

Year 2 Knowledge Organisers.

Autumn 1 - 2023

Art

No Art unit this half term.



| Overview | |
|----------|---|
| | <p align="center">Technology Around Us</p> <ul style="list-style-type: none"> -You should already know that <u>Technology</u> is something that has been made by people to help us. -Technology is '<u>man-made</u>' and not '<u>natural</u>.' -<u>Information technology</u> (I.T.) includes <u>computers</u> and <u>things that work with computers</u>. -Information technology is in lots of important items <u>in our homes and around the world</u>. -It is important that we understand <u>how to use information technology safely</u>. |

| I.T. in the Home | I.T. in the World |
|---|--|
| <p>There is lots of information technology in our homes. I.T. is used to:</p> <ul style="list-style-type: none"> -Control the tools and appliances that we use in the home, e.g. the panel for the heating, setting the washing machine, and programming the microwave. -Help us to communicate with one another, e.g. the internet router and the telephone. -Entertain us, e.g. the information technology in toys, consoles and computer games. | <p>There is also lots of information technology in the wider world</p> <ul style="list-style-type: none"> -I.T. can be found in shops, e.g. the barcode, barcode scanner and till all work together to scan your shopping items. -I.T. can be found in ATMs, e.g. the bank card, chip and PIN card reader help you to access your bank account. -I.T. can be found outside, e.g. traffic lights, buttons, and signals work together to tell you when to cross the road. |

| Information Technology | |
|---|---|
| <ul style="list-style-type: none"> -Technology is the name for man-made things that help us. -Information technology is made up of computers and things that work with computers. | |
| <ul style="list-style-type: none"> -Information technology includes <u>computers</u>, for example desktop computers, laptops, games consoles, smart phones and tablet. | <ul style="list-style-type: none"> -Information technology also includes <u>devices that work with computers</u>, e.g. USB sticks, SMART boards and digital cameras. |
| Using Technology Safely | |
| <p>We can create and follow a number of rules to use technology safely, e.g.:</p> <ul style="list-style-type: none"> -Make sure that the games and apps that we access are age-appropriate. -Always sit down when using devices. They can be broken if dropped! -Do not use devices at social times, e.g. at the table. It is bad manners. -Stick to using technology at agreed times. Too much screen time is not good for us! | |

| How I.T. Improves Our World |
|---|
| <ul style="list-style-type: none"> -Information Technology helps us in lots of different ways in our daily lives. -I.T. can help to make things quicker and easier. E.g. at the supermarket, the barcodes/ scanners quickly add up the product numbers and costs of the things that we want to buy. -I.T. can also help us to stay safe. E.g. The traffic lights, buttons and signals help us to avoid traffic when crossing the road. -I.T. also helps us to communicate with one another and have fun! E.g. it can connect us to the internet, and can allow us to play games, share and receive information. |

Important Vocabulary

| | | | | | | | | | |
|------------------------|----------|--------|---------|---------|---------------|---------------|------------|--------|----------|
| Information Technology | Computer | Device | Barcode | Scanner | Communication | Entertainment | Appliances | Signal | E-Safety |
|------------------------|----------|--------|---------|---------|---------------|---------------|------------|--------|----------|



KS1 D.T: STRUCTURES KNOWLEDGE ORGANISER






Overview


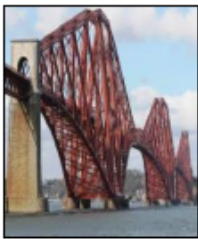
Freestanding Structures

Structures are things that are built for a purpose.

- Structures can be large (e.g. buildings and bridges) or small (e.g. chairs and tables).
- Freestanding structures are structures that can stand up without being attached to something else.
- Freestanding structures need to support their own weight and also the weight of the things/people using them.

So that they can do this, freestanding structures need to be well-designed: **strong, rigid and stable**.

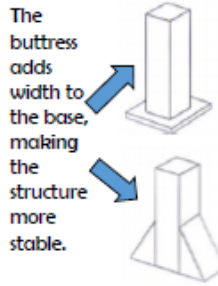
| Example Structures | | |
|--|---|---|
|  | <p>Name: Burj Khalifa</p> <p>Location: Dubai, United Arab Emirates</p> <p>Height: 828m</p> <p>Floors: 163</p> <p>Built in: 2010</p> | <ul style="list-style-type: none"> -The Burj Khalifa is the <u>tallest freestanding structure</u> in the world. -It has an extremely <u>wide base</u>, and is very <u>narrow at the top</u>. -The steps down the sides help to protect the structure from the wind. -It has deep <u>foundations</u> in the ground. -It is made of <u>strong, rigid materials</u> – over 330,000m³ of concrete and 40,000 tonnes of steel reinforcement! |
|  | <p>Name: Forth Bridge</p> <p>Type: Railway Bridge</p> <p>Location: Scotland</p> <p>Length: 2,528m</p> <p>Built in: 1890</p> | <ul style="list-style-type: none"> -The Forth Bridge is a <u>long railway bridge</u> in Scotland, across the Firth of Forth. -It is made of <u>strong materials</u>: it was one of the first bridges made of <u>steel</u>. The steel frame is built into <u>triangles</u> (a wide base and narrow top). It also has <u>strong, stable concrete arms supporting</u> on either side. |

Designing – What makes a strong, stable, rigid structure?

A structure that is stable is less likely to fall over.

- Structures are more stable when they have a wider base.
- Buttresses can also make a structure more stable. A buttress is something that is built against a structure to give it more stability.

The buttress adds width to the base, making the structure more stable.



A structure that is strong and rigid is able to support more weight.

- Some materials are stronger and more rigid (stiffer) than others, e.g. card is stronger and more rigid than paper.
- Structures can also be made stronger and more rigid by making sure that parts and materials are properly joined together, e.g. with glue or tape.

- Folding and layering (adding an extra layer) of materials can also be used to strengthen and stiffen structures.


Key Vocabulary

| |
|--------------|
| Structures |
| Freestanding |
| Support |
| Weight |
| Strong |
| Rigid |
| Stable |
| Base |
| Materials |
| Layering |
| Design |
| Make |
| Evaluate |

Making & Evaluating


Making

- Read your plan carefully. Make sure that you are prepared.
- Think about the skills you will need to use (e.g. cutting, assembling/sticking) and the tools that you will need for them (e.g. scissors, glue).
- Think about finishing techniques (e.g. adding buttresses/extra layers for strength, or colour to make your structure look well presented!)
- Remember your purpose – does it work?



Evaluating

- How well does your structure work? Does it meet its purpose?
- How did you make your structure stable? How could you make it more stable?
- How did you make your structure strong and rigid? How could you make it more strong and rigid?



| Health and Safety | | | | | | | |
|---|--|--|---|--|---|---|--|
| -Remove any jewellery and tie back long hair. | -Wear an apron and roll up your sleeves. | -Walk safely and calmly around the classroom/workshop. | Keep your work area and floor area clear – keep your belongings well clear. | Follow the teacher's cutting instructions carefully. | Make sure that you are wearing the correct equipment for tasks. | If you need to move around with scissors, hold around the closed blades, facing down. | Report all spillages & clean up properly after yourself. |

Geography

Geography- Year 2 - Autumn My Local Area- Hanslope

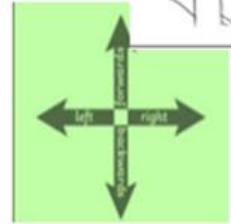




Hanslope is a village in the city of Milton Keynes in the country of England.



Hanslope Primary School Address
Long Street Road
Hanslope
Milton Keynes
MK19 7BL ← Postcode







What is your home address?



Key:
 Shop
 Church

Giving directions:
 When you reach the _____, you turn right
 If you look _____, you can see
 Next to the _____ you will see
 Keep walking forwards until you reach _____

| Vocabulary | Definition |
|------------------|--|
| Human feature | Like houses, roads and bridges are things that have been built by people. |
| Physical Feature | Physical features like seas, mountains and rivers are natural. They would be here even if there were no people around. |
| Compass | Something that tells people directions. (North, East, South, West) |
| City | A city is a large town where people work and live. |
| Town | A place where people live that is smaller than a city but bigger than a village. |
| Village | A group of houses and associated buildings, smaller than a town, situated in a rural area |
| Key | A list of symbols that appear on a map |
| Aerial View | Any view from a great height, above |
| Route | A journey from a starting point to a destination. |

| Human Features | | Physical Features | |
|----------------|---|-------------------|---|
| Shop |  | Office | Trees  |
| Farm |  | Factory | River  |
| House |  | | Weather  |

History

No History unit this half term.

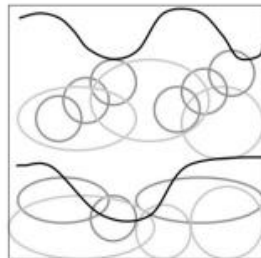
Music

Vocabulary

| | |
|--------------|--|
| Rhythm | A pattern of long and short notes. |
| Layers | The different instruments, rhythms or melodies that build the overall texture. |
| Melody | An arrangement of notes which sound tuneful. |
| Dynamics | The volume of the music (loud or quiet). |
| Timbre | The quality of sound e.g. smooth, scratchy, twinkly. |
| Pitch | How high or low a sound is. |
| Verse | A repeated section of a song that usually has different words (lyrics) each time it is repeated. |
| Chorus | A repeated section of a song that usually has the same words (lyrics) each time it is repeated. |
| Instrumental | A section of a song which is performed by instruments and has no vocals. |

Graphic score

Pictures, symbols, lines or shapes to represent sound.



Structure

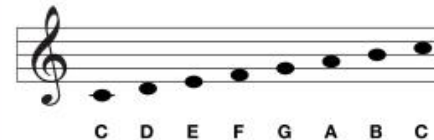
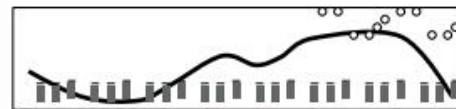
How the music is organised into different sections.

VERSE - A
CHORUS - B
BRIDGE - C

ABABC B

Notation

How the music is written down.



Texture

How many layers of sound the music has (thick or thin).

Thin



Thick



Tips for performing



Smile and sit smartly



Start and stop playing at same time



Play at the same speed and volume



Keep your hands to yourself



Be silent at the beginning and at the end of performance



Take a bow at the end

PE



I can learn to stay on task with help
I can learn to stay on task
independently
I can ask for help when needed

PE Y2 Autumn 1



Vocabulary

Following instructions

Gallop

Hop

Skip

Standing still

Balance

Perseverance

Pivot

Side step



Coordination

Footwork



Static Balance

One Leg

PSHE

| | |
|------------|--|
| Emotions | The range of feelings that someone can have, such as happiness or anger. |
| Family | A unit of people joined together by blood, marriage, or other means including adoption or a close social bond. |
| Feelings | Emotions that a person can have. |
| Friendship | A special bond between yourself and a friend. |
| Love | Feelings of affection and care. |
| Manners | A way of behaving that shows respect for other people. |
| Respect | A way of thinking about someone or behaving towards someone, in a kind and thoughtful way. |
| Stereotype | A view or idea about something, often someone, which is often untrue. |



Good memories can help us feel better if a person or pet dies or doesn't live with us anymore.



We can decide what job we want to do and being a boy or girl should not affect what we choose.

Getting help

Talk to an adult you trust either at school or at home.

Contact: Childline
www.childline.org | 0800 1111
Calls DO NOT show on the phone bill



Families support and care for each other.



Other people's families might be different to yours, but that is OK.

We can sometimes see how people are feeling by their body language, such as smiling.



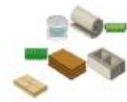
If a friendship makes us unhappy, we need to talk to someone or find a new friend.





Religious Education Year Two Autumn One

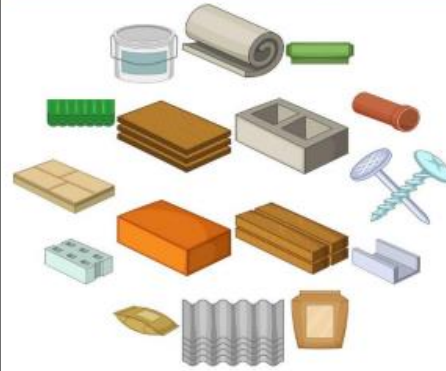
| | |
|--|---|
| <p>Key Question: Who Should You Follow?</p> <p>Learning Intention:</p> <ul style="list-style-type: none"> *To find out about religious leaders and how and why they are followed *To learn stories about religious leaders and their significance for believers | |
| <p>Values Explored: community, trust, faith, respect</p> <p>What I should already know:</p> <ul style="list-style-type: none"> *Some Old Testament stories and what can be learned from them <p>What I will know by the end of this unit:</p> <ul style="list-style-type: none"> *A story about a leader in the Bible *A leader in society and suggest what makes that person special * Reasons why people follow certain leaders *What makes someone a good leader *Why leaders are needed | <p>Key Vocabulary:</p> <p>Christianity- the religion based on the person and teachings of Jesus Christ or its beliefs and practices</p> <p>Judaism-religious and cultural traditions of the Jewish people</p> <p>Rabbi- a spiritual leader or religious teacher in Judaism</p> <p>Vicar- a holy representative of the church. A parish is led by a priest, usually called a vicar or rector.</p> |
| <p>Stories I will know by the end of this unit:</p>  <p>Moses leading the Israelites through the desert- Exodus 1-2</p>  <p>Joshua leading the Israelites against Jericho- Joshua- Joshua</p> | <p>Reflection:</p>  <p>Who do you think are the best leaders?</p> |



Use of EVERYDAY MATERIALS KNOWLEDGE ORGANISER



What you should already know...



- Materials are the substances that things are made from.
- We use lots of different materials every day, e.g. metal, plastic, wood, and glass.
- Different materials have certain properties, e.g. glass is see-through, metal is strong and often shiny, etc.
- Composites are made from two or more materials together.
- Some materials are used to make many things.

Development of Materials

John Dunlop

- John Dunlop is famous for developing the pneumatic (air-filled) tyre.
- He did this, at first, to improve the tyres on his son's bicycle!
- He used his understanding of rubber to fit it to a wooden disc. He then used an inflated tube of sheet rubber to blow up the tyre.



Charles Macintosh

- Charles Macintosh is best known for inventing the raincoat.
- He discovered a way in which rubber could be placed between two layers of cloth, to make it waterproof.
- His name lives on today – a raincoat is often called a Macintosh or Mac.



John McAdam

- John McAdam was the first person to think of tarmac roads.
- Roads used to be made from clay, earth, or chalk, but these materials were messy and not very smooth.
- He spread hot tarmac on a road, adding lime chippings & flattening.



Properties of Materials

| Material | Image | Properties | What could it be used for? |
|------------------|-------|--|---|
| Metal | | <ul style="list-style-type: none"> -Metals are often strong, shiny, hard and long-lasting. -Metals can be hammered into different shapes. | <ul style="list-style-type: none"> -Metals can be made into things like pots and pans. -Metals can be stretched into wires and rods. |
| Glass | | <ul style="list-style-type: none"> -Glass can be strong, but thin glass shatters. -Glass is transparent and waterproof. It can be made into different shapes. | <ul style="list-style-type: none"> -Glass is most often used to make windows and glasses. -It is also used in making mirrors, table-tops and windscreens. |
| Wood | | <ul style="list-style-type: none"> -Wood is hard and strong; -Wood is long-lasting and is a natural product. -Wood is flammable. | <ul style="list-style-type: none"> -Wood is often used to build furniture, like benches and desks. -Wood can be used to build houses and cabins. |
| Plastic | | <ul style="list-style-type: none"> -Plastics can be tough or flexible and can be made into any shape. Plastics can be dyed different colours and can be made transparent. | <ul style="list-style-type: none"> -Plastics can be used to make packaging, bottles and toys. -Plastics can be moulded into plates, knives and forks. |
| Rubber | | <ul style="list-style-type: none"> -Rubber is extremely tough, but also very flexible. -Rubber is elastic and also waterproof. Rubber doesn't tear easily. | <ul style="list-style-type: none"> -Not including food and drinks, water is still used in many, many products. For example, it is used in making paints, toothpastes, shampoos and cement. |
| Brick | | <ul style="list-style-type: none"> -Bricks are very hard and strong. They are difficult to break. Bricks are thick and store heat well. | <ul style="list-style-type: none"> -Bricks are normally attached together with mortar and are used to make buildings. -They are also used for paving. |
| Paper | | <ul style="list-style-type: none"> -Paper is often thin and can be made into lots of different shapes. Paper can be torn. It goes soggy when wet. | <ul style="list-style-type: none"> -Paper is normally used for writing. Paper is used in diaries, notebooks and for printing on. Paper is used for posters/displays. |
| Cardboard | | <ul style="list-style-type: none"> -Cardboard is often thin but is firmer and tougher than paper. Cardboard is more difficult to tear. It goes soggy when wet. | <ul style="list-style-type: none"> -Cardboard is often turned into boxes and is then used for packaging items. It can be used for protection, e.g. protecting floors when painting. |

Properties of Materials Vocabulary

Hard Squashy Smooth Absorbent Bumpy Bouncy Dull Flexible Flammable Translucent Waterproof Firm Soft