Wheelwright Lane Knowledge Organiser for:

Exploring Printing in Art

Key questions:

Who was William Morris?

Who was Andy Warhol?

What are they famous for?

What are their similarities and differences?

How is printmaking used?

How can you create printing blocks using a relief and intaglio method?

How can you print with two colour overlays?

How do artists and designers use colours, shapes and lines to create prints?

Key facts:

Poly block is a polystyrene based printing material which you can work into using a biro or a pencil.

The areas pushed down on the polystyrene block will show up in white when printed on to white paper.

Understand positive and negative space when printing.

Understand the properties and printing ink and how to roll ink out evenly.

Know how to use tools safely.

To know how William Morris used printing in his work.

Relief, where ink is applied to the original surface of the matrix.

Intaglio, where ink is applied beneath the original surface of the matrix.

Planographic, where the matrix retains its original surface, but is specially prepared and/or inked to allow for the transfer of the image.

Stencil, where ink or paint is pressed through a prepared screen.

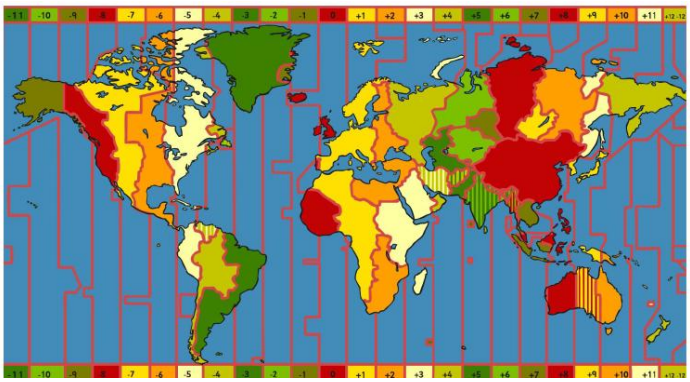
Understand negative and positive space when printing

Key vocabulary:

Relief printing- when you carve into a printing block that you then use to press onto paper and make a print. Positive space- the areas in a work of art that are the subjects, or areas of interest. Negative space- the area around the subjects, or areas of interest. Pattern- a repeated decorative design.

Wheelwright Lane Knowledge Organiser for:

What on Earth! (Location Knowledge)



Key questions:

What are the horizontal and vertical lines on a map called?

Why do we have different time zones?

Where is the Antarctic Circle located?

What does GMT stand for ?

What's the difference between the Arctic and Antarctic Circle?

Why is it night time in Australia when it is day time in The UK?

Key facts:

Why do we have different Time Zones?
The sun is highest in the sky at 12pm –this is midday. This happens at different times in different places around the world. For every place to have midday when the sun is highest, we have to divide the Earth into **Time Zones.** The sphere divided into the 24 hours means each section is 15°. As you can see from the map, the world is split into these sections with almost vertical lines. Any place in the 0 section, also known as GMT **(Greenwich Mean Time)** has midday at the same time. This means it is always the same time in these places. Anywhere one hour ahead of GMT, and therefore one hour ahead of the U.K, is in the +1 section. Some countries have more than one time zone as they span across two sections on the time zone map. New Year is celebrated at different times in different places due to these time zones, meaning some people see in the new year before we do. Some people celebrate New Year after us!

Key vocabulary:

Arctic circle, Antarctic circle, Prime Meridian, Greenwich Meridian, time zones, equator.

Wheelwright Lane Knowledge Organiser for:

What on earth!

Key questions:

What is climate change?

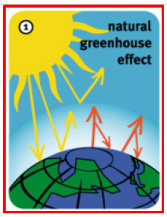
Why is climate change happening?

Which countries are most responsible?

How can we stop climate change?

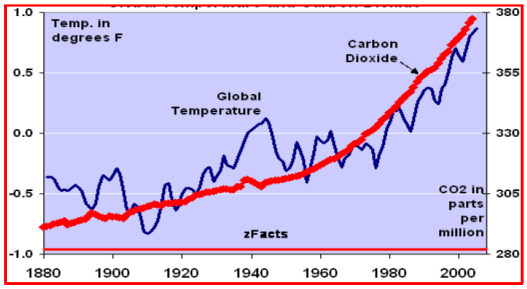
Who is affected by climate change?

What effects will climate change have in the future?



Linking CO_2 and Global temperatures

The rate of carbon dioxide and increase in global temperatures is strong. Scientist agree that this increase is cause by human activity.



Key facts:

Greenhouse Gases

Most greenhouse gases occur naturally. Some greenhouse gases have greater potential to increase global warming than occurs as different gases trap and absorb different amounts of radiation.

Carbon dioxide	Accounts for 60% of the enhanced greenhouse gases. It is produced by burning fossil fuels through producing electricity, industry, cars and deforestation.
Methane	Accounts for 15% of the enhanced greenhouse gases. 25x more efficient than Carbon dioxide. Produce from landfills, rice and farm animals.
Halocarbons	Human made and makes a tidy proportion of all greenhouse gases. 15000x more efficient at trapping radiation than Carbon dioxide. Produced from air-conditioning, refrigerators and aerosols.
Nitrous Oxide	Accounts for 6% of the enhanced greenhouse effect. 250x more efficient than Carbon dioxide. Produced from fertilisers and car exhausts.

Global impacts of climate change

The impact of rising temperatures is affecting the world socially, economically and environmentally in several potential problematic ways.

Extreme Weather	Climate is causing more unpredictable and severe weather events. This includes more frequent and powerful tropical storms; more extreme heatwaves and lasting droughts. E.g. Typhoon Haiyan 2013
Rising sea levels	Sea levels have risen by 20 cm since 1901. due to thermal expansion, melting glaciers and ice caps. Some coastal countries are now disappearing such as the Maldives in the Indian Ocean.
Food supply	Warmer temperatures and changing rainfall will make it harder to produce a reliable source of food to sustain a rising global population. E.g. In 2011, Russia banned crop exports after a incline in yield.
Plants and Animals	About a quarter of animals and plants on Earth could become extinct. With warmer temperatures and changing rainfall environments will no longer be able to provide for the world's fragile ecosystems.
Disease and Health	Warmer temperatures will increase the spread of infectious diseases like malaria. In addition, more frequent floods could cause more waterborne disease such as dysentery.
Water Supply	People need freshwater to drink but with 1 billion people predicted to not have excess to enough water by 2025 due to climate change, this might cause several social, economic and environmental problems. E.g. fishing, irrigation and sanitation.
Climate refugees	Climate refugees are people who are forced to leave their home due to the impact of climate change. This can be due to sea level rises or extreme weather conditions such as drought.

Key vocabulary: carbon dioxide, methane, greenhouse gases, evidence, absorb, radiation, fossils, sediment, ice cores, Milankovitch cycle,

Wheelwright Lane Knowledge Organiser for: Year 6 - Athletics

Key questions

- Can you practise and improving your refine an effective sprinting technique, including reaction time?
- Can you build up speed quickly for a sprint finish?
- Can you run over hurdles with fluency, focusing on the lead leg technique and maintaining a consistent stride pattern?
- Can you work as a team to competitively perform a relay?
- Can you confidently and independently select the most appropriate pace for different distances and parts of a run?
- Can you continue to develop techniques to throw for increased distance and help others improve their personal best?
- Can you develop and refine techniques to throw for accuracy?
- Can you develop the technique for the standing vertical jump?
- Can you maintain control at each of the different stages of the triple jump?
- Can you land safely and with control?
- Can you develop and improve your techniques for jumping for height and distance, and support others in doing the same?

Key vocabulary:

Running and Sprinting

- **Sprint** – to run at full speed over a short distance.
- **Reaction time** – the time it takes to respond to a signal or start command.
- **Acceleration** – the process of increasing speed quickly.
- **Stride** – the distance or pattern of each step when running.
- **Pace** – the speed at which you run.
- **Endurance** – the ability to keep going without getting tired.
- **Finish line** – the end point of a race.
- **Start position** – how you prepare your body before the race begins.
- **Drive phase** – the powerful first steps of a sprint to build momentum.

Hurdles

- **Hurdle** – an obstacle to be jumped over in a race.
- **Lead leg** – the leg that goes over the hurdle first.
- **Trail leg** – the leg that follows after the lead leg over the hurdle.
- **Fluency** – smooth and controlled movement throughout the action.
- **Stride pattern** – the number and rhythm of steps between each hurdle.

Relays

- **Relay** – a team running race where each member runs a part of the distance.
- **Baton** – the stick passed between runners in a relay.
- **Exchange zone** – the area where the baton must be passed.
- **Teamwork** – working effectively with others to achieve a shared goal.
- **Coordination** – moving smoothly and accurately in time with teammates.

Throwing

- **Technique** – the method or skill used to perform a throw.
- **Power** – strength used to propel the object.
- **Accuracy** – how close the throw is to the target.
- **Distance** – how far the object travels.
- **Follow-through** – the movement after releasing the object that helps with power and control.
- **Personal best** – your best performance to date.

Jumping (Height and Distance)

- **Take-off** – the point where your feet leave the ground.
- **Flight** – the phase when you're in the air.
- **Landing** – how you return to the ground safely and under control.
- **Balance** – maintaining body control throughout the movement.
- **Triple jump** – a combination of hop, step, and jump phases.
- **Vertical jump** – jumping upwards from a standing position.
- **Height** – how high you jump.
- **Distance** – how far you jump horizontally.

Key facts:

- Athletics includes a variety of throwing events, such as the fling throw, where different techniques are used to increase distance.
- Jumping events in athletics include the standing long jump, triple jump, and vertical jump, all of which require effective take-off, flight, and safe landings.
- Developing proper technique is essential for improving performance in both throwing and jumping events.
- Sprinting in athletics requires practising an effective sprint start and refining running technique to maximize speed.
- Stamina is an important part of athletics, helping runners maintain their performance over longer periods of time.

Wheelwright Lane Knowledge Organiser for: Year 6 - Gymnastics

Key questions

- Can you create your own complex sequence that includes a full range of actions and movements such as travelling, balancing, holding shapes, jumping, leaping, swinging, vaulting and stretching?
- Can you demonstrate precise and controlled placement of your body parts in your actions, shapes, and balances?
- Can you confidently use equipment to perform a vault and include this as part of a sequence?
- Can you show strength, good technique, and flexibility throughout your performance?
- Can you link your movements smoothly so your sequence flows with control and confidence?

Key vocabulary:

Movement and Sequence

- **Sequence** – a series of linked movements performed smoothly and in order.
- **Flow** – how smoothly movements connect together.
- **Transition** – the movement that links one action or position to another.
- **Routine** – a completed performance of movements and actions.
- **Pattern** – a repeated or structured arrangement of movements.

Actions and Skills

- **Travel** – moving across the floor or apparatus in different ways.
- **Balance** – keeping the body steady in one position.
- **Shape** – the position your body makes, such as tuck, pike, or star.
- **Jump** – taking off and landing on two feet.
- **Leap** – taking off from one foot and landing on the other.
- **Swing** – moving the body rhythmically back and forth, often using apparatus.
- **Vault** – jumping or springing over an apparatus with control.
- **Hold** – maintaining a position for a set amount of time.

- **Stretch** – extending muscles and limbs to improve flexibility and control.

Control and Technique

- **Precision** – accurate and exact body movements.
- **Control** – keeping movements steady and deliberate.
- **Technique** – the correct way to perform a movement or skill.
- **Coordination** – using different parts of the body together smoothly.
- **Focus** – concentrating on body placement and movement.
- **Timing** – performing movements at the right moment or rhythm.

Physical Qualities

- **Strength** – using muscles to hold, lift, or control movements.
- **Flexibility** – the ability to move joints and muscles through a full range of motion.
- **Balance** – staying steady whether still or moving.
- **Posture** – the way the body is held or positioned.
- **Agility** – the ability to move quickly and easily.

Apparatus and Equipment

- **Apparatus** – the equipment used in gymnastics (e.g. vault box, mats, benches).
- **Vault box** – a padded box used for vaulting and jumping movements.
- **Springboard** – a board that helps gymnasts gain height in jumps or vaults. (We do not have one of these in school!)
- **Mat** – used to perform movements safely and cushion landings.

Key facts:

- 🤸 **Combining Skills:**
  In Year 6 gymnastics, pupils learn to **create and perform complex sequences** that include travelling, balancing, jumping, leaping, swinging, vaulting, and stretching.
- 💪 **Control and Precision:**
  Gymnasts work on showing **control, accuracy, and strength** in every movement, making sure their body positions are precise and well-balanced.
- 🧠 **Planning and Creativity:**
  Pupils are encouraged to **plan and design their own routines**, choosing movements that flow together smoothly and show creativity and confidence.
- 🧍 **Using Apparatus:**
  Children learn to **use equipment safely and effectively**, including mats, benches, and vaults, and to include these in their sequences.
- 🧘 **Physical Development:**
  Gymnastics helps to build **strength, flexibility, balance, coordination, and body awareness**, which are important in many sports and physical activities.
- 🎯 **Performance and Evaluation:**
  Pupils practise performing in front of others, **evaluating their own and others' routines** to identify strengths and areas for improvement.
- ⚖️ **Safety and Technique:**
  Good gymnastics focuses on **safe landings, correct posture, and controlled movements** to prevent injuries and improve performance.
- 🌟 **Expression and Confidence:**
  Gymnastics encourages pupils to **express themselves through movement**, building confidence, discipline, and pride in their performances

Wheelwright Lane

Knowledge Organiser for:

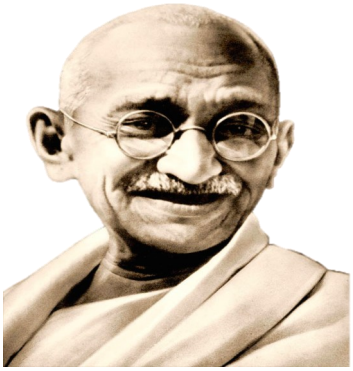
What difference does it make to believe in ahimsa (harmlessness), grace and Ummah?

Key questions:

What does Religious commitment m[illegible]n?

Can you explain the value of Ahimsa in Hinduism and how it leads to practice, and the belief of grace in Christianity?

Can you make links with the belief of Ummah in Islam and how that leads to practice too?



Key facts:

The grace of God in Christianity is the belief that God loves people unconditionally and is willing to offer forgiveness to anyone for anything.

•The worldwide Muslim community is called the Ummah

•Muslims complete at least on Hajj in their lifetime and give zakat to the needy.

•Ahimsais an ancient Indian principle of non-violence which applies to all living beings. It's a religious value.

•Ghandi saw non-violence as a tool based on strong religious thinking.

•Ghandi did not preclude the use of violence.

Gandhi was a political and social leader in the 20th century. His use of non-violent protest eventually led to his country's

Key vocabulary:

Ahimsa Ahimsa -(in the Hindu, Buddhist, and Jainist tradition) respect for all living things and avoidance of violence towards others. Civil resister A person who takes political action that relies on the use of nonviolent resistance to challenge a power, force, policy or regime. Community A group of people living in the same place or having a particular characteristic in common. Gospels The teaching or revelation of Christ Grace of God "The love and mercy given to us by God because God desires us to have it, not necessarily because of anything we have done to earn it". Hajj Muslim pilgrimage to Mecca Karma (In Hinduism and Buddhism) The sum of a person's actions in this and previous states of existence, viewed as deciding their fate in future existences. Parable A simple story used to illustrate a moral or spiritual lesson, as told by Jesus in the Gospels Religious behaviours Behaviours motivated by religious beliefs. Religious actions are also called 'ritual' and religious avoidances are called taboos or ritual prohibitions. Religious beliefs Attitudes towards mythological, supernatural, or spiritual aspects of a religion. Religious belief is distinct from religious practice and from religious behaviours – with some believers not practising religion and some practitioners not believing religion Religious commitment How much an individual is involved in his or her religion (Koenig et al., 2001). More precisely, a religiously committed person is supposed to "adhere to his or her religious values, beliefs, and practices and use them in daily living" Religious values Based on values reflected within religious texts or by the influence of the lives of religious persons. Scripture The sacred writings of Christianity contained in the Bible. Ummah Worldwide community of Muslims