❖ 28 Days



## 3. Puberty (Boys): What are the physical signs a boy is going through puberty?

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

## 4. Personal Hygiene: What can you do to prevent Body Odour?

- ❖ Shower daily
- ❖ Keep yourself clean with a particular focus on areas that sweat the most (Feet, Armpits and Genitals)
- ❖ Wash and change clothes on a regular basis
- ❖ Use anti-perspirants/deodorants
- ❖ Wash hands with soap and warm water to prevent germs spreading.

## 5. What is Female Genital Mutilation (FGM)?

- ❖ A procedure that involves partial or total removal of the external female genitalia, or injury to the female genital organs for non-medical reasons.
- ❖ It is an **act of violence** against women!

## 6. What is meant by consent?

- ❖ Consent is an agreement which is given willingly and freely without exploitation, threat or fear, and by a person who has the capacity to give their agreement.

## 7. What is Self Esteem?

- ❖ Self-esteem reflects an individual's overall emotional view of his or her own worth. It is the decision made by an individual as an attitude towards the self.



# TEXTILES

## 1. What is Remembrance day?

- ❖ Remembrance Day was first observed in 1919 throughout the British Commonwealth. It was originally called “Armistice Day” **to commemorate armistice agreement that ended the First World War** on Monday, November 11, 1918, at 11 a.m.—on the eleventh hour of the eleventh day of the eleventh month.
- ❖ Our red poppy is a **symbol of both Remembrance and hope for a peaceful future**. Poppies are worn as a show of support for the Armed Forces community. The poppy is a well-known and well-established symbol, one that carries a wealth of history and meaning with it.



## 2. Artist information – Tina Leahey

### Who is Tina Leahey?

Is a Textile Felt Artist who makes a variety of items made out of felt. One of her most popular is the poppy she makes for remembrance day. She sells her poppies online in a shop called Etsy.



### 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

<b>Remembrance day</b>	11 <sup>th</sup> November 1918 at 11am.
<b>Natural fabrics</b>	Can be harvested from plants animals. For example cotton comes from plants and wool from sheep
<b>Tina Leahey</b>	A Textile Artist who sells hand stitched felt poppies online.
<b>Hand stitch</b>	a decorative detail or feature added to something to make it more attractive.

### 5. Model Example



#### **Success Criteria of gaining high marks**

- Variety of sewing techniques
- Use of colour
- Creative design and composition.
- Related back to artist.