



## Year 5 Autumn 1

### Knowledge Organiser



**Science** We will be learning all about different forces and how various mechanisms work with levers, pulleys and gears.

#### Key Knowledge

- A force causes an object to start moving, stop moving, speed up, slow down or change direction.
- Gravity is a force that acts at a distance. Everything is pulled to the Earth by gravity. This causes unsupported objects to fall.
- Air resistance, water resistance and friction are contact forces that act between moving surfaces.
- The object may be moving through the air or water, or the air and water may be moving over a stationary object.
- A mechanism is a device that allows a small force to be increased to a larger force. The small force moves a long distance and the resulting large force moves a small distance, e.g. a crowbar or bottle top remover. Pulleys, levers and gears are all mechanisms, also known as simple machines.

#### Key Vocabulary

Force  
Gravity  
Earth  
Air resistance  
Water resistance  
Friction  
Surface  
Balanced forces  
Stream lined  
Mechanisms

**History** Our history topic for the next term is 'The Second World War'. Our enquiry question is 'What made World War Two a significant period in British history?'

#### Key Knowledge

- World War 2 began in September of 1939 when Hitler's army invaded Poland
- The Battle of Britain took place between July and October 1940. After The Battle of Britain, the German airforce (Luftwaffe) was severely weakened
- Children from British cities were evacuated to the countryside for their safety. The organised rescue of children from Nazi Germany was known as Kindertransport.
- Not all British men went to fight as many had vital roles in Britain. Many women worked to keep the country running. They took on roles that women had never done before.
- Victory in Europe Day (VE Day) was declared on 8th May 1945, bringing an end to the war in Europe.

#### Key Vocabulary

Hitler  
Luftwaffe  
Evacuation  
Evacuee  
Kindertransport  
Antisemitism  
Land Army  
Holocaust

**DT** We will be designing and testing bridges by changing structures and reinforcing them.

#### Key Knowledge

- Triangles can be used to reinforce bridges.
- Properties are words that describe the form and function of materials. Material selection is important based on their properties.
- Some bridges are stronger than others because they have different structures.

#### Key Vocabulary

Beam bridge  
Arch bridge  
Truss bridge  
Strength  
Stiffness  
Stability  
Aesthetics

**Music**—Our music for this half term will be focusing on popular songs from WW2.

- ‘Pack up your troubles’ and ‘We’ll meet again’ are examples of song popular in WW2.
- To know that Solfa Syllables represent the pitches of an octave.
- A ‘counter subject’ or ‘counter melody’ provides a contrast to the main melody.
- To know that a counter melody is different to harmony because it uses a different rhythm as well as complementary notes.

**Key Vocabulary**

Graphic score  
Counter melody  
Solfa syllables  
Harmony  
Pitch  
Tempo

**Geography**

This term, our geography topic is linked to our history topic of World War 2.

- The 8 points on a compass are north, north east, east, south east, south, south west, west and north west.
- The main countries involved in WW2 were: UK, France, Germany, Italy, Poland, Russia, USA and Japan.
- The war covered three continents: Europe, North America and Asia.

**Key Vocabulary**

Ordnance survey  
France  
UK  
Germany  
Italy  
Poland  
Russia

**RE**—Children will learn about Islam.

**Key Knowledge**

- Muslims believe in one God, Allah. They follow the teachings of the Prophet Muhammad (Peace Be Upon Him).
- A prophet is someone who spreads God’s message on Earth.
- Muhammad (pbuh) is believed to have received the most important Islamic holy book, called the Qur’an.
- Muslims believe that, when we die, we remain in our graves until the end of the world. The date on which the world will end is known only by Allah.
- On this day, everyone who has ever lived will be resurrected. They will either go to Jannah (heaven) or Jahannam (hell).
- Ummah refers to the whole Muslim world, or the community of believers.

**Key Vocabulary**

Prophet  
Day of Judgement  
Ummah  
Jahannam  
Jannah  
Qur’an  
Muhammed

**Other relevant information for this half term**

**English**—This half term we will be reading ‘The Tin Forest’.

**Spelling**—Children need to practice the year 5/6 spelling lists that will be in their homework books. They need to know half of these by the end of year 5.

**Reading**— Children need to read at home and have their reading diaries signed 5 times a week. Children who don’t read at home may be asked to attend catch up club on Fridays.

**Maths**—We will be focusing on Roman Numerals and place value to 100,000 and 1,000,000. Times Table Rock Stars logins are in their reading diaries.

**PE**—The focus this term is Games. PE will be on a Friday, however, this can change from week to week. Children are to bring in their PE kits on a Monday. These will then be sent home on a Friday.

**French** — The children will focusing on school and subjects.

**Computing**—This half term we will learning about online safety and databases

**Homework**— Homework will be sent home on a Friday to be returned the following Wednesday. Children who do not complete their homework will need to attend Catch Up Club.