



















Stafford Manor High School

Year 11 Spring Term 2

Core Knowledge

-  Art
-  Biology
-  Business
-  Chemistry
-  Design Technology
-  English
-  French
-  Geography
-  History
-  Information Technology
-  Maths
-  Performing Arts
-  PE
-  Physics
-  SEL
-  Textiles



1. Describe why presentation is important.

- ❖ How we present work can demonstrate professionalism.
- ❖ We present our analysis in a way that is appropriate for the different medias used.

2. What must be included in a successful record board?

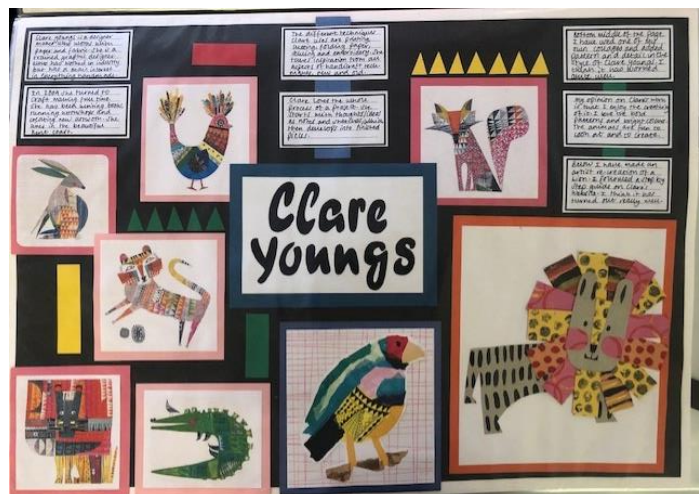
- ❖ A title of the relevant board.
- ❖ A selection of at least x5 high quality drawings in different medias.
- ❖ Annotations based on the drawings. Always using the guidance booklet to assist you.

3. Why is it important to analyse artists?

- ❖ We write and learn about artists so we can better understand the world of art and learn from what others have done.

4. What must be 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.



5. Key word definitions:

- ❖ **Composition:** How different elements are combined.
- ❖ **Contemporary:** Art made today by living artists.
- ❖ **Contour:** the artist outlines the shape / mass of an object.
- ❖ **Curling:** Strips of paper that are rolled/looped to create shapes
- ❖ **Geometric:** Using shapes to create a piece of art
- ❖ **Overlapping:** Placing objects over one another to create depth.
- ❖ **Perspective:** Gives art a 3D look.
- ❖ **Realistic:** Subjects painted from everyday life.
- ❖ **Shading:** Darkening of a drawing to show depth.
- ❖ **Soft edged:** Indicates a gradual or smooth transition.
- ❖ **Symmetry:** Involves mirroring of portions of an image.

BIOLOGY

What are light and electron microscopes?

- 🔬 **Light** microscopes use 2 **lenses** (eyepiece & objective) and light to magnify cells, tissues and large sub-cellular structures.
- 🔬 Scanning (3D) and Transition (2D) **electron** microscopes have a much greater **magnification** & **resolution** (the smallest distance between 2 points which can still be seen as two points).

What are eukaryotic and prokaryotic cells?

- 🔬 **Eukaryotic** animal and plant cells: have a **nucleus** and bigger.
- 🔬 **Prokaryotic** bacterial cells: no nucleus and **smaller**.

What are the functions of sub-cellular structures?

- 🔬 **Nucleus**: contain genes that control cell activity [**animal & plant**]
- 🔬 **Cytoplasm**: where cell reactions happen [**animal & plant & bacteria**]
- 🔬 **Membrane**: controls what enters & leaves [**animal & plant & bacteria**]
- 🔬 **Mitochondria**: where respiration releases energy [**animal & plant**]
- 🔬 **Ribosomes**: where proteins are made [**animal & plant & bacteria**]
- 🔬 **Chloroplasts**: site of photosynthesis [**plant**]
- 🔬 **Vacuole**: stores cell sap for cell structure [**plant**]
- 🔬 **Wall**: for structure and support [**plant & bacteria**]

Microscopes core practical – how can we view cells?

- 🔬 Place slide on stage and look through eyepiece lens → start with the lowest objective lens magnification → turn the focus wheel to obtain a clear image → increase the objective lens magnification and refocus.
- 🔬 **Stains** make parts visible: plant cells: **iodine**; animal cells: **methyl blue**.
- 🔬 Magnification = Image Size ÷ Actual Size.

What are specialised animal cell functions and adaptations?

- 🔬 **Sperm cell** fertilises egg cell: acrosome enzyme, haploid nucleus, tail.
- 🔬 **Egg cell** develops into fetus: nutrients in cytoplasm, haploid nucleus.
- 🔬 **Ciliated cells** carry mucus: cilia to waft.
- 🔬 **Red blood cells** carry oxygen: contain haemoglobin but no nucleus.

What are specialised plant cell functions and adaptations??

- 🔬 **Root hair cell** absorbs water & minerals: large surface membrane and many mitochondria for energy.
- 🔬 **Xylem cells** transports water: hollow with lignin deposits.
- 🔬 **Phloem cells** sieve cells with holes allow movement and companion cells with mitochondria for energy.

What are the quantitative units of cell biology?

- 🔬 Milli = 10^{-3} Micro = 10^{-6} Nano = 10^{-9} Pico = 10^{-12}

BUSINESS

1. What are the four types of organisation chart?

Tall hierarchical
Flat
Centralised
Decentralised

2. What are the three types of communication method?

Verbal – meetings, telephone, online conferences
Written – letters, reports, posters
Digital – email, text, social media

3. What are the barriers to communication?

Verbal – language not understood, accent not understood, speaking too fast or too slow
Written – illegible handwriting, poor spelling and grammar, poor font choice

4. What are the three main types of employment?

Full-time
Part-time
Flexible Hours

5. What are the benefits of a full-time or part-time contract?

- Stable earnings and high degree of job security
- Regular contributions towards pension
- Likely to receive holiday and sick pay, providing more security
- More likely to be sent on training courses to improve skills

6. What are the five main job roles in a large business?

- Directors
- Senior Managers
- Supervisors / team leaders / junior managers
- Operational staff
- Support staff

7. Why should you train staff?

Motivate staff therefore improve retention
Introduction of new technology or working practices

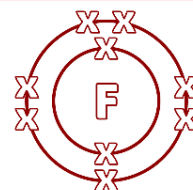
CHEMISTRY

1. How do you 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)

2. How do you draw/write the electronic configuration?

- 🌀 **Electrons:** The smallest number (the atomic number)
- 🌀 **1st shell:** Can contain 2 electrons.
- 🌀 **2nd shell+:** Can contain 8 electrons.



3. What is the charge and mass of protons, neutrons, and electrons?

- 🌀 **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 **0.005 (almost 0)**.

4. What do the group and period tell us?

- 🌀 **Group:** The total number of electrons in the **outer shell**.
- 🌀 **Period:** The total number of **shells** in an atom.

5. What is an isotope?

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

6. Similarities and differences between Mendeleev's Periodic Table and ours.

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

7. Why did Mendeleev leave gaps?

- 🌀 If the elements in a group didn't match up, Mendeleev would **swap** the elements or **leave gaps**.
- 🌀 Mendeleev left gaps because elements **hadn't been discovered** yet.

DESIGN TECHNOLOGY



1. What is a design process?

- 🔧 **Design Brief:** A document outlining design project requirements and constraints.
- 🔧 **Research:** Gathering information and inspiration for a problem.
- 🔧 **Specification:** A detailed list of product requirements.

2. What are materials and properties?

- 🔧 **Properties:** Material characteristics like strength, flexibility, and conductivity.
- 🔧 **Sustainability:** Considering the environmental impact of materials and processes.
- 🔧 **Composite Materials:** Materials made from two or more different types of material.

3. What is a manufacturing process?

- 🔧 **Casting:** Forming materials by pouring them into moulds.
- 🔧 **Machining:** Shaping materials through cutting, milling, or drilling.
- 🔧 **Joining:** Connecting materials using welding, soldering, or gluing.

4. What do CAD and CAM mean?

- 🔧 **CAD:** Using computer software for designing products.
- 🔧 **CAM:** Using computer-controlled machinery for manufacturing.

5. What do ergonomics and anthropometrics mean?

- 🔧 **Ergonomics:** Designs to suit the human body and its movements.
- 🔧 **Anthropometrics:** Study of the measurements and proportions of the human body.

6. What is quality control and assurance?

- 🔧 **Quality Control:** Ensuring products meet specified standards.
- 🔧 **Quality Assurance:** Systems to prevent defects in manufacturing.

7. How can we stay safe in a DT lab?

- 🔧 **Risk Assessment:** Evaluating potential hazards and taking measures to minimize risks.
- 🔧 **PPE:** Gear worn to protect against workplace hazards.

8. What does sustainability mean?

- 🔧 **Renewable Resources:** Resources that can be replaced naturally.
- 🔧 **Life Cycle Analysis:** Assessing the environmental impact of a product from raw material extraction to disposal.

9. What does 'prototype and testing' mean?

- 🔧 **Prototyping:** Creating a preliminary model or sample of a product.
- 🔧 **Testing:** Evaluating the functionality, durability, and performance of a product.

ENGLISH LANGUAGE

1. How long is each English Language exam?

- 🔗 1 hr 45 minutes

2. What is a metaphor?

- 🔗 A metaphor is a figure of speech that implicitly compares two unrelated things, typically by stating that one thing is another. E.g. 'That chef is a magician'

3. List two rules for using a semi-colon

- 🔗 1. Use semicolons to connect related independent clauses. E.g. 'I ordered a cheeseburger for lunch; life's too short for counting calories.'
- 🔗 2. You can use semicolons to divide the items of a list if the items are long or contain internal punctuation. E.g 'I need the weather statistics for the following cities: London, England; London, Ontario; Paris, France; Paris, Ontario; and Perth, Scotland.'

4. What do you understand by the term 'writer's perspective'?

- 🔗 Perspective – the writer's outlook. A writer's perspective will be shaped by their experiences and outlook – the lens through which they see the world.

5. What do you understand by the term 'format'?

- 🔗 The conventions of writing for a particular form. For example, an article would have a headline and sub-headings.

ENGLISH LITERATURE

1. What does the term 'Hamartia' mean?

- 🔗 A fatal flaw leading to the downfall of a tragic hero

2. What vision does Macbeth have before killing Duncan?

- 🔗 A floating dagger pointing towards Duncan's chamber

3. Macbeth visits the witches again in Act 4. Name the 3 apparitions they show him

- 🔗 1. A floating head
- 🔗 2. A bloody child
- 🔗 3. A child wearing a crown holding a tree

4. Define the term 'Hubris'?

- 🔗 Excessive pride or self-confidence

FRENCH

1. What are these in English? Le bulletin; le cours; la cour ; les devoirs ; le directeur / la directrice ; l'élève

🔗 School report; lesson; playground; homework; headteacher; pupil

2. What are these in English? La matière; le / la prof (le professeur / la professeure) ; la récré ; la pause-déjeuner

🔗 Subject ; high school teacher ; break ; lunch time

3. What are these in English? L'emploi du temps; en sixième ; en seconde ; le trajet

🔗 Timetable ; in year 7 ; in year 11 ; journey (short)

4. What are these subjects in English? L'informatique; la chimie; le dessin; l'EPS ; les langues

🔗 Computing ; chemistry ; art ; PE ; languages

5. What are these nouns in English? Le car de ramassage; le bruit ; l'ambiance ; l'inconvénient ; l'intimidation ; la mode

🔗 School bus ; noise ; atmosphere ; disadvantage; bullying; fashion

6. What are these verbs (in the infinitive) in English? Avoir raison; avoir tort; faire attention ; passer l'examen

🔗 To be right ; to be wrong ; to pay attention ; to sit an exam

7. What are these adjectives in English? Bien équipé; faux; vrai; pire; tôt ; en retard ; propre ; sale

🔗 Well-equipped ; false ; true ; worse ; early ; late; clean; dirty

8. What are the future endings for je, tu, il/elle/ on, nous, vous, Ils/elles which you add to the infinitive ?

🔗 Je = ai; tu = as; il / elle/ on = a ; nous = ons ; vous = ez ; ils /elles – ont (eg je travaillerai)

9. What are the future conditional endings for je, tu, il/elle/ on, nous, vous, Ils/elles which you add to the infinitive ?

🔗 Je = ais; tu = ais; il / elle/ on = ait ; nous = ions ; vous = iez ; ils /elles – aient (eg je travaillerais)

10. What are the irregular stems for these verbs in the future and future conditional tenses? Aller; faire; être; avoir; vouloir; devenir

🔗 Ir ; fer ; ser ; aur ; voudr ; deviendr (eg je voudrais)

GEOGRAPHY

1. Describe how population pyramids help to understand development.

- The dependency ratio
- Population demographic of countries
- Gender life expectancy

2. What is a science park?

- A group of scientific and technical knowledge-based businesses located on a single site.
- Most are associated with universities, enabling them to use research facilities and employ skilled graduates.

3. Explain the theory of continental drift.

- Tectonic plates
- Pangea
- convection currents
- slab-pull theory.

4. Describe the primary and secondary effects of the Haiti and Kobe earthquakes.

- Death toll.
- Injured.
- Buildings destroyed.
- Schools destroyed. Hospitals destroyed.
- Homeless.
- Destroyed infrastructure.

5. What is fetch?

- The distance the wind blows across the water

6. What examples of hard engineering?

- Sea wall
- Rock armour
- Gabions
- Groynes

7. Define a river.

- A large natural stream of water flowing in a channel to the sea or a lake.

HEALTH & SOCIAL CARE

1. Aspects of health that can be measured include:

- Temperature
- Height/weight
- Blood pressure
- Cholesterol levels
- Blood glucose
- Liver function
- Resting pulse and recovery pulse rates
- Waist-to-hip ratio

2. The average resting pulse rate is?

- 60 – 100 bpm (beats per minute)

3. High blood pressure is caused by:

- Being overweight
- Smoking
- Eating too much salt
- Drinking too much caffeine
- Being aged 65 or over
- Not getting enough exercise or sleep
- Being African or Caribbean descent
- Having a relative with high blood pressure
- Not eating enough fruit and vegetables

4. How is BMI calculated

- BMI is worked out using a formula, which divides an adult's weight in kilograms by their height in metres squared.

$$\text{BMI} = \frac{\text{Weight in kilogram}}{(\text{Height in meter})^2}$$

5. How is BMI categorised?

BMI	Meaning
Less than 18.5	Underweight
Between 18.5 and 24.9	Healthy weight
Between 25 and 29.9	Overweight
Between 30 and 39.9	Obese
40 and above	Severely obese

6. Published guidelines to support practitioners to interpret lifestyle data are?

- The Eatwell Guide (Nutrition)
- UK Chief Medical Officers' Physical Activity Guidelines
- UK Chief Medical Officers' Smoking Guidelines
- UK Chief Medical Officers' Alcohol Guidelines

HISTORY

1. Who ran the machinery of terror?

- 🚫 Heinrich Himmler

2. What was the SD?

- 🚫 Nazi Secret Service

3. When did Himmler become Chief of Police?

- 🚫 1936

4. How did the Nazi change the justice system?

- 🚫 Judges didn't have to be fair and unbiased.
- 🚫 Death sentences increased
- 🚫 No trials by jury

5. Who ran the machinery of propaganda?

- 🚫 Joseph Goebbels

6. What were the different types of Nazi Propaganda?

- 🚫 Posters
- 🚫 Newspapers
- 🚫 Radio
- 🚫 Rallies
- 🚫 Film
- 🚫 Berlin Olympics

7. Who were the left-wing opposition?

- 🚫 Social Democrats
- 🚫 Communists

8. What was the Reich Church?

- 🚫 A Protestant church that accepted Nazi ideas

9. Which group of religious dissenters openly opposed the Nazis?

- 🚫 Jehovah's witnesses

10. Who were the Swing Kids?

- 🚫 A group of young people who listened to jazz, liked to dance and talked openly

11. Who were the Edelweiss Pirates?

- 🚫 A youth group that wore Edelweiss flowers and resisted Nazi rule

INFORMATION TECHNOLOGY

Revision from Year 10

1. What is a storage device?

- A device that saves and keeps data.
- They can be internal or external
- Examples: hard disk drive, dvd, solid state storage, cloud

2. What are the basic internal components of a computer?

- Motherboard
- Network interface card
- Sound card
- Graphics card
- CPU (Central Processing Unit)
- Ports

3. Why is good quality data important?

Poor quality data can lead to incorrect conclusions, poor decision-making, and significant risks.

On the other hand, high-quality data enables businesses to make accurate insights, improve decision-making, reduce risks, save costs, improve the customer experience, and comply with regulatory requirements

4. What are the advantages of using ICT to store data?

- Security
- Automatic Backups
- Better accessibility
- Disaster Recovery
- Easy Sharing

5. What are the disadvantages of using ICT to store data?

- Network connection required if working in different locations
- Additional costs

6. What are the advantages and disadvantages of cloud computing over in-house servers

+ cost: storage can be adjusted based on how much you need, so that you only pay for what you need.

+ space: cloud storage requires little to no physical space

- performance: cloud storage relies on an Internet connection, without one may not be able to access your files

MATHS

1. Key word definitions:

- 🌀 **Index:** Another word for power
- 🌀 **Consecutive:** Numbers that follow each other on the number line

2. What are congruent shapes?

Shapes that are exactly the same. (they may be rotated or reflected).

3. What are similar shapes?

When a shape is enlarged, the result is a similar shape.

4. What are the four conditions for unique triangles?

ASA, SAS, SSS, RHS

5. What are the four power facts?

$$n^0 = 1$$

$$n^1 = n$$

$$n^{-1} = \frac{1}{n}$$

$$n^{-2} = \frac{1}{n^2}$$

6. What is standard form?

Standard form is a way of writing very big or very small numbers.

7. What are the three parts to a number written in standard form?

$$A \times 10^n$$

Where A is any number between 1 and 10.

8. How do you add or subtract numbers in standard form?

Convert back to ordinary form first, then add or subtract as normal.

9. How do you multiply numbers in standard form?

Rearrange the order of the calculation. Calculate the numbers first, then use the index laws on the powers of ten.



1. What is a linear narrative in music videos?

- A narrative that works in one line or strand. The narrative works from start to finish and tells the story in one sitting without interruptions from the past or future

2. What is non-linear narrative in music videos?

- Non-linear means there are interruptions in between, at the start or at the end of the music video.

3. What are semiotic codes in the study of media products?

- Semiotics means the study of signs and symbols and how to interpret their meaning. It is a vital skill in Media Studies as there are so many meanings built into media products.

4. Name 3 audience types from Young and Rubicam Audience Classification

- The Aspirer
- The Mainstreamer
- The Resigned
- The Succeeder
- The Struggler
- The Reformer
- The Explorer

5. What are social media codes and conventions?

- Verbal Language
- Visual Language
- Hypertext use
- Use of brand image

PERFORMING ARTS

1. Task 3- Performance of Devised piece in groups (18 Marks)

When preparing for a performance in drama, there are several key aspects to consider to ensure a successful and engaging presentation. Here are some important factors to keep in mind:

1. Character Development:

Develop a deep understanding of your character's background, motivations, and relationships for convincing portrayal.

2. Script Analysis:

Thoroughly analyse the script to grasp plot nuances, themes, and your character's role in the story. Consider scene context and character journey.

3. Objective and Motivation:

Clearly define your character's objectives and motivations in each scene to embody them authentically.

4. Emotional Connection:

Connect emotionally with your character, conveying genuine emotions for enhanced impact.

5. Physicality and Movement:

Pay attention to physicality and movement on stage, expressing emotions and conveying character traits through gestures and navigation.

6. Voice and Diction:

Work on vocal skills for clear, audible, and expressive dialogue delivery. Focus on diction, pitch, tone, and pacing.

7. Rehearsal Etiquette:

Be punctual and committed during rehearsals, respecting the director's vision and using feedback for improvement.

8. Blocking and Stage Movement:

Understand and follow blocking as directed by the director, practicing and refining stage movements for smooth transitions.

9. Costume and Makeup:

Pay attention to costume and makeup details to align with your character's traits and the production's aesthetic.

10. Audience Awareness:

Be aware of the audience and adjust performance based on their reactions, while staying true to the director's vision.

2. Task 4- Evaluation- You have to write 800 words about your performance. (12 Marks)

When writing a drama evaluation, it's important to provide a thoughtful and comprehensive analysis of the performance you witnessed. Here are some key elements to include in your evaluation:

1. Introduction:

Provide a brief introduction including the play's title, playwright, director, and performance date. • Mention the venue and relevant contextual information about the production.

2. Synopsis:

Offer a concise summary of the plot or main events without major spoilers.

3. Setting and Atmosphere:

Evaluate the effectiveness of setting and atmosphere, considering lighting, set design, and sound effects.

4. Characters:

Analyse character development, complexity, and believability. Discuss actors' performances, highlighting strengths and weaknesses.

5. Technical Elements:

Assess technical aspects like lighting, sound, costumes, and set design.

Comment on their contribution to the overall effectiveness of the production.

6. Themes and Messages:

Explore presented themes and discuss their conveyance.

Consider any messages or social commentary addressed in the play.

7. Audience Engagement:

Reflect on how well the performance engaged the audience, noting moments of tension, humour, or emotional impact.

Comment on the audience's reaction and participation.

8. Comparison with Source Material:

If an adaptation, compare it to the original source material.

Discuss faithfulness and any creative liberties taken.

9. Overall Impression:

Summarize your overall impression of the play.

Highlight compelling or noteworthy aspects and suggest areas for improvement.

10. Conclusion:

Conclude with a final thought or recommendation.

State whether you would recommend the play and provide reasons.

PHYSICAL EDUCATION

1. Ethical Issues

Sportsmanship	Gamesmanship
<p>Sportsmanship is the sporting behaviour you would like to see in sport. Performers display good conduct and do not try to win by unfair means</p> <p>Sportsmanship examples:</p> <ul style="list-style-type: none"> • Shows respect to their opponents and officials • Shakes hands with opponents • Kicking the ball out of play if an opponent is injured • Being honest if the ball is out or if they break a rule <p>Sportsmanship creates:</p> <ul style="list-style-type: none"> • Good role models • Positive image for the sport • Satisfaction to know you have won honestly 	<p>Gamesmanship is the type of behaviour that you should not see from performers in sport. It is bending the rules (not breaking them) to gain an unfair advantage</p> <p>Gamesmanship examples:</p> <ul style="list-style-type: none"> • Playing for time if winning • Entering a weaker team if the following match is more important • Sledging in cricket <p>Gamesmanship creates:</p> <ul style="list-style-type: none"> • Bad role models • Negative image for the sport • Dissatisfaction to know you have won due to an unfair advantage

2. Deviance in Sport

Deviance in Sport	
What is it?	<p>It is unacceptable behaviour and is against the rules in sport, examples include:</p> <ul style="list-style-type: none"> • Cheating • Taking performance enhancing drugs • Violence • Match fixing • Racism • Sexism
Why do people do it?	<p>Even though it is against the rules some performers use deviant behaviour to try to win by all means, examples are:</p> <p>For prizes, fame, sponsorship, money, promotion, pressure from coaches</p>
What are the consequences?	<p>Deviant performers hope not to get caught, but there are consequences for breaking rules, examples are:</p> <ul style="list-style-type: none"> • Red card/being sent off • Fines • Loss of sponsors/reputation • Prison
What is done to prevent it?	<p>Deviance is cheating and is unacceptable behaviour. Sporting organisations try to stop it and encourage fair play, examples include:</p> <ul style="list-style-type: none"> • Random drug testing • Campaigns such as, anti-racism & anti-drug • Fair play awards <ul style="list-style-type: none"> ▪ UEFA Respect Fair Play Rankings ▪ FA Respect and Fair Play Awards

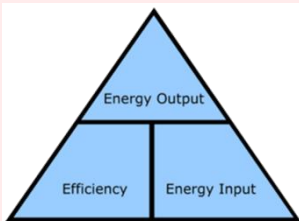
PHYSICS

1. What are the eight energy stores?

- Energy allows work to be done, it has **8** different stores (types)
- Energy is measured in **joules (J)**

Thermal	The hotter an object, the more thermal energy it stores	Today Kids Can Easily Memorise GCSE Energy Names
Kinetic	Any moving object has a kinetic energy store	
Chemical	Can release energy through a chemical reaction (e.g. fuels, foods)	
Elastic	Anything stretched or compressed (e.g. elastic band or spring)	
Magnetic	In two magnets that are attracting or repelling	
Gravitational	Due to an objects position within a gravitational field	
Electrostatic	In two electric charges that are attracting or repelling	
Nuclear	Released from the nucleus (e.g. decay, fission or fusion)	

2. What is the conservation of energy?



- The **conservation of energy** tells us that: energy cannot be made or destroyed, it can only be transferred between stores

$$\text{Efficiency} = \frac{\text{useful energy transferred by device}}{\text{total energy supplied to device}}$$

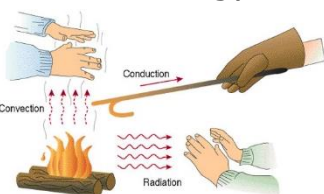
- To improve efficiency- reduce the amount of energy wasted.

- To **reduce** the amount of **energy wasted**- use **insulation** to reduce heat loss or use a **lubricant** to reduce friction.

3. How can heat energy be transferred?

- Heat energy can be transferred from one place to another through

Conduction, convection or radiation



- Insulators** are poor conductors, using insulation slows down the rate of energy transfer to the surroundings.

4. How can the amount of energy stored be calculated?

- Gravitational potential energy (GPE) is stored in raised objects

$$\text{GPE (J)} = \text{mass (kg)} \times \text{gravitational field strength (N/kg)} \times \text{change in height (m)}$$

- Kinetic energy (KE) is stored in moving objects.

$$\text{KE (J)} = \frac{1}{2} \text{mass (kg)} \times \text{velocity}^2 \text{ (m/s)}$$

5. How are non-renewable energy resources used?

- Fossil fuels** (coal, oil and gas) & **nuclear** are non-renewable
- Advantages:** they are a **reliable** source of energy, fairly **cheap** to use and they provide a **lot of energy**
- Disadvantages:** They are **running out**, fossil fuels **produce carbon dioxide**, nuclear power produces **radioactive waste**.

6. How are renewable energy resources used?

- Solar power, wind power, hydroelectric, geothermal and biomass are all examples of renewable energy resources.
- Advantages:** they **will not run out**, they **do not produce carbon dioxide** (biofuels are carbon neutral).
- Disadvantages:** In general they are **not reliable** and **do not produce enough energy** to meet our demands.

TEXTILES

1. What should be included in your Artist information pages?

For Assessment object 1, (Artist research) you need to show the moderator you understand the work of Artists and that you can interpret the work and recreate your own Art based on them as inspiration.

2. What is a source

A source can be absolutely ANYTHING you are inspired by! Below is an example of different sources you might include in your sketchbook:

- 🌀 **A Theme Mind Map** – Mind map all the things you can think of relating to your topic! Include images if you want to.
- 🌀 **Mood Board** – Collect images linked to your theme into a moodboard – annotate keywords about the images / theme.
- 🌀 **Artist / Designer Analysis** – Look at an existing artist or designer and complete an analysis of their work
- 🌀 **Take your own photographs** – You can use your own photos as a source of inspiration! Annotate them explaining how they link to your theme.

3. How to analyse a Textile Artist

- 🌀 Introduce the work of your designer or artist (**key facts only**), **how** does their work fit into trends at the time it was produced or current trends?
- 🌀 Are there any social, environmental, moral, issues surrounding your designers work?
- 🌀 Consider **what** key features appear regularly in your designers work, **why** might that be?
- 🌀 **What** colours do they use a lot of? **What** effect does this give?
- 🌀 **Who** do you think their designs are aimed at? **Why**?
- 🌀 Explain what you like / dislike about the designs and **why** that is.
- 🌀 **What** techniques has the designer used? **Why**? Could different techniques be used to create different effects?
- 🌀 **How** will this designer inspire your work? **How** does the designer fit into the theme? **What** techniques will you sample? **Why**?

4. How do you annotate a design?

- 🌀 What textile techniques have you used in your designs? Why?
- 🌀 How does it link to the samples you have done?
- 🌀 Is your design inspired by any of your sources? How? Why?
- 🌀 What materials would you use? Why?
- 🌀 How does this design link to your theme?
- 🌀 What developments would you make to your designs? Why?

5. Key words:

Composition

- Background
- Perspective
- Proportion
- Symmetry
- Space
- Scale
- Foreground
- Design
- Decorative
- Eye-Line
- Focus
- Blurred

Drawing

- Tone
- Line
- Texture
- Pattern
- Shading
- Contour
- Positive
- Negative
- Observational
- 2D and 3D
- Figurative
- Shape

Descriptive

- Unrealistic
- Realistic
- Colourful
- Bright
- Linear
- Rounded
- Soft edged
- Motion
- Messy
- Organised
- Liquid
- Geometric

Verbs

- Construct
- Prepare
- Manipulate
- Improve
- Criticize
- Examine
- Inspect
- Practice
- Demonstrate
- Engage
- Relate
- Interpret

Assessment Objective 1 A01 (Artist Research)

For Assessment object 1, (Artist research) you need to show the moderator you understand the work of Artists and that you can interpret the work and recreate your own Art based on them as inspiration.

