Year 7 Homework Booklet Half term 5 2024

Contents

English

The Watercress Girl, from London Labour and the London Poor, by Henry Mayhew (1812-1887)

The writer Henry Mayhew wanted to keep a factual record of the people who lived in London during Victorian times, so he spent years interviewing and writing about the people who lived and worked on the streets.

The little watercress girl who gave me the following statement, although only eight years of age, had entirely lost all childish ways, and was, indeed, in thoughts and manner, a woman. There was something cruelly pathetic in hearing this infant, so young that her features had scarcely formed themselves, talking of the bitterest struggles of life. I did not know how to talk with her. At first I treated her as a child, speaking on childish subjects; so that I might, by being familiar with her, remove all shyness, and get her to narrate her life freely. I asked her about her toys and her games with her companions; but the look of amazement that answered me soon put an end to any attempt at fun on my part. I then talked to her about the parks, and whether she ever went to them. "The parks!" she replied in wonder, "where are they?" I explained to her, telling her that they were large open places with green grass and tall trees, where beautiful carriages drove about, and people walked for pleasure, and children played. Her eyes brightened up a little as I spoke; and she asked, half doubtingly, "Would they let such as me go there-- just to look?" Her little face, pale and thin with privation1 , was wrinkled where the dimples ought to have been, and she would sigh frequently.

The poor child, although the weather was severe, was dressed in a thin cotton gown, with a threadbare2 shawl3 wrapped round her shoulders. She wore no covering to her head, and the long rusty hair stood out in all directions. When she walked she shuffled along, for fear that the large carpet slippers that served her for shoes should slip off her feet.

"I go about the streets with water-cress, crying, 'Four bunches a penny, water-cress.' I am just eight years old--that's all, and I've a big sister, and a brother and a sister younger than I am. On and off, I've been very near a twelvemonth in the streets. Before that, I had to take care of a baby for my aunt. No, it wasn't heavy--it was only two months old; but I minded it for ever such a time--till it could walk. It was a very nice little baby, not a very pretty one; but, if I touched it under the chin, it would laugh. My mother learned me to needle-work and to knit when I was about five. I used to go to school, too; but I wasn't there long. I've forgot all about it now, it's such a time ago; and mother took me away because the master whacked me. I didn't like him at all. What do you think? he hit me three times, ever so hard, across the face with his cane; and when mother saw the marks on my cheek, she went to confront him, but she couldn't see him--he was afraid. That's why I left school.

Glossary:
 privation1 – not enough food or water to nourish her.
threadbare2 – clothing that is old and worn out.
shawl3 – an item of clothing that is worn over the shoulders.

Week One:

Sketch the watercress girl.
Label your sketch with 3-5 quotations from the text above.

Week Two:
Read the Watercress Girl by Henry Mayhew and answer the following comprehension questions:

1. How old is the watercress girl?
2. What was she wearing?
3. What is her job?
4. Why doesn't she go to school?
5. Where does she live and where did she work before?

Week Three:
Read the Watercress Girl by Henry Mayhew. Write a summary of the article and include the following key words:

- Watercress girl
- Victorian
- Poverty
- Childhood

Week Four:
Vocabulary. Put the three words from the glossary into your own sentences.
privation1 – not enough food or water to nourish her.
threadbare2 – clothing that is old and worn out.
shawl3 – an item of clothing that is worn over the shoulders.

Week Five:

Creative writing task. Write a description, from the point of view of the Watercress Girl, of a park in Victorian London. Include sensory descriptions and imagine how the girl would feel in the park.

Remember to:

- Vary paragraph and sentence lengths.
- Vary punctuation - ; ( ) ... !
- Use sophisticated vocabulary.
- Use a variety of language techniques (Alliteration, tripartite (power of three), hyperbole, metaphors, pathetic fallacy, similes, imagery, sibilance, themes, mood, personification, narrative shift, foreshadowing, symbolism) etc.

Maths

NGA Maths Homework Page

BLAISE PASCAL

Blaise Pascal (1623 – 1662) was a very influential French mathematician and philosopher who contributed to many areas of mathematics.

At a tender age of 12, Pascal began participating in the meetings of a mathematical academy, despite not being taught mathematics by his father Pascal Sr. This increased the curiosity of young who went on to experiment with geometrical figures, even formulating his own names for standard geometrical terms.
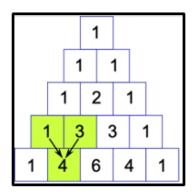
He also studied the Pascal Triangle, making many new mathematical observations. This is a triangle where each number is the sum of the two directly above it. The triangle was used to prove Pascal's Identity. This is a useful theorem when dealing with expanding binomial ('two term') expressions. His work "Traité du triangle arithmétique'" ("Treatise on the Arithmetical Triangle") was published in 1653.

In 1654, Pascal began corresponding with mathematician Pierre de Fermat. He conducted experiments with dice and discovered that there was a fixed likelihood of a particular outcome. This was the beginning of the field of probability. Fermat and Pascal are today recognized as the co-founders of probability theory.

Questions

1) How old was Pascal when his paper on Pascal's Triangle (Traité du triangle arithmetiqué)?

2) To build Pascal's triangle, start with "1" at the top, then continue placing numbers below it in a triangular pattern. Each number is the numbers directly above it added together.

What would be the numbers present on the 8th row?

3) What do you notice about the diagonal patterns created from the triangle?

4) What do you notice about the horizontal sums of the triangle – is there a pattern to this?

Science

The Size of The Earth

Carl Sagan tells us how an ancient Egyptian calculated the size of the Earth with a stick.

The was once a time when our small planet seemed immense, when it was the only world we could explore. It's true size was first worked out in a simple and ingenious way by a man who live in Egypt in the third century B.C. In Alexandria at that time there lived a man named Eratosthenes. One of his envious contempories called him beta (the second letter of the greek alphabet) because Eratosthenes was second best in the world at everything, but it seems clear that in many fields Eratosthenes was alpha. He was an astronomer, historian, geographer, philosopher, poet, theatre critic and mathmetician. He was also the chief librarian at the great library of Alexandria and one day while reading a papyrus book in the library he came across a curious account.

Sun Cast No Shadows

Far to the south, he read, at the frontier outpost of Seyene something notable could be seen on the longest day of the year. On June 21st the shadows of a temple column or vertical stick would grow shorter as noon approached and as the hours crept towards midday the sun's rays would slither down the sides of a deep well which on other days would remain in shadow. Then at precisely noon, the columns would cast no shadows and the sun would shine directly down into the water of the well. At that moment the sun was exactly overhead. It was an observation that someone else might easily have ignored - sticks, shadows, reflections in wells, the position of the sun – simple everyday matters of what possible importance might they be? But Eratosthenes was a scientist and his contemplation of these homely matters changed the world, in a way, made the world. Because Eratosthenes has the presence of mind to experiment, to actually ask whether back in Alexandria did a stick cast a shadow near noon on June 21st? And it turns out, sticks do.

Carl Sagan-globular Earth
Deduced By Eratosthenes

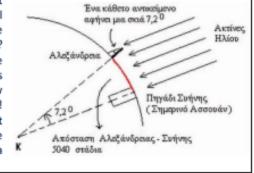## A Curious Mind and A Simple Experiment

An overly skeptical person might have said that the report from Seyene was an error – but it's an absolutely straight forward observation – why would anyone lie on such a trivial matter? Eratosthenes asked himself how it could be that at the same moment a stick in Seyene would cast no shadow and a stick in Alexandria, 800km to the north would cast a very definite shadow? On the left is a map of ancient Eygpt with two sticks or Obelisks one in Alexandria and one down here in Seyene, now if at a certain moment each stick casts no shadow at all that is perfectly easy to understand, provided the Earth is flat, if the shadow at Seyene is a certain length and the shadow at Alexandria is the same length then that also makes sense on a flat Earth. But how could it be, Eratosthenes asked, that at the same instant there was no shadow at Seyene and a very substantial shadow at Alexandria? The answer was that the surface of the Earth is curved. Not only that, but that the greater the curvature, the greater the difference in the lengths of the shadows.

Simple Trigonometry

The sun is so far away that the rays are parallel when they reach the Earth. Sticks at different angles to the sun's rays will cast shadows of different lengths. For the observed difference in these shadow lengths the distance between Alexandria and Syene had to be about 7° along the surface of the Earth. By that I mean image the sticks extending all the way down to the centre of the earth they would there intersect at an angle of about 7°. Well 7° is something like 1/50th of the full circumference of the Earth (360°). Eratosthenes knew the distance between Alexandria and Seyene – he knew it was 800km – why? Because he hired a man to pace out the entire distance so that he could perform the calculation we're talking about. Now 800km x 50 is 40,000km so that must be the circumference of the Earth. That's how far it is to go once around the Earth. That's the right answer! Eratosthenes' only tools were sticks, eyes, feet and brains plus a zest for experiment. With those tools he correctly deduced the circumference of the earth to high precision with an error of only a few percent. That's pretty good figuring for 2200 years ago!

Ένα κάθετο αντικείμενο αφήνει μια σκιά 7,2⁰

Ακτίνες Ηλίου

Αλεξάνδρεια

7,2⁰

Πηγάδι Συήνης (Σημερινό Ασσουάν)

Απόσταση Αλεξάνδρειας - Συήνης 5040 στάδια

Κ

Comprehension and Reflection Questions

1. Suggest why Eratosthenes, one of greatest minds of his generation was working at a library?
2. Eratosthenes was not worried about the accuracy of the accounts from Seyene, what could he have done to check the veracity of these reports?
3. The circumference of the Earth is actually 40,075km. Calculate the actual error of Eratosthenes calculation of 40,000km.

Extension Activities

Ideas for things to do next:

- The Earth isn't actually Spherical. Research "Polar Flattening" write about how much the poles are flattened at what caused it.

- The definition of the "metre" was originally one ten millionth of the distance from the equator to the north pole. Research how this definition changed and find out what is used to define the exact distance of one meter today.

Further Reading

Ideas for things to read next:

- Read about the great library at Alexandria
  https://en.wikipedia.org/wiki/Library_of_Alexandria

Spanish

Europe

South America

Machu Picchu

South America

Places to visit!

Granada (which means 'pomegranate') is a city in the South of Spain. It is renowned for its beautiful monuments and architecture. The most famous example is **La Alhambra**, an ancient palace and fortress which was constructed by the Moors, who ruled Spain from the 7th century to the 15th.
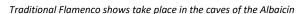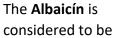
Interior of La Alhambra

The name Alhambra has origins in Arabic, meaning "red castle" because of the building's reddish walls which shine golden in the light of the setting sun.

It is also a UNESCO World Heritage Site. This means the Alhambra is protected for having cultural and historical importance! In Spanish this is called **patrimonia cultural**.

It is Spain's number one tourist attraction with approximately three million visitors a year. Tours also include a visit to the **Generalife**, the shaded and fragrant gardens of the castle.

Traditional Flamenco shows take place in the caves of the Albaicín

The **Albaicín** is considered to be the most historic and charming quarter of Granada, with steep, narrow winding streets and cool shaded 'plazas', or squares where you can take a break from the sun and get your breath back! The **Sacromonte** district is a place known worldwide for its caves, the essence of gypsy life in the area and the **zambra** of Granada. At night, if you stand on the edge of the valley between Sacromonte and the Alhambra, you can hear the sound of the dancers' heels drumming against the stone

floors of the caves echoing from one side to the other. Flamenco dancers often use *castanets* to accompany them.

Tucked away in the rocky countryside northwest of Cuzco, Peru, **Machu Picchu** is believed to have been a royal estate or sacred religious site for Inca leaders, whose civilization was virtually wiped out by Spanish invaders in the 16th century.

For hundreds of years, until the American archaeologist Hiram Bingham stumbled upon it in 1911, the abandoned citadel's existence was a secret known only to **Peruanos** living in the region. The site stretches over an impressive 5-mile distance, featuring more than 3,000 stone steps that link its many different levels. Today, hundreds of thousands of people tramp through Machu Picchu every year, braving crowds and landslides to see the sunset over its towering stone monuments and marvel at its mysterious splendour.

A UNESCO World Heritage Site since 1983 and designated one of the New Seven Wonders of the World in 2007, Machu Picchu is Peru's most visited attraction and South America's most famous ruins, welcoming hundreds of thousands of people a year. Increased tourism, the development of nearby towns and environmental degradation continue to take their toll on the site, which is also home to several endangered species. As a result, the Peruvian government has taken steps to protect the ruins and prevent erosion of the mountainside in recent years.

1. What would you choose to visit first in Granada?

   _____

2. At what time of day does the Alhambra turn a golden colour?

   _____

3. Why do you think the Generalife gardens are described as fragrant?

   _____

4. Why might you need to get your breath back on a walk around the Albaicín?

   _____

5. Would you like to spend the day exploring Macchu Picchu? Why / Why not?

   _____

6. What happened to the Inca Civilisation? How does this make you feel?

   _____

Geography

Factors in soil formation

The factors involved in soil formation are time, geology, relief, drainage, climate, vegetation and people.

Time
It takes about 1000 years for one centimetre of soil to form. In many parts of Britain we have had only 10,000 years since the last Ice Age stripped the original surface soils away.

Geology
Minerals from the parent material are added to the soil by physical and chemical weathering.

Relief
Different soils will form on different degrees of slope and aspect. Gravity and temperatures will affect the degree of slope movement and weathering.

Drainage
Whether water can or cannot move through the soil easily will affect the development of the soil profile.

Climate
How much water and air enter the soil - and their temperatures - will affect the organic life of the soil and evaporation rates on the surface.

Vegetation
The type and quantity of plant cover will affect the amount of organic material added to the soil. This is called humus.

People
When people change the angle of a slope through construction, or change the vegetation cover and/or drainage in an area, the soil will also change.

Time, geology and people all play a part in soil formation. There are three main British soils - podzol, brown earth and gley. Each soil has distinctive properties. Today we will read about Podzol.
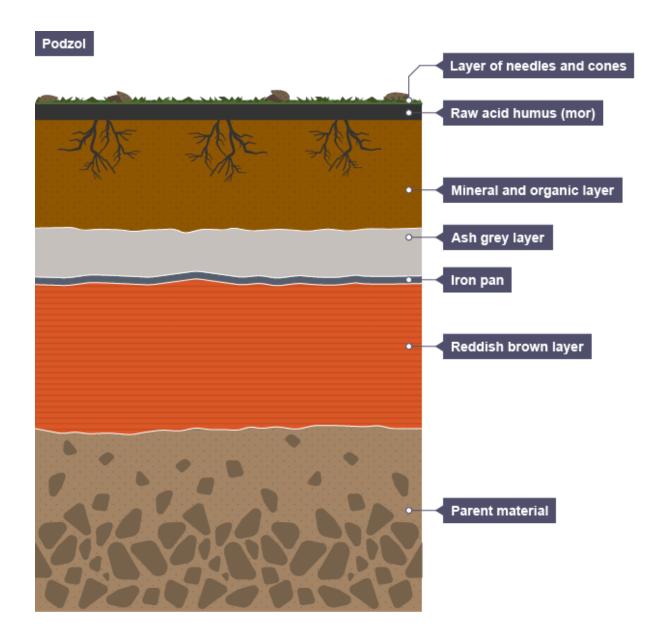
Podzol

Podzols are easily recognisable by their distinct layers or horizons. A grey or light-coloured 'E' horizon is the result of severe leaching, or eluviation, which washes out everything but quartz grains.

Eluviation is the removal of soil, clay, silt or fine organic matter in suspension from a soil horizon. The iron and aluminium oxides collect in the 'B' horizon where the iron oxides can accumulate to form a thin layer of hardpan, which impedes drainage through the soil.

Illuviation is the process of deposition of soil material removed from one horizon to another, usually from an upper to a lower horizon as material is washed down profile by percolating water. Some iron and aluminium oxides get through the iron hardpan, giving this 'B' horizon its dull orange colour.

These soils are found where there is good drainage and soil water is strongly acidic. They tend to be found on the upper slopes of upland areas where precipitation is heavy or where the vegetation is coniferous forest, producing an acid humus.

The acidic conditions are not liked by soil organisms which would normally merge the boundaries of the horizons.

Podzol

Layer of needles and cones

Raw acid humus (mor)

Mineral and organic layer

Ash grey layer

Iron pan

Reddish brown layer

Parent material

History

The Dissolution of the Monasteries

In the reign of Henry VIII the Pope was the head of all the Christian Church. When the Pope refused to grant Henry VIII a divorce from **Catherine of Aragon**, he set up the **Church of England**. (The Roman Catholic faith believed in marriage for life. It did not recognise, let alone support, divorce.)

What is the Reformation?

Martin Luther began the Protestant Reformation, which lead to the birth of the Protestant faith.

Martin Luther was a Catholic monk who didn't believe that you could just buy your way into heaven. In 1517 he protested against the Catholic practice of granting indulgences. An indulgence was a pardon instead of punishment for a sin. To gain an indulgence, a person had to perform a good deed. This was often giving money to the church, so it looked like the Church was selling pardons. Luther protested that this was wrong. He believed that a man could only be saved by the grace of God.

The Reformation is the process by which the English Church is split off from the Roman church. Rather than the pope, the king would be the spiritual head of the English church. It means that the people who left the Roman Church again formed or made the Church.

The English Reformation started in the reign of **Henry VIII** when he wanted to annul his marriage to Catherine of Aragon.

1534 Act of Supremacy

The Act of Supremacy (1534) confirmed the break from Rome, declaring Henry to be the **Supreme Head of the Church of England**.

The conflict between Henry VIII and the Roman Catholic Church eventually led to the seizure of Church properties by the state. Over 800 monasteries were dissolved, demolished for building materials, sold off or reclaimed as Anglican Churches.

Why?

After his divorce (on 23 May, 1533), Henry VIII needed to reduce the power of the Church's power in England, as well as find money to fund his fruitless and expensive wars against France and Scotland.

When?

The year **1536** saw Henry order the closing down of the wealthy Roman Catholic Abbeys, monasteries and convents across England, Wales and Ireland. This act became known as the '**Dissolution of the Monasteries**'.

The Dissolution of the Monasteries lasted four years to 1540. The last monastery to be dissolved was Waltham Abbey in March 1540.

What happened?

Henry put Thomas Cromwell in charge of getting rid of the monasteries. Cromwell started by sending royal commissioners to all the monasteries in 1535 - 1536 to find out what they own, how much money they have coming in, and to report on what is happening inside the monasteries. The royal commissioners report stated that the monks and nuns are seriously breaking the rules they should be living by.

Titchfield Abbey was given to Thomas Wriothesley,
one of Henry's closest friends in 1537.

The Act of Suppression (1536)
Small monasteries, those with an income of less than £200 a year, are closed.

Henry VIII took ownership of all the buildings, land, money and everything else. Some of the small monasteries stay open because they paid some money to the king.

The Act of Suppression (1539)
Another Act of Suppression sanctioned the transfer of further monastic possessions to the state.

For the communities that relied upon the monasteries, their loss was devastating. Monasteries employed many in the community and provided education, charity and medical care for the poor and vulnerable. They had also dominated the landscape for centuries. Those that weren't converted into grand houses collapsed into ruins over time

From - http://www.primaryhomeworkhelp.co.uk/tudors/reformation.html

Performing Arts

SUPERNOVA

"The superstar troupe from Britain's Got Talent consistently fill venues across the country – and you can see why"

Reviewed by Lyndsey Winship **(The Guardian)**

It's 15 years since street dance crew Diversity beat Susan Boyle to the Britain's Got Talent crown, and the troupe is still going strong. Ashley Banjo is now a prime-time telly face, a judge on Dancing on Ice, and he still leads from the front as choreographer, director and star, greeted by whoops and screams from the crowd. About half the 14-strong group are original members – teenage boys then, now men in their 30s. They are joined by more recent recruits, the youngest being the talented 18-year-old Isaac Akinyemi, and some fierce women too.

They are performing 'Supernova' 60 nights this year, in 27 towns. Never mind the latest chin-scratching developments in contemporary dance, this is the dance that people of all ages buy tickets for, all over the country, looking for a good night out.

The formula in many ways hasn't changed, Diversity's signature style is punchy unison routines, tight as a military parade, crammed with percussive rhythms and sharp stops, with power moves and acrobatics thrown in (if in doubt, do a backflip). When they go all out, the energy is massive, it's a rush.

Banjo is really in the business of emotional manipulation, and he uses every device going – video game-style visuals, rain falling from the sky, and music especially, whether for drama, uplift or nostalgia, pushing all the buttons. It's mostly surface-level stuff, pretty cheesy, but why have I got a lump in my throat, dammit?

Ultimately this a story about living a good life, holding on to people you love, vanquishing your demons. And they are so darn sincere, as Banjo chats about love, peace and hope. Diversity are very successful at what they do: pure entertainment, with heart.

Questions:

1. Who are Diversity? How many members are there?

_____

_____

_____

2. What is the signature style of Diversity?

_____

_____

3. Describe the story of the show?

_____

_____

_____

_____

PE

Title: Let's Play Rounders!

Welcome to the exciting world of rounders! Rounders is a fun and energetic game that's perfect for playing with friends and family. It's a bit like baseball, but with its own unique twist. In this guide, we'll take you through everything you need to know to start playing rounders like a pro!

What You Need:
A rounders bat (or any lightweight bat)
A rounders ball (a soft ball similar to a baseball)
Four bases (you can use cones, shoes, or any other markers)
A field or open space

Positions:
Backstop, fielder, batter

How to Play:
Setting Up: Start by marking out a diamond-shaped playing area. Place the bases at each corner of the diamond. One player stands at home base with the bat, ready to hit, while the rest of the players spread out in the field.

Batting: The player at home base (the batter) takes their turn to hit the ball when it's pitched to them by a member of the opposing team. The pitcher must throw the ball underarm, and the batter aims to hit it as far as they can.

Running: Once the batter hits the ball, they drop the bat and run around the bases. They must touch each base in order: first base, then second base, third base, and finally back to home base. Meanwhile, the fielding team tries to retrieve the ball and throw it to the base the batter is heading to. If the batter reaches a base before the ball gets there, they're safe.

Scoring Runs: Each time a batter makes it around all four bases and back to home base, their team scores a run. The batter can keep running around the bases until they're tagged out by the fielding team or the ball is caught in the air.

Fielding: The fielding team works together to catch the ball and tag out the batters. If a fielder catches the ball before it bounces, the batter is out. If a fielder tags a runner with the ball while they're between bases, that runner is out. The fielding team aims to get three batters out to end the inning.

Switching Sides: After each team has had a turn to bat and field, the teams switch roles. The team with the most runs at the end of the game wins!

Tips for Success:
Pay attention to the fielders and try to hit the ball where they aren't.
Run fast and pay attention to your teammates for signals on when to advance or hold your position.
Work together as a team to communicate and strategize both when batting and fielding.

Safety First:
Make sure the playing area is clear of any obstacles or hazards.
Always wear appropriate footwear to prevent slips and falls.
Remember to play fair and have fun!

Now that you know the basics of rounders, grab your friends and head outside for a game. Get ready to swing, run, and have a blast playing this classic game!

Questions:

What are the positions in rounders?

What do you need to play rounders?

How do you score?

Computing

Year 7 – The History of Memory

Before computers were as common as they are today, there were different types of computer memory that were used. Let's take a look at some of the most interesting types.

The first type of computer memory that was developed was called magnetic core memory. This type of memory used tiny magnetic cores that were woven into a grid of wires. Data was stored by changing the polarity of the magnetic cores, which allowed for the storage of information in a small amount of space. Magnetic core memory was used in early computers, but was eventually replaced by other types of memory that were faster and more efficient.

Another type of memory that was developed was called bubble memory. This type of memory used tiny magnetic bubbles that were created by passing a current through a thin film of magnetic material. The bubbles could be moved around by changing the direction of the current, allowing for the storage of data. Bubble memory was used in some computers in the 1970s, but was eventually replaced by other types of memory.

One of the most common types of computer memory used today is called dynamic random access memory, or DRAM for short. This type of memory uses tiny capacitors to store data. The capacitors are charged or discharged to represent a 0 or a 1. DRAM is used in most personal computers and is also used in other types of electronics like smartphones and tablets.

Another type of memory that is commonly used is called flash memory. Flash memory is used in devices like USB drives, memory cards, and solid-state drives. Flash memory stores data by trapping electrons inside of transistors, which allows for fast and reliable storage of information.

Yet another type of memory is read-only memory, or ROM for short. As the name suggests, data can only be read from ROM, not written to it. ROM is used to store programs and data that should not be changed. For example, the BIOS (basic input/output system) of a computer is stored in ROM.

Last but not least, we have cache memory. Cache memory is a type of high-speed memory that is used to store frequently used data. The cache is located close to the CPU (central processing unit), which allows for fast access to data. Cache memory is used in most modern computers to help speed up processing times.

Creative Arts

CREATIVE ARTS

SUBJECT	HOMEWORK 1
TEXTILES	Classifying Materials by their Properties and Uses Complete this chart with a list of textile products found in your home. Next to each product, list the properties and uses of each item. Use the word bank below to help you.

Textile Product	Properties	Uses
Dishcloth	*Absorbent, easy to wash*	*Cleaning*
Curtains	*Insulating, warm*	*Decoration, blocks out sun & light, Keeps room dark, keeps heat in.*
Word bank	**Word bank**	**Word bank**
Absorbent Insulating Easy to wash (easy care) Crease- resistant Hard- wearing Stretchy Soft	Thick Smooth Shiny Waterproof Textured Cool Cheap Transparent	Strong Fireproof Textured Decorative Breathable Expensive Stretchy Fluffy

	Recyclable Expensive Tough Stiff	Spongy	Protective

D & T	# Plastics Most plastics are produced by industry using water, oil (or coal or gas), air and salt. There are <u>two families</u> of plastics - <u>thermoplastics</u> and <u>thermosetting plastics</u>. <u>Thermoplastics - Recyclable and Bendy</u> 1) Thermoplastics are <u>recyclable</u>. 2) They <u>don't resist heat</u> very well, so they can be ground down, melted and re-used- very important in today's society of increasing waste. 3) Thermoplastics are easily <u>formed</u> into shapes. 4) A <u>moulded</u> shape can be <u>reheated,</u> and it will return to its <u>original state</u> the material is known as having plastic memory. 5) Examples of thermoplastics: <u>acrylic</u>, <u>ABS</u>, <u>polystyrene</u> and polyethylene (<u>polythene</u>) . <u>Thermosetting plastics-Non-Recyclable and (usually) Rigid</u> 1) These types of plastic are <u>non-recyclable</u>. 2) They <u>resist heat and fire</u> so are often used for <u>electrical fittings</u> and <u>pan handles.</u> 3) These types of plastic undergo a <u>chemical</u> change when heated (unlike thermoplastics) to become hard and rigid. They're not used in schools very often. 4) Examples of thermosetting plastics: <u>melamine-formaldehyde</u>, <u>polyester resin</u>, <u>epoxy resin</u> and <u>urea-formaldehyde</u>. <u>Questions:</u> 1; Name the two Families of plastic? 2; What happens to a moulded shape when it is reheated?

	3; Name one Thermosetting plastic?

FOOD	**Read the following recipe** Date of Practical: _____ **FRUIT SALAD** **Ingredients** *Please bring small amounts of ingredients (choose from)* 1 apple 1 pear 1 banana 1 kiwi 1 orange A few grapes A few strawberries A few blueberries Half a melon – can use this as a bowl **Named container to present your salad in and take it home in.** **Learning how to:** Demonstrating the bridge and claw, knife skills, washing fruit. Melon balling, Kiwi flower, strawberry fans, threading a kebab stick. **Method** 1. Collect all your equipment from the table. 2. Set up your chopping board with your damp cloth underneath. 3. Wash all fruit. 4. Prepare fruit and add to your container. Using the bridge and claw cutting methods. 5. Present your fruit salad attractively. 6. Combine all your ingredients together **in your container.** The melon can be used to make into a bowl or basket (optional). Have a go at preparing a mango, passion fruit, kiwi at home first. Skip through this clip see how to prepare every fruit! https://www.youtube.com/watch?v=VjINuQX4hbM <u>Marks up!</u> **Do a little research to get ideas for your fruit salad.** **Google:** posh fruit salad Fruit salad kebabs Fruit salad rainbow Melon basket

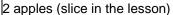| FOOD	**Read the following recipe** **Date of Practical:**
	Crumble **Ingredients** *Bring an ovenproof dish to make/take your crumble in.* *Please bring the following ingredients* **100g** plain flour **50g** butter 50g oats 25g sugar **Fruit: your choice, stew at home if needed** (cooking apples or rhubarb will need stewing: peel and chop, add to a saucepan, tbsp of sugar and 4 tbsp water then simmer gently until soft). 2 apples (slice in the lesson) 2 plums (slice in the lesson) Raspberries (summer) Blackberries (winter) Blueberries (summer) Strawberries (summer) Chop the fruits into big chunks **Note:** other flavours to add to the crumble topping: nutmeg, cinnamon, vanilla, different sugars, honey. Fruit ideas: stewed fruits, tinned fruits, frozen fruits also work well. Try to choose seasonal fruits when possible. **Named container to present your salad in and take it home in** If you want to find out more about CREATIVE CAREERS https://www.bbc.co.uk/bitesize/articles/zfrq92p **Read the following recipe** Date of Practical:_____ **SCONE BASED PIZZA** This is a savoury scone base which we use for 1hr practical lessons as opposed to making bread with yeast. **Ingredients** *Please bring the following ingredients* **For the dough:** 150g self-raising flour 1 tsp salt 25g butter 1 egg 50 mls milk **For the topping:** 50g cheddar cheese (grated) or mozzarella 2 tbsp tomato ketchup and 2 tbsp tomato puree **or** 3 tbsp passata (pizza topping sauce) Any three of the toppings below (prepared as much as possible at home please) **Named baking tray and foil to cook your pizza on and take it home on** **Learning how to:** Consolidates rubbing-in method, shaping dough, using the oven, vegetable preparation.

Method

1. Collect all your equipment. Preheat the oven to 200°c. Grease baking tray.
2. Weigh the flour and sieve into a mixing bowl with the salt.
3. Measure the butter then rub into the flour.
4. Measure the milk in a jug then break 1 egg and whisk into the milk.
5. Stir the milk & egg into the flour & butter and mix to combine into a dough.
6. Shape the dough onto your baking tray.
7. Spread the tomato base onto the dough, add the grated cheese.
8. Prepare your toppings and arrange on top of the cheese.
9. Bake in the oven for 15 mins, until the crust is brown and the cheese is bubbling.

Pizza topping ideas (choose 3)

Ham (just chop)
Sweet corn (open tin and drain)
Tuna (open tin and drain)
Pepperoni (just chop)
Peppers (slice, can go on raw or fry)
Mushrooms (can go on raw, sliced)
Sliced tomatoes (can go on raw)
Pineapple (open tin and drain)
Sliced onion (can go on raw or fry)
Olives (go on from the jar/drained)
Chilli peppers/jalapenos (remove seeds and finely chop)
Chicken (will need to be cooked)
(any other suitable topping)

ART: KS3 HW

Meet Tegan, 24, from Wiltshire. She works in London as an architectural apprentice for Gensler, a design and architecture firm.

What is your job?

Architecture is all about **designing buildings**. I do a lot! My job involves figuring out the needs of the client, how we translate that into design and then translating it back to the client. Sometimes I make **site models** for clients, and other times I might be sitting at the computer doing **3D models**, or **2D plans** and **hand sketches**.

What skills do you use in your work?

Knowing how to talk to **communicate** with people in the right way is very important. **Research** is also crucial because it informs the rest of your design decisions. **Time management** is critical because I've had to learn to juggle my coursework at uni, my job here at the office and my disabilities (arthritis and chronic migraines). Also, **presentation skills** – I had to do a big presentation for university recently.

What subjects did you study?

At GCSEs I did **Design & Technology**, and at **A-level I did History, Maths, Physics and Chemistry** (I dropped Chemistry). I got my A-levels and then went to university, but half way through my second year I got quite seriously ill, so I had to pause my studies. Instead of staying in bed recovering, I did an **Art A-level**. After getting back on my feet I finished my degree and now I'm doing my **masters degree**! My illness has left me with some long-term health issues but it hasn't stopped me achieving or doing the job I love.

What subjects do you draw on?

History and **Art** have been the most useful of the A-levels that I've done.

How did you get into your job?

My **lecturer** in my third year of uni **told me about the apprenticeship**, and I was attracted to the fact that this is such a huge firm, so there's worldwide opportunities to move, a wealth of knowledge and a research institute.

Was it a smooth ride?

No! When I started uni, if someone had told me what would happen with **my health** over the next six years, I wouldn't have believed them! I feel like there's good in it happening, because it's changed my perspective on what I'm doing and how I'm going to approach it. It's **made me far more sympathetic to the accessibility issues in architecture.**

Top tips

- I asked my teachers what A-levels they would recommend, but I wish I'd done a little bit more of my **own research**
- **Question everything** and start delving into topics and explore them – figure out what it is you like
- **Look after your health**. When you're at your healthiest you're performing your best.

After completing your education and training, there are many careers open to architects, for example designing new buildings and the spaces around them, and working on the restoration and conservation of existing buildings.

What to expect if you want to be an architect

- **Architect average salary**: £27,500 to £90,000 per year
- **Architect typical working hours**: 35 to 40 hours per week

What qualifications do you need to be an architect?

You could get into this role via a university course, an apprenticeship or working towards the role.

ANSWER THE FOLLOWING QUESTIONS

https://forms.office.com/Pages/DesignPageV2.aspx?origin=NeoPortalPage&subpage=design&id=WnSRoNi3ek2yphNZBT1FECFv4HeDi3pLoWrqdE0O0dhUQTc0SDJRODMxREhWUVU5NjVTTjJBMUVGRy4u

What does Tegan go to help show her clients her design ideas?

Tegan says the following skills are most useful: Communication; Research; Time management and Presentation skills. Choose the one YOU think is most important and say why?

Tegan studied History, Maths, Physics and Art at A Level. Which did she find most useful for her career as an Architect?

What company is Tegan doing her Architecture Apprenticeship with?

Tegan has given 'Three Top Tips'. Which one is the most important for you?

RE

"For God so loved the world He gave his only Son, that whoever believes in Him shall not die but have eternal life." John 3:16

Life of Jesus

KEYWORDS

Salvation = being freed from sins, and it's consequences (hell)

Incarnation = God becoming flesh

Miracle = an action or event that does not seem to be scientifically possible

Sin = something that breaks one of God's laws

Crucifixion = being killed on a cross

Resurrection = coming back to life

Messiah = a word used to describe Jesus, meaning that he was the saviour of humankind

Disciple = a follower of Jesus

Gentile = a person who is not Jewish

Faith = having complete belief in something, even without evidence

HISTORY

The land of Israel had been attacked and invaded since its creation.

From 63 BCE, the Romans were the occupying power. **The Jewish people hoped for a saviour, a messiah, who would defeat their enemies** and restore them to their homeland to live in peace under their own laws.

Expectations were high at the time of Jesus, who was himself Jewish. The Messiah was widely expected to be a prophet who would re-establish the line of King David on the throne in Jerusalem, site of the Temple of God, and bring all nations to God.

As the extraordinary events of his life unfolded, **Jesus' followers started to think he could be the Messiah.** When Jesus rode into Jerusalem on a donkey on Palm Sunday, there was much excitement at the possible arrival of a new king!

The early Christians found their Messiah in Jesus, who was not an earthly king or a warrior but a peaceful man; more amazing still, Jesus was someone whose life, words and deeds made people believe that he was actually God in the flesh, and the final and most important part of God's plan of salvation.

THE BASICS

- Jesus lived in the first century CE in an area which is now called Israel.
- The religion of Christianity did not develop until after the death of Jesus.
- **Christians believe that Jesus is God incarnate** (in human flesh).
- **Christians believe that Jesus' teachings should be followed when making moral decisions** – deciding right from wrong.

JESUS MIRACLES

Christians learn a lot about Jesus through the miracles he did, like waking on water, healing a blind man, and coming back from the dead!
- Miracles **showed the love Jesus had for people.** He did not want to see them suffering unnecessarily. For example, when he healed a people.
- Miracles **provided examples for people to follow.** This can be seen when Jesus healed the paralysed man because of the faith of his friends. This teaches us to have faith and help others.
- Miracles **demonstrated the power he had,** and for many it proved that he was God.

OPPOSITION TO JESUS

Jesus welcomed all types of people, even those that Jewish religious leaders considered to be sinners.

Some religious leaders thought that Jesus' teaching was wrong and that it was leading people astray. The Romans feared that he might start a political uprising, and that this would lead to great trouble—they were worried that they would lose their power. The leaders decided to have Jesus put to death.

Jesus knew that opposition to him was growing and that one of his disciples, Judas Iscariot, was turning against him.

Jesus gathered the apostles together for a meal, known as the **Last Supper.** He told them that his death was necessary because it would establish a new bond between God and humans. Jesus took bread and wine, blessed them, and shared them with his disciples. **Christians remember this in Communion.**

Later that night, Judas brought men to arrest Jesus, and Jesus was sentenced to death. He was crucified, or nailed to a cross. **He died on the cross and was buried.**

On the third day after that, a group of women went to Jesus' tomb and found the body gone. The Gospels tell that Jesus then appeared to one of the women, Mary Magdalene, and to the disciples. He spent 40 days on Earth after his **Resurrection,** or return from the dead, and then was taken up to heaven (called the ascension).

JESUS' TEACHINGS

Jesus began preaching when he was about 30 years old. He gathered a group of 12 followers, or disciples, called the apostles, who helped him spread his message.

He taught people to forgive others, to live a good life, and to honour God so they could enter God's kingdom (heaven).

He often taught by using parables, or short stories that illustrated his message.

Jesus' messages were **designed to help people clearly understand how to live in the way that God wanted them to,** and how to have a relationship with God. One of the most famous things that he said in this sermon was to *"treat people as you want to be treated".* This is known as the Golden Rule.

Questions

What is the golden rule?

_____

_____

Why did the Romans oppose (go against) Jesus?

_____

_____

How many disciples are there?

_____

On the back of this page, make a mind-map of why Jesus' miracles are important