

# Year 7 Homework Booklet Half term 4 2024

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# English



## Children Of The Wartime Evacuation

Evacuees leave for the countryside during the second world war.

Photograph: Popperfoto/Getty Images

Millions of British city children were evacuated to safer places during the second world war. Some hated living away from their families – others didn't want to go home again

*Julie Summers*

Sheila is a past president of the League of Jewish Women and an energetic organiser at Nightingale House, a Jewish care home in London. Joan Risley lives near Chelmsford. She is a grandmother who learned to swim when she was 60 and keeps fit by line-dancing. Don Bayley ran a pension scheme for a large company in the West Midlands until his retirement a decade ago. These three people are unconnected, but they have one thing in common: the greatest evacuation of children in British history, which began on Friday 1 September 1939.

It was codenamed Operation Pied Piper. Who on earth came up with that name? Not a mother, that is certain. After all, the piper leads the children of Hamelin away from the town, never to return. Over the six years of the war, more than two million children were sent away from their family homes. Most returned, but how they had changed and how the separation affected their relationships with their families is seldom considered.

What must it have been like to be sent away from home at five, 10 or even 14, as some of the older ones were, and then come home months, – or, more often, years – later and have to pick up where you left off? Is it even possible when your life has changed in all other respects? And who were the winners and losers in the whole evacuation project?

Joan Risley is keen to emphasise the good points in her experience. She was evacuated twice. The first time, she went with her sister to Beccles, in Suffolk. They were home by the beginning of 1940 but when an invasion seemed likely, Joan announced that she wished to be evacuated again. None of her brothers and sisters wanted to go too, so she was sent alone, aged nine, to Northamptonshire. She lived there with a childless couple who loved and cared for her as their own. When she returned in 1945 she found it difficult: "I remember sitting on a sofa with a feeling of not belonging. By that time we were really poor. Dad was still ill and unable to work. My family all commented on how I talked different, so I had that strange feeling of not quite belonging yet wanting to be there because they were my family. I soon got used to being with Mum, and she got used to me. But with my siblings it was more difficult. They are my family and I am very fond of them but they never went away like I did, so they don't understand that I have had these two lives."

Two lives. That is what so many children of that generation had and for some it was, in retrospect, a bonus.

But it wasn't a bonus for parents. As a mother, I feel deeply troubled at the thought of being forced to miss out on five or six years of my sons' childhood. I'm profoundly grateful that I have never had to face that dilemma. In Operation Pied Piper, the family suffered but I feel the real losers, as in the legend, were the parents. It was as tough for many as one would expect. Although some wrote of their immense gratitude to the kindly foster parents who had loved and cared for their children, there were far more stories of mothers feeling that they had missed part of their children's lives. Vera Brittain wrote in her memoir: "The small gallant figures which disappeared behind the flapping tarpaulin of the grey-painted Duchess of Atholl have never grown up in my mind, for the children who returned and eventually took their places were not the same; the break in continuity made them rather appear as an elder brother and sister of the vanished pair."

If you ask Don Bayley about his past he immediately talks about his evacuation to Lichfield, just 20 miles from his home in West Bromwich. It changed his life and that of his younger brother, Phil. Mrs Coles, their foster mother, gave them something their own mother could never have done: a love of books and learning. And it was not one-sided. Twenty years after the war, Mrs Coles wrote to Don to say that she felt the children had been sent "to cheer her up".

Even parents who were delighted that their children had had life-enhancing experiences and opportunities, found it hard to adjust to the changes. Fathers, often forgotten in the evacuation story, also felt they had lost out. In 1944, Ted Matthews wrote to one of his four daughters whom he sent to America in 1940: "Sending you away has been, in some ways, a tragedy. I still think it was the right thing to do, even though events proved different from our fears. But it has been heartbreaking to miss these years of your lives. We shall meet again as almost strangers."

The gulf in experience was not just felt between the generations or within families in which some children had been evacuated and others had not. Nigel Bromage and his twin brother, Michael, spent two years of the war on a farm in south Wales. They shared a room, they went to the same school, experienced the same foster family and saw the same sights in the countryside. They were seven when they arrived and nine when they left. Yet they had two opposite responses to their evacuation.

Nigel and Michael's hosts were small farmers at Golden Grove near Llandeilo, in Carmarthenshire. They had 20 cows, all of which had to be milked by hand, and the only aid was a horse. For Nigel, there was no down side. "As I enjoyed my experience on the Williamses' farm so my brother did not. It is not perhaps surprising. We were very different personalities – he an introvert, I an extrovert. He tended to opt out of activities around the farm; I volunteered for everything. I loved every minute of it. I don't think I was particularly aware of Michael's unhappiness at the time, because I was enjoying myself. It was only after he died that my sister told me how homesick and unhappy Michael had been."

Foster parents are often forgotten in the evacuation story, yet their role was vital. For them the war years often brought great delight, though it was only temporary. One wrote

poignantly: "Here are your children ... Mother and I have loved them with all our hearts. We ask you to keep alive their loyalty to us as we have kept alive their loyalty to you – may they never forget that they have two homes."

### **Week 1**

Read the article and summarise it.

### **Week 2**

Underline five words that you do not understand in the text. Write down their definitions and then use each one in a sentence.

### **Week 3**

Why was 'Operation Pied Piper' not a good name for the evacuation process?

### **Week 4**

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Answer the following question using the paragraph above. Make sure you use quotations to support your points. Zoom into those quotations and look at the key words. What type of words are they and what effect do they have on the reader?

**How has Julie Summers used language here to describe Ted Matthews' feelings about having his daughters evacuated?**

### **Week 5**

Describe the photo at the top of the article.

- Look at the children's expressions.
- Look at what they are wearing.
  
- What are they holding?
- How might they be feeling?
- Use the five senses to help you describe the photo [Sight, sound, touch, taste, smell]
- Remember to vary your sentence and paragraph lengths for effect, as well as your punctuation.
- Remember to use interesting vocabulary and different language devices [alliteration, metaphors, similes, sibilance, personification, pathetic fallacy, repetition, imagery, tripartite, juxtaposition].



# Maths



Public

# NGA Maths Homework Page



## RÉNÉ DESCARTES

(1596 – 1650) contribution to mathematics lies in geometry. He explained in detail how algebraic equations can be expressed and explained through use of geometrical shapes.

Descartes, who liked to stay in bed until late, was watching a fly on the ceiling from his bed.

He wondered how to best describe the fly's location and decided that one of the corners of the ceiling could be used as a reference point. Imagine the ceiling as a rectangle drawn on a piece of paper: taking the left bottom corner as the reference point, you can specify the location of the fly by measuring how far you need to go in the horizontal direction and how far you need to go in the vertical direction to get to it. These two numbers are the fly's *coordinates*. Every pair of coordinates specifies a unique point on the ceiling and every point on the ceiling comes with a unique pair of coordinates.

The coordinate system we commonly use is called the *Cartesian* system, named after Descartes. Geometric shapes, such as circles, could now be described algebraically using the coordinates of the points that make up the shapes. You might have heard of his

famous quote, "I think, therefore I am". He would undoubtedly have gone on to produce more, had he not died at the relatively young age of 53. His habit of sleeping until 11am had been brutally disrupted by Queen Christina of Sweden, who persuaded him to go to Stockholm in 1649 and wanted to do maths with him at 5 o'clock every morning. Descartes endured the early mornings and the Scandinavian cold for a few months, but eventually contracted pneumonia and died.

### Questions

- 1) How much sleep did Descartes lose by waking up in the early morning instead of the late morning to do maths with the Queen of Sweden?
- 2) How would you describe the position of a fly that moved 4 units left and 7 units down from the origin of the ceiling i.e. (0,0).
- 3) What is the name of the coordinate system we commonly use today to describe the position of a point in space?
- 4) Write down 4 coordinates that form a square when plotted on a graph.

Public



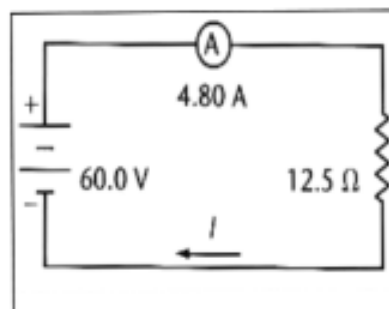


# Science

## Electrons; the corpuscles of J.J. Thomson's achievement.

*Jinny Bell* tells us how current changed direction.

Benjamin Franklin was fascinated by charges; who isn't? Franklin knew that rubbing two carefully selected materials together could produce a somewhat attractive force between them and, if brought close enough together this force would discharge into a spark between the objects. There were no batteries at this time and Franklin did not have the fundamental understanding of how this came about and had to surmise that a transfer of a kind of 'electric fluid' was responsible for creating this force. Franklin imagined that there must be a plentiful supply of this fluid on one object and a deficit on the other, which directed its movement. He termed objects with 'plenty' of the fluid 'positive', and those with a deficit as 'negative'. Pioneering these new ideas, Franklin initiated 150 years of the understanding of what is now referred to as the 'conventional' current.



### Cathode Ray Tubes

A cathode ray tube (See also 'Crookes' tubes'.) is a vessel of significantly low-pressure gas containing two electrodes, one positive and one negative, across which a large potential difference is applied. Following an electrical discharge from the electrodes, glowing streams of light can be observed between them. These streams of light were referred to as cathode rays, noting that they left the cathode (negative electrode) and travelled towards the anode. At the time, many German physicists suggested that the nature of these cathode rays was an occurrence in the ether and thought that this weightless substance pervaded all space.

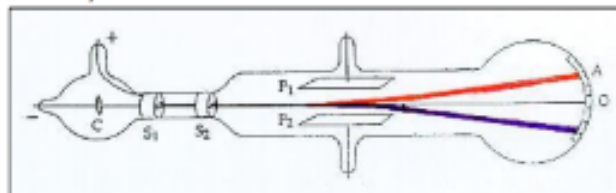


**Joseph John Thomson**

Born in Manchester, 1856, J. J. Thomson was destined for a career in engineering. But, after the death of his father, fate found him a place at Trinity College, Cambridge. Despite being a young graduate in Mathematics, Thomson was controversially elected to replace Lord Rayleigh as Cavendish chair just four years after he began working under him in the department of physics. Thomson began to experiment with discharging electricity through gases at low pressure using cathode ray tubes.

### The race against Hertz?

The 'occurrence in the ether' nature of cathode rays was supported by Heinrich Hertz' demonstration that these beams could penetrate thin foils, and this behaviour was akin to light through glass. Hertz also determined through experimentation that electric fields could not deflect this 'ether', concluding that it was not of a charged property. Thomson discovered that at too high a pressure, the gas ions would neutralise the electric field that Hertz had been using to try to deflect the rays. Thomson reduced the pressure of the gas in the vessel and showed that the beams were in fact deflected by an electric field. A scale placed at the bulbous end of the vessel allowed for measurements of the deflection; the red, upper line in the diagram (above) denotes the path taken by the cathode rays when P1 is a positive charged plate. Thomson proved that negative charges were being fired from the cathode. Furthermore, applying Faraday's earlier experiments, Thomson showed that a magnetic field, applied perpendicular to both the electric field and the cathode rays, could also deflect the beam. This observation further supported the theory that negative charges were flowing along the beam.



### The discovery of the electron and the plum pudding model

Thomson's claim to this discovery is based on two contributing factors: Firstly, his ability to distinguish this newly observed particle as having fundamentally different properties to known matter. Thomson measured the charge-mass ratio of this particle to be 1000 times smaller than the smallest known particle, hydrogen, using his measurements of deflection due to a measured force. Secondly, Thomson defined his newly termed particle, the 'corpuscle', as being a universal constituent of matter. He achieved this by showing that his measurements were independent of the gas used, and the metal forming the electrodes. Thomson's corpuscles, electrons, were fundamental. This new understanding of fundamental matter led Thomson to suggest a plum pudding model for the atom, trying to consolidate the known properties of negative electrons, and neutral atoms. Thomson's student, Ernest Rutherford, explored further.



# Spanish



## The Galápagos

The Galapagos islands are in the **Pacific Ocean** about 1,000 km from the South American continent. They are made up of 19 separate islands and are closest to Ecuador.



### **The Land Iguana**

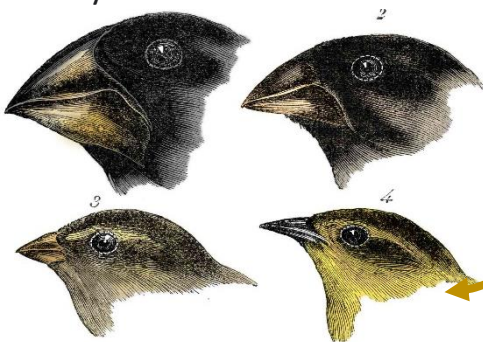


The Galapagos islands have been called a unique “living museum and showcase of evolution”. This is because the islands are located where three ocean currents meet, which means the Galapagos is a “melting pot” of marine species.

### **Lonesome George The Giant Tortoise**

Because of the ocean currents and the fact that these islands are extremely isolated, this has led to the development of unusual animal life – for example **the Land Iguana**, the **Giant Tortoise** (both reptiles) and the many types of **Finch** (species of bird).

These diverse animals inspired Charles Darwin’s theory of evolution after his visit to the island in 1835.



**Finches**



*Galapagos tortoises can live up to 177 years!*



How were these islands formed you might wonder? Volcanic activity and seismic activity, like earthquakes, formed the islands millions of years ago.

The islands have a population of slightly over 25,000 and the official language of the Galapagos Islands is Spanish. Most locals are bilingual, speaking Spanish and Kichwa (also known as Quechua) a language indigenous to the Islands and the country of Peru.

The Islands were 'discovered' in 1536 by the Bishop of Panama, Tomás de Berlanga, when his ship drifted off course whilst en route to Peru. He named the islands **Las Encantadas** ("The Enchanted").

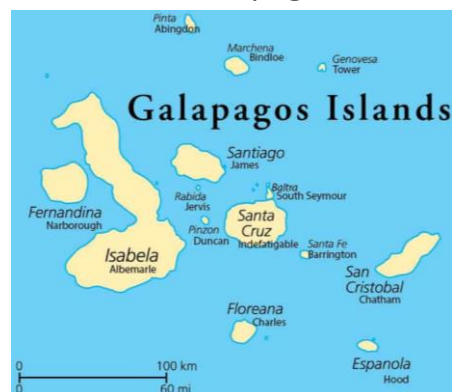
Later, in 1570 the islands were named "Insulae de Galapagos". The shells of the thousands of giant tortoises found there reminded the visitors of horse saddles.

If you are lucky enough to visit the Galapagos islands, here are some activities you can do; snorkelling to see the magnificent coral reefs, panga (dinghy) rides and finally go to the Charles Darwin Research Station to learn about Galapagos



Conversation.

**"Galápagos"**  
means **Giant**  
**Tortoise** in  
**Spanish.**



**1.How many people live in the Galapagos Islands?**

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**2.Why are they called the "Galapagos" Islands?**

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**3.In what year were the Islands 'discovered' and how many are there?**

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4. If you went to the Galapagos, **which** activity would you like to do? Explain why.

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5. **Why** have the Galapagos Islands been called “unique”? Explain in your own words.

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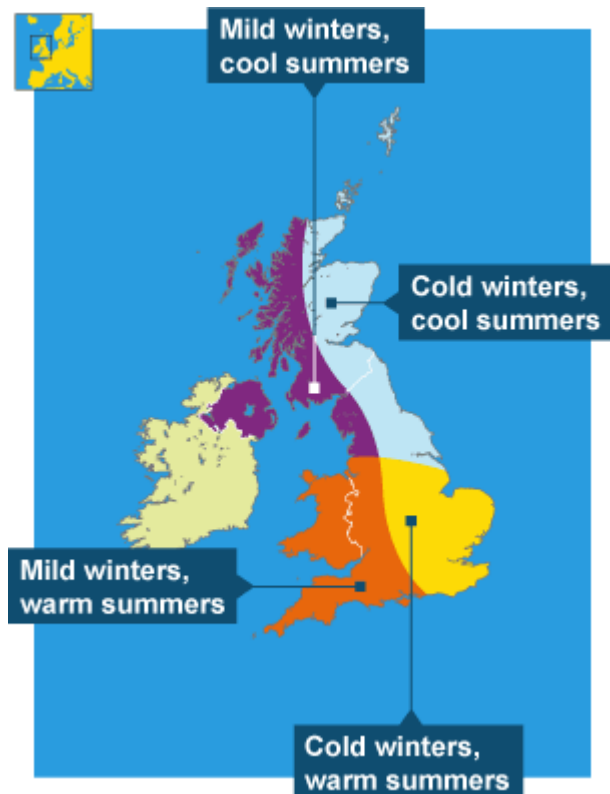
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<https://www.youtube.com/watch?v=R2x4AXoUBzs>



# Geography

## British climate



Britain has a mild climate. It is in the **temperate climatic zone** and the sea affects the weather. In general, this means that Britain gets cool, wet winters and warm, wet summers. The weather conditions are also very changeable. Climate can change from place to place and from time to time.

The British Isles experiences **four seasons**:

- **Spring** - March to May
- **Summer** - June to August
- **Autumn** - September to November
- **Winter** - December to February

Temperature and rainfall also vary between different parts of the British Isles.

### What factors affect the temperature?

#### Prevailing winds

Prevailing winds are the dominant wind direction in an area. The temperature of the wind and the amount of rainfall partly depend on where the air has come from. Looking at where the air has come from helps to explain the characteristics of the weather. A large body of air with similar characteristics is called an air mass.

#### Latitude

The equator lies directly underneath the Sun and so countries that fall on the equator receive the strongest solar energy. This means that in the Northern Hemisphere, the Sun's energy becomes less concentrated and therefore the temperatures become cooler as you travel further away from the equator.

#### Altitude

Temperatures decrease with altitude. There is a 1°C drop in temperature for every increase of 100 m in height. This is because the air is less dense in higher altitudes.

#### Distance from the sea

Coastal areas are most affected by the sea. The sea takes longer to heat up and cool down than land. So in the winter the sea keeps coastal areas warm and in summer, it cools them down.

#### Ocean currents

The effect that **ocean currents** have on the temperature depends on whether the ocean current is hot or cold. Britain is on the same latitude as Siberia and parts of Russia, yet it does not suffer the same long, harsh winters. Britain's mild climate is partly due to the Gulf Stream, a large Atlantic Ocean current of warm water from the Gulf of Mexico.





# History

## **The Impact of the Black Death – Spartacus Educational Website**

Historians have found it difficult to calculate the number of people who died from the Black Death because of a lack of documentary sources. The Church was the main institution that kept accurate records and these show between 40-45% of the clergy died. However other records show two-thirds of the tenants on four manors in Hampshire, Wiltshire and Oxfordshire died; and between 50 and 60 per cent on seven manors in Cambridgeshire, Essex and Cornwall. Traditionally, historians have tended to believe that about one-third of the population died during this period.

[George M. Trevelyan](#) has pointed out that in the early years of the 14th century there had been lots of available workers and this enabled harsher treatment of the peasants. The [Black Death](#) dramatically changed this situation: This dramatic fall in population led to great changes taking place in England. Fields were left unsown and unreaped. Those who had not died of the plague were in danger of dying from starvation. Food shortages also resulted in much higher prices. The peasants, needing the money to feed their families, demanded higher wages. The landowners, desperately short of workers, often agreed to these wage demands. If the landlord refused, the peasant was likely to search out another employer.

[Edward III](#) became concerned about the increase in wages and the peasants moving around the country searching for better job opportunities. In 1350 he decided to pass the [Statute of Labourers' Act](#). This law made it illegal for employers to pay wages above the level offered in 1346. It states: "That every man and woman of our kingdom of England... who is able bodied and below the age of sixty years, not living by trade nor carrying on a fixed craft or land of his own... shall be bound to take only the wages... that were paid in the twentieth year of our reign of King Edward III".

However, both the employers and the peasants tended to ignore the law, and although Parliament increased the penalties people breaking this law, they continued to ignore it. Although the punishments were severe, more and more peasants became willing to run away from their lords. In the past, landowners would have returned them to their masters. However, because they needed labour so badly, they did not ask any awkward questions and instead kept them

Even when peasants who ran away from their masters were caught, it was difficult to punish them too harshly. Execution, imprisonment or mutilation only made the labour shortage worse. Therefore the courts tended to punish the peasants by branding(burning) the letter 'F' on their forehead when they were caught. [William Langland](#), a poor man living in England during this period wrote: "Nowadays the labourer is angry unless he gets high wages, and he curses the day that he was ever born a workman... he blames God, and

murmurs against reason, and curses the king and his Council for making Statutes on purpose to plague the workman."

In some areas labourers began to organise themselves into groups and there were examples of strikes for higher wages took place. For hundreds of years peasants had accepted the way they were treated by their lords as being natural and unchangeable. They now knew that if they were willing to take risks, either by running away or by joining up with others to demand better treatment, they could improve their situation. This change in consciousness meant that the lords' power over their peasants was not as strong as it was before the outbreak of the Black Death.



# Performing Arts

# SAMBA



Samba is Mardi Gras or carnival music from Brazil that features a large percussion ensemble. It is music to dance to and has its own characteristic rhythms that distinguish it from other Latin-American music. It originates in Rio de Janeiro, the result of a unique musical fusion of African, Portuguese and Spanish/Cuban cultures. Today, different types of samba have evolved, but by far the loudest, and most brash, is *Samba Batucada*.

Samba Batucada is a purely percussion form of samba and is very popular in Rio de Janeiro where a large number of samba schools exist. Competition between them is fierce, and the Mardi Gras celebrations include a huge street procession in which every Samba school is represented, each competing for the prize of best performance of the year.



During the early twentieth century a colourful and exciting street life formed in Rio de Janeiro and the music associated with the carnival became known as Samba. Samba music is a very popular style of music from Brazil.



Brazilian music is based on a variety of different musical cultures that have been joined together by history. Portuguese colonies imported slaves from Africa. All of these cultures gave something to music. Some instruments are similar to Portuguese folk instruments while the rhythm of Samba is from Africa.

In 1928 the first Samba schools were formed. These were social clubs where people got together and performed a variety of music using drums and other percussion instruments. Samba schools, which began in Rio de Janeiro, have evolved and are now found worldwide. The schools parade down a street lined with grandstands, thousands of members dressed in costumes, dancing a rehearsed samba routine to original music.



**Questions:**

1. Where does Samba music come from?

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2. Which cultures have contributed to Samba?

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3. What is Samba Batucada?

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4. When were the first Samba schools formed? Describe what they are.

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PE

## Meet Spikeball, a new game

Spikeball is a dynamic and fast-paced sport that has gained popularity for its competitive yet accessible nature. Played with a small, circular net at ankle level, teams of two serve and volley a small rubber ball with the goal of bouncing it off the net in a way that makes it challenging for the opposing team to return. Combining elements of volleyball and foursquare, Spikeball requires agility, strategy, and quick reflexes. The sport has a growing community, with organized tournaments and leagues worldwide. Its compact and portable design makes it suitable for diverse settings, from beaches to parks, contributing to its widespread appeal.

### Rules of the game:

1. **Starting Play:** A player serves the ball by hitting it down onto the net, propelling it towards the opposing team.
2. **Three Hits:** Teams have a maximum of three hits to return the ball to the net. These hits can be divided between teammates in any way.
3. **Bouncing the Ball:** The ball must be cleanly hit onto the net, causing it to bounce upward, making it challenging for the opposing team to return.
4. **Out of Bounds:** If the ball hits the ground or goes out of bounds, the opposing team scores a point.
5. **Rotation:** After each point, teams must rotate positions around the net to ensure fair play.
6. **Scoring:** Points are scored when the opposing team fails to return the ball within the three hits or if they hit the ball out of bounds.
7. **Winning the Game:** The first team to reach 21 points (with a lead of at least 2 points) wins the game. Matches are typically best of three games.
8. **Serving Rotation:** Only the serving team can score points. Teams alternate serving in a clockwise direction.

These rules encapsulate the essence of Spikeball, emphasizing agility, teamwork, and strategic ball control.

1. How many hits are teams allowed to make in Spikeball before returning the ball to the net, and how can these hits be distributed between teammates?
2. In Spikeball, what happens if the ball hits the ground or goes out of bounds during play, and how are points scored in such situations?
3. Explain the concept of rotation in Spikeball. Why is it necessary, and when does it occur during a game?
4. What is the winning condition in Spikeball, and how many points must a team score to secure victory in a typical game? Are there any specific rules regarding the winning margin?
5. Describe the serving rotation in Spikeball. How does it work, and what role does serving rotation play in the overall flow of the game?





# Computing

## Year 7 – The History of Computer Hardware

What is a computer? In the most basic sense, a computer is something you can program to conduct specific operations. There are arguments over what the first computer was. Some people say it was an abacus which is a counting device that has been used for centuries.

The Jacquard loom was invented in 1804 and made textile manufacturing much easier through the magic of programming. It's often viewed as the beginning of computing, since it was the first programmable machine. Invented by France's Joseph Marie Jacquard, these looms carried a piece of hardware that would spin and read punch cards before telling the loom what to do. There you have it, the first punch cards, designed to make cheaper textiles.

In 1833, Charles Babbage invented all the parts a modern computer uses; he called the machine he was working on the "Difference Engine" but unfortunately he never finished it. It was a very large and complicated device, with lots of rods and moving gears. It had four components: an input, a processor, memory, and an output. These four components are still a part of all computers today. Over the years, people improved on the calculating engine. One major improvement occurred when the many moving parts were changed to switches controlled by numbers or digits, which led to the term "digital." The very first computer programmer was Ada Lovelace, who was writing sequences for computers that didn't even exist yet. She also predicted that sound, music, text, and pictures could be made digital.






The first modern computers were created much later. These were electronic calculating machines and were developed during the Second World War. One computer would take up rooms and parts of the computers were put on wheels because they were so big. Even though the first modern computer was massive it could only do 4 things. Add, subtract, multiply and divide. One of the most famous was called Colossus and was invented by a man called Alan Turing, who worked for the British military and was used to break German codes.

By the 1950s, programmers were using languages to tell the computer what they wanted it to do. At first this was written by hand and punched into cards and fed into the machines. Later, computers were designed that could be typed on using keyboards.



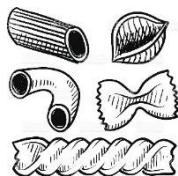
# Creative Arts

# CREATIVE ARTS

SUBJECT	HOMEWORK 1	HOMEWORK 2
D & T	<p><u>Read the following article answer the questions.</u></p> <p>Sunlight-powered 'bulbs' made from plastic bottles light up homes</p> <p><b>The Liter of Light project</b>, launched to combat the rising cost of electricity in the Philippines, aims to provide 1 million homes with light.</p> <p>How solar power can help the billion people without electricity</p> <p>Plastic bottles are put in shanty home roofs to provide light.</p>  <p>Around 25,000 low-income homes in the Philippines have been lit up after the launch of a scheme to fit sunlight-powered "bulbs" made from old plastic bottles.</p> <p>In a country where 40% of the population lives off less than \$2 a day, the rising cost of power leaves many unable to afford electricity. Some use candles as a light source, but when generations of family members share a small, dark space in shanty towns, accidental and destructive fires are often the result. <b>The Liter of Light project</b> was launched six months ago by the My Shelter Foundation, a Philippines-based NGO which aims to provide light to 1 million of the roughly 12 million homes who are either still without light or live on the threshold of having their electricity shut down. The scheme uses plastic bottles filled with a solution of bleached water, installed into holes made in shanty towns' corrugated iron roofs, which then refracts the equivalent of 55W of sunlight into the room – during the day, at least. It takes five minutes to make, and using a hammer, rivet, metal sheets, sandpaper and epoxy, it costs \$1 to produce.</p> <p>Eduardo Carillo, a resident in one of Metro Manila's many impoverished areas, said: "Before we had the bottle light, the walkways to our house were so dark and going inside made it even darker. The children are no longer scared – they are happy now and they laugh</p>	<p><u>Product Analysis</u></p> <p><u>Choose one of the following products.</u></p>     <p><u>Answer the questions</u></p> <ol style="list-style-type: none"> <li>Describe the product</li> </ol>

	<p>because they can play inside during the day instead of playing in the streets."</p> <p>The idea of using plastic bottles as a light source is not a new one - it was developed in Brazil by Alfredo Moser in 2002. But with the help of a group of MIT students, the solar bulb used in the Philippines has been modified to meet local needs.</p> <p>My Shelter Foundation Founder and social entrepreneur Ilac Diaz explains: "We basically did a cheap kind of one-way lock using the metal sheet. Once you put in the bottle, it will not slip down anymore. That way even if the roof expanded or contracted with the heat, it would not affect the waterproofing and would keep the bottle intact for many years to com."</p> <p>Diaz believes in the importance of using "appropriate" green technologies for poorer countries:</p> <p>"The challenge is how can the developing world come up with its own model to limit emissions of carbon- we can't afford to buy imported, patented or manufactured solutions from the developed world and can't afford to wait until they become affordable."</p> <p>The programme is also creating jobs. What began with teaching and contracting one unemployed man to make the first 1000 bottles has evolved into an ongoing program that has creating more than 20 jobs in installing the bottles. "We wanted to prove one man could change his village," said Diaz.</p> <p><b>Questions:</b> Write your answers here.</p> <ol style="list-style-type: none"> <li>1. Which material/product is being used to make a light source?</li> <li>2. Name one benefit of this project on the community.</li> <li>3. Why are candles not a suitable light source for all?</li> </ol>	<ol style="list-style-type: none"> <li>2. What materials do you think are used?</li> <li>3. What do you like about it?</li> <li>4. What could be improved about the product?</li> <li>5. Who is this product aimed at?_Why do you think this?</li> </ol>
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## FOOD



**Read the following recipe**      Date of Practical: \_\_\_\_\_

### **Pasta Salad**

#### **Ingredients**

*Please bring small amounts of ingredients, weighed at home*

100g Pasta shapes (to fill just a third of your container)

1 carrot

100g cooked ham/chicken OR grated cheese OR tuna (drain and place into a container/bag)

1 tomato

$\frac{1}{4}$  cucumber

Optional: cooked sweetcorn or peas (1 tbsp), spring onions, olives...

2 tbsp low fat dressing


**Named container to present your salad in and take it home in**  
**Learning how to:**

Use the hob, boil and drain pasta. Demonstrate the bridge and claw method while cutting vegetables. Grating cheese and/or carrot.

Combining or layering ingredients and presenting a dish.

#### **Method**

1. Collect all your equipment from the table.
2. Bring a half-filled pan of water to the boil. Add dried pasta when the water is boiling.
3. Cook the pasta for 8 – 10 mins.
4. While the pasta is cooking:
  - a) Grate the carrot and/or cheese
  - b) Dice the tomato into chunks
  - c) Chop the cucumber into chunks or half moons
  - d) Prepare any other ingredients
5. Drain the hot water from the pasta using a colander over the sink. Cool the pasta rinsing under the tap. Drain well.
6. Combine all your ingredients together **in your container**.
7. Drizzle the dressing over all ingredients or stir through to combine.

<p style="text-align: center;"><b>FOOD</b></p> 	<p><b>Read the following recipe</b>      Date of Practical: _____</p> <p><b><u>Crumble</u></b></p> <p><b><u>Ingredients</u></b></p> <p><b><i>Bring an ovenproof dish to make/take your crumble in.</i></b></p> <p><i>Please bring the following ingredients</i></p> <p><b>100g</b> plain flour</p> <p><b>50g</b> butter</p> <p>50g oats</p> <p>25g sugar</p> <p><b>Fruit: your choice, stew at home if needed</b> (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).</p> <p>2 apples (slice in the lesson)</p> <p>2 plums (slice in the lesson)</p> <p>Raspberries (summer)</p> <p>Blackberries (winter)</p> <p>Blueberries (summer)</p> <p>Strawberries (summer)</p> <p>Chop the fruits into big chunks</p> <p><b>Note:</b> 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.</p>
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If you want to find out more about CREATIVE CAREERS

<https://www.bbc.co.uk/bitesize/articles/zfrq92p>

## ART: KS3 HW



<https://www.bbc.co.uk/bitesize/articles/z7thd6f>

**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

# Y7 WORLD FESTIVALS


## H O L Y   W E E K




***Palm Sunday***  
Celebrating Jesus' triumphant entry into Jerusalem.



***Maundy Thursday***  
Celebrating the Last Supper, when Jesus first started the Eucharist.

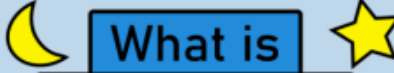


***Good Friday***  
Remembering when Jesus was crucified.



***Easter Sunday***  
Celebrating when Jesus was resurrected (rose from the dead).

## What is Ramadan?



The 9<sup>th</sup> month in the Islamic calendar.

Muslims fast between sunrise and sunset.

Eating, drinking and smoking are prohibited whilst fasting.

At the end of Ramadan, Muslims celebrate a three-day holiday called Eid al-Fitr.

Keywords	
<b>Festival</b>	day or time of celebration, usually for religious reasons
<b>Holy</b>	Dedicated to God or religious
<b>Ritual</b>	Actions (usually religious) done in a certain way.
<b>Diwali</b>	The festival of lights
<b>Easter</b>	The resurrection (raising from the dead) of Jesus
<b>Ramadan</b>	The Islamic month of fasting

In your opinion, what is the most important day of Holy Week and why?

Why is Eid celebrated by Muslims? How would you celebrate it?