

Year 7 Autumn Term 1 Core Knowledge

- Art
- Computing
- Design Technology (DT)
- 🤨 English
- French
- Geography
- History
- Maths
- Performing Arts
- Physical Education (PE)
- Science
- **∮** SEL
- Textiles



1. Mixed Media: Pencils

There are a large range of pencils that can be used such as sketching pencil and normal HB. Sketching pencils range from hard (H) to soft (B). H pencils are good for fine details and light shading, while B pencils are better for bold lines and darker shading.

- Gradient Shading: Gradually transition from dark to light by varying pressure or using different pencil grades.
- Layering: Build up layers of graphite to create depth.
- Contrast: Use high contrast between light and dark areas to add drama and focus to your drawing.



2. Mixed Media: Oil Pastels

- Layering: Build up colour gradually. Start with light layers and add more pigment to create depth.
- Blending: Use the oil pastels, blending stumps, or even a cloth to blend colours smoothly.
- Sgraffito: Scratch through a top layer of pastel to reveal the colour beneath using a pointed tool.



3. Mixed Media: Watercolour

- Washes: Create a flat wash by wetting the paper and applying an even layer of colour. For a gradient wash, add more water as you move down the paper.
- Wet-on-Wet: Apply wet paint onto wet paper for soft, flowing effects. This technique is great for backgrounds and skies.
- Wet-on-Dry: Apply wet paint onto dry paper for more defined edges and details.
- Dry Brush: Use a relatively dry brush with minimal water to create textured, rough strokes.





1. What is a computer network?

Two or more computers connected together

2. What is a protocol?

A set of rules

3. What is used to connect computers together?

Network cable

4. What is a hub?

A hub connects computers together. All computers in a network can be plugged into a hub, instead each needing to be connected individually to every other computer.

5. What is a server?

A server is a powerful computer that provides services.

6. What is a router?

A router connects networks together (often connecting one network to the Internet)

7. Name four examples of wireless technologies used to communicate.

Bluetooth

WiFi

4G

5G

8. What is bandwidth?

Bandwidth is the amount of data that can be moved from one point to another in a given time.

9. What is the difference between upload and download?

Upload is when the computer is sending data to the Internet. Download is when it is receiving it.

10. What does TCP stand for?

Transmission Control Protocol



1. What is PPE, which is used in the workshop?

PPE stands for Personal Protective Equipment. These are things that you use when doing practical work to protect your self or clothing from harm, such as an apron, safety glasses/goggles, Ear defenders, dust mask, leather gloves/apron, etc.

2. What golden rules keep you safe during practical work?

- 1. Always follow the member of staff's instructions.
- 2. Only use tools or equipment you have been shown how to use.
- 3. Always behave in a safe and appropriate manner in the DT area.

3. What tools and equipment should I be able to use safely?

Tenon Saw Mallet & Chisel Coping Saw Pillar Drill









4. What measurement scale is used in DT?

In Design and Technology we measure in millimeters as it gives us more accurate outcomes

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

- Steel rule A device used for measuring in the workshop
- Carpenters square a device used to draw lines perpendicular to an edge
- Tenon-saw A fixed saw for cutting straight lines in timber
- Mallet & Chisel Tools used together to remove material from timber that cant be cut with a saw
- Bench vice Used to secure your work when using tools so as to leave both hands free
- Coping saw A fine bladed saw used to cut intricate lines or curves
- Disc sander Equipment that has an abrasive wheel for smoothing
- Pillar drill A piece of equipment for making holes



1. What is the purpose of an adjective?

It is a word which describes or modifies a noun.

'The corridor was clean and bright'

2. What is a complex sentence?

A complex sentence is made up of a main clause and then one or more dependent subordinate clauses.

'You can't persuade me to go to town, no matter how hard you try'

3. What is a time adverbial?

• Time adverbials are used to specify the timing of an action and they often answer questions like when, how often or how long.

'We are going on holiday tomorrow'

'We will be travelling for three days'

4. How do you use a semi-colon?

Semi-colons link two main clauses that are closely related.

'Hannah loves football; it's her favourite sport'

5. What is alliteration?

Alliteration is the repetition of an initial consonant sound in words.

'The gentle 'w' sounds in "whispering wind" 'The harsh 'r' sounds in "raging river rapids"

6. What is a simile?

A simile is a description that uses "like" or "as" to make a comparison.

'The snake moved like a ripple on a pond'

7. What is a compound sentence?

It is a sentence that has at least two independent clauses joined by a comma, semicolon or conjunction.

'The boy liked his bike and the boy liked his helmet'



1. How do you say 'hello' in French?

Bonjour

2. How do you say 'goodbye' in French?

Au revoir

3. How do you say 'how are you?' in French?

Ça-va?

4. What are the days of the week in French (Monday to Sunday in order?

Iundi, mardi, mercredi, jeudi, vendredi, samedi, dimanche

5. What are the months of the year in French (January to December in order)?

janvier, février, mars, avril, mai, juin, juillet, août, septembre, octobre, novembre, décembre

6. What are these colours in French? Red, blue, green, orange, black, yellow, grey, white?

Rouge, bleu, vert, orange, noir, jaune, gris, blanc

7. What are the numbers 1-10 in order, in French?

Un, deux, trois, quatre, cinq, six, sept, huit, neuf, dix



1. What are the five oceans?

Arctic, Atlantic, Indian, Pacific, Southern

2. What are the seven continents?

Africa, Asia, Antarctica, Europe, North America, South America, Oceania

3. What are the three types of geography?

Environmental, human, physical

4. What is used when trying to determine distance on a map?

Scale

5. What is used to find direction on a map?

Compass

6. What type of map shows borders of countries?

Political map

7. What type of map uses colours to show averages?

Choropleth map



1. What is a monarch?

The head of state, usually a king or queen

2. What is chronology?

The time order of dates or when events occurred

3. What is an empire?

A group of countries ruled over by one country

4. Who ruled Britain before the Anglo-Saxons?

The Romans

5. What does significant mean?

Something that is important or worthy of attention

6. What is the definition of consequences?

The result of something that has happened – positive or negative



1. What is perimeter?

The distance around the outside of a shape.

2. What is area?

The amount of space inside a shape.

3. Name four metric units of length

Millimetres, Centimetres, Metres, Kilometres

4. How many cm are in one metre?

100

5. How many mm are in one cm?

10

6. How many hours are in one day?

24

7. How many days are in one year?

365 (apart from a leap year which has 366)

8. How many minutes are in one hour?

60

9. How many seconds are in one minute?

60



1. What does Solo mean?

To play by oneself or on your own. One instrument or voice

2. What does duet mean?

To play/sing in a pair

3. What does tempo mean?

The speed of the music

4. What does pitch mean?

How high or low the notes are

5. What does improvise mean?

To make it up on the spot

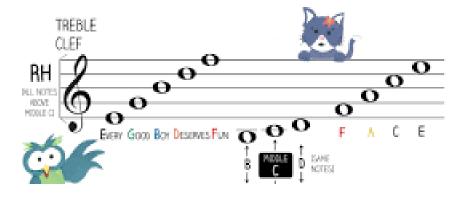
6. What is the role of the conductor?

To lead the orchestra

7. Musical genres include

- Pop
- Classical
- Rock
- Ra,
- County

8. Notes on the stave





1. Skills

Forehand

A shot hit from the racket-arm side of the body. Usually played as a one-handed shot. Hit the ball side on, creating a 'star' shape with your body and swinging with a low to high swing path.



Backhand

A stroke in which the ball is struck on the opposite side of the body to the racquet hand. A backhand shot is now more commonly hit with a two-handed grip, however some players



(Federer) will use a onehanded grip. Use the same technique as the forehand just from the other side of your body.

2. Scoring in Tennis

Scoring

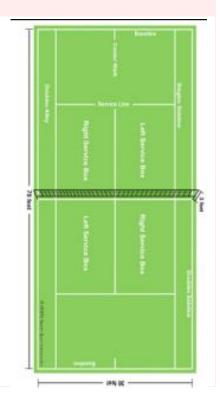
In scoring, a game is won by winning points, a set is won by winning games, and a match is won by winning sets

Point	
0	Love
1	15
2	30
3	40
4	Game
40-40	Deuce

Game: A sequence of points with the same player serving. To win a game a player must win at least 4 points but at this point have 2 more points than the opponent.

Set: A player must win at least six games to win a set.

Match: Usually a best of 3 sets win a match. In Grand Slams, men play best of 5 sets, all other formats are best of 3.





1. What is the difference between a vertebrate and an invertebrate?





Vertebrate: With a backbone

Invertebrate: No backbone

2. What is the circulatory system made up of?

- The heart pumps blood around the body.
- The **blood vessels** that carry the blood and oxygen.
- The **lungs** that give the blood oxygen.

3. Name two types of microorganisms:

Bacteria

Fungi

4. What is an ecosystem?

A group of animals, plants and microorganisms that live together

5. What do renewable and non-renewable mean?

- Renewable: Can be used again / won't run out.
- Non-renewable: Cannot be used again / will run out.

6. What are conductors and insulators?

- Conductors: Allow electricity to pass through the object.
- Insulators: Stop heat/electricity from passing through.

7. What is filtering used for?

To separate a solid (sand) from a liquid (water)

8. What do soluble and insoluble mean?

- Soluble: Will dissolve.
- Insoluble: Will not dissolve.

9. Name three magnetic materials.

Iron Nickel Cobalt

10. What does melting point and boiling point mean?

- Melting point: Solid turns into a liquid (melts)
- Boiling point: Liquid turns into a gas (boils / evaporates).



1. What should be included within a healthy balanced diet?

- Fruit and Vegetables
- Carbohydrates
- Protein

- Dairy
- Oils and spreads

2. How can getting enough sleep benefit us?

- Feel fresh, energised and focused
- Improves mental and emotional wellbeing
- Improves your ability to fight infections
- Repairs muscles and bones
- Improves learning and long-term memory

3. Who can you talk to if you are worried about your health?

Parents

Other family members

Friends

Teacher

Teaching Assistant

Doctor

4. List different feelings and emotions someone starting Year-7 may feel:

Excited

Anxious

Nervous

- Fearful
- Embarrassed
- Sad

5. List different types of relationships young people may have:

- Friendships
- Family relationships
- Romantic relationships
- Online relationships

6. What is peer pressure?

Pressure from friends and peers to behave or do things in a certain way

7. What does democracy mean?

When people have a say in how their country if run.



1. How do you use a needle and thread?

Thread the needle by inserting the thread through the eye and tie a knot at the end.



2. How do you sew on buttons:

To sew on buttons, pass the needle through the buttonholes and fabric several times, securing it with a knot underneath.



3. What are fabric scissors, rulers and pin cushions for?





Fabric Scissors

Use fabric scissors only for fabric and cut away from your body.

Pin Cushions

Pins and pin cushions hold fabric pieces together.

Rulers

Rulers and tape measures ensure accurate cutting and shaping.

4. How can you stay safe when in Textiles?

- Use scissors and needles carefully to avoid injury.
- Keep the workspace clean and wash hands before and after handling fabrics.
- Properly store tools and materials to maintain safety and organization.