

Unit 13

Time



In this unit we will ...

- ⚡ Convert between units of time
- ⚡ Write times in different ways
- ⚡ Compare times by converting units
- ⚡ Solve problems involving units of time

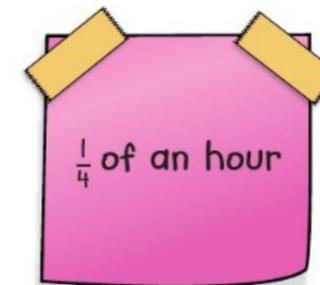
How many minutes are in 1 hour?



Here are some maths words we will be using. Are any of these words new?

convert	compare	units of time
seconds	minutes	hours
days	weeks	months
years	12-hour	24-hour
analogue	digital	am/pm

Which time do you think is shortest? Why?



Unit 14

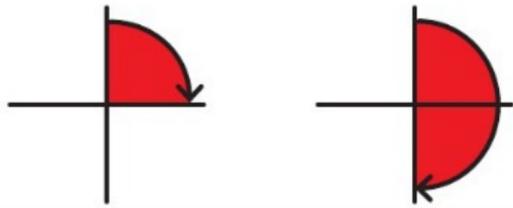
Geometry – angles and 2D shapes



In this unit we will ...

- ⚡ Learn to recognise obtuse, acute and right angles
- ⚡ Understand regular and irregular shapes
- ⚡ Name and describe quadrilaterals and triangles
- ⚡ Identify lines of symmetry in shapes and patterns

Do you remember quarter turns and half turns?



We will need some maths words.
Do you recognise any of these words?

- quadrilateral
- triangle
- regular
- irregular
- interior angle
- angle
- acute
- obtuse
- polygon
- right angle
- symmetric
- isosceles
- scalene
- equilateral
- line of symmetry
- reflective symmetry

Can you identify the right angle?
Describe it to a partner.



Unit 15

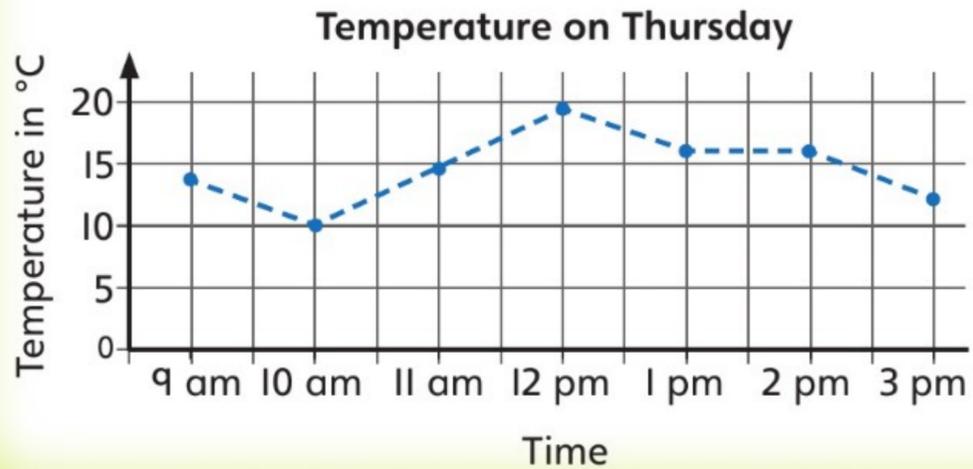
Statistics



In this unit we will ...

- ⚡ Present data in pictograms, bar charts and tables
- ⚡ Solve problems based on data
- ⚡ Explore line graphs

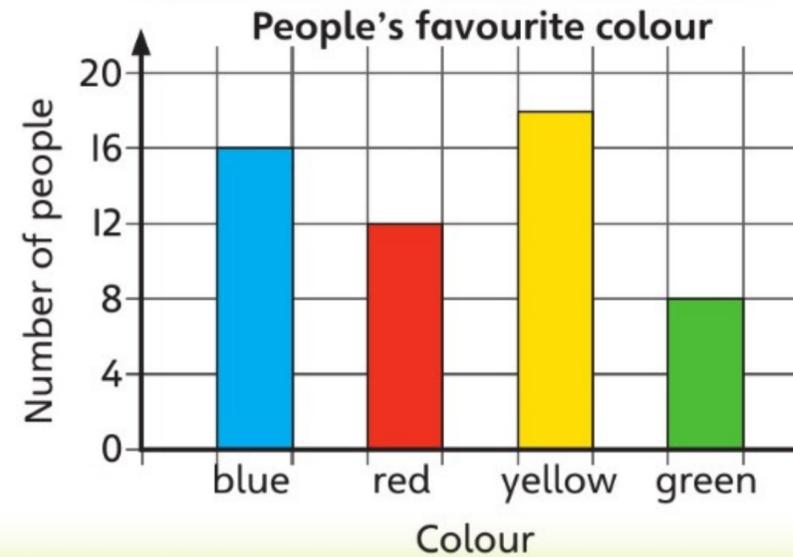
We are going to meet this type of graph in this unit. What was the temperature at 10 am?



We will need some maths words. Which ones have you seen before?

- data
- line graph
- pictogram
- bar chart
- table
- altogether
- more than
- compare

We need this too! How many people's favourite colour is yellow?



Unit 16

Geometry – position and direction



We will need some maths words. Do you know what they mean?

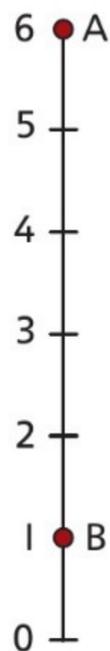
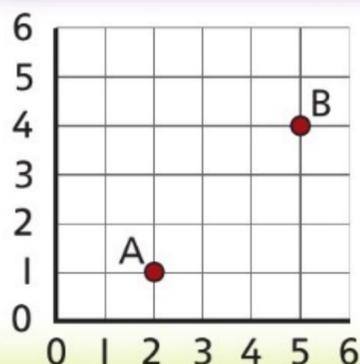
position horizontal vertical
up down left right
coordinate plot vertex
vertices point grid
translate



In this unit we will ...

- ⚡ Use numbers to say where things are on a grid
- ⚡ Plot points on a grid
- ⚡ Use our knowledge of shapes to complete diagrams
- ⚡ Describe translations on a grid

Point A is '2 across and 1 up'. Where is Point B?

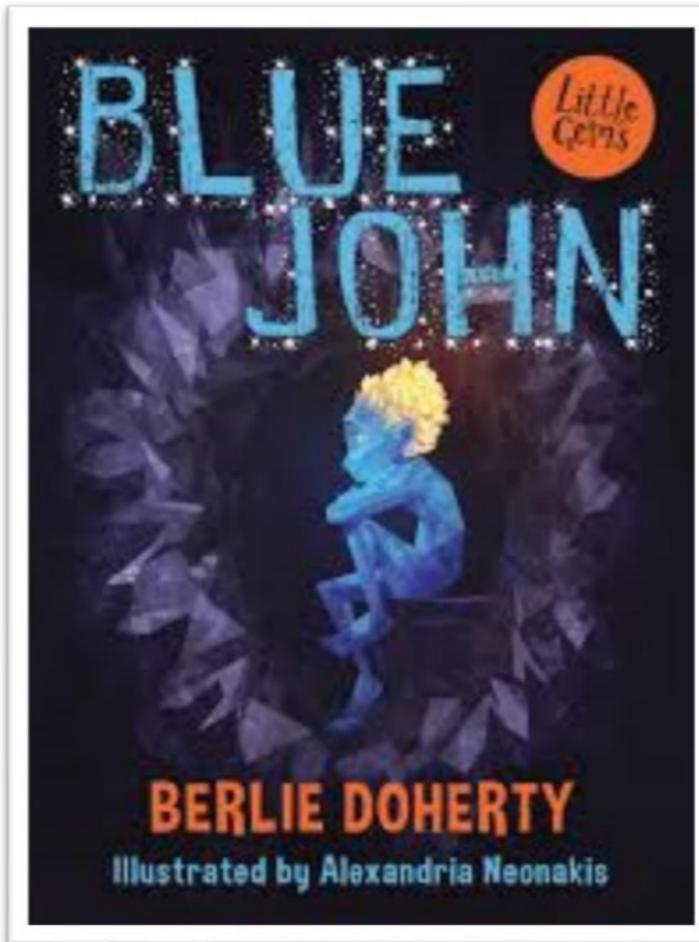


You will need to know how to find numbers on a number line. What are the numbers marked with letters?



Blue John

By Berlie Doherty



 Pathways to Write keys		
Gateway keys (non-negotiables/basic skills)	Mastery keys (year group national curriculum expectations)	Feature keys (vocabulary, manipulating sentences and tense, structure)
<ul style="list-style-type: none"> • Full stops, capital letters, exclamation marks, question marks, commas and apostrophes • Group related ideas into paragraphs • Use past and present tense consistently • Expand noun phrases by the addition of modifying adjectives, nouns and prepositional phrases 	<ul style="list-style-type: none"> • Build a rich and varied vocabulary and an increasing range of sentence structures • Variety of verb forms used correctly and consistently including the progressive and the present perfect forms • Use paragraphs to organise information and ideas around a theme <p>Integrated as revision: The grammatical difference between plural and possessive s</p>	<p>Explanation</p> <ul style="list-style-type: none"> • Use language to explain a process or how something works • Use some technical vocabulary • Use simple present tense • Use words /phrases to make sequential, causal or logical connections e.g. because, as a result of • Use organisational features e.g. opening statement, paragraphs, steps explained in logical order, diagrams and flowchart <p>Letter</p> <ul style="list-style-type: none"> • Choose sentence forms to address the reader directly • Use fronted adverbials to introduce paragraphs • Use layout features including an address/date, suitable closing

National curriculum skills for this unit:

Spoken language:

- Ask relevant questions
- Build vocabulary
- Articulate and justify answers
- Give well-structured descriptions, explanations and narratives
- Use spoken language: speculating, hypothesising, imagining and exploring ideas
- Speak audibly and fluently
- Participate in **discussions**, presentations, performances, **role play**, **improvisations** and debates

Reading comprehension:

- Identify themes and conventions
- Discuss words and phrases that capture the reader's interest and imagination
- Explain meaning of words in context
- Draw inferences (characters' feelings, thoughts and motives); justify with evidence
- Predict from details stated and implied
- Identify main ideas drawn from more than one paragraph and summarise
- Identify how language, structure, and presentation contribute to meaning
- Retrieve and record information from non-fiction

Writing composition:

- Plan writing by discussing the structure, vocab and grammar of similar writing
- Discuss and record ideas
- Compose and rehearse sentences orally
- In non-narrative material, use simple organisational devices
- Assess the effectiveness of own and others' writing
- Proof-read for spelling and punctuation errors

Year 4: Adapting and transposing motifs (Romans)

Musical style: Motifs

Using Roman mosaics to explore musical motifs.



Vocabulary

- Motif** A short repeated pattern of notes.
- Ostinato** A repeating musical pattern.
- Riff** A short repeated phrase in pop music and jazz.
- Rhythm** A pattern of long and short sounds (and silences) within a piece of music.
- Backing track** A recorded musical accompaniment.
- Transpose** Move a whole tune or piece of music up or down in key by starting it on a different note.

Sharp notes



Notes that sound a semitone higher than notes that appear on the lines and spaces of a musical staff.

Flat notes



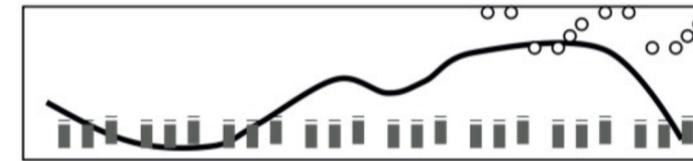
Notes that sound a semitone lower than notes that appear on the lines and spaces of a musical staff.

Notation

The way that music is written so that others can play it.

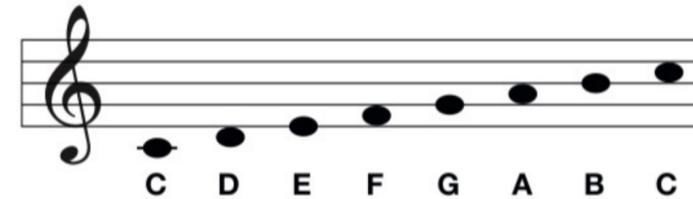
Graphic score

A way of writing music down using pictures or symbols, rather than standard music notation.



Letter notation

Writing the notes in a melody using letters.



Rhythmic notation

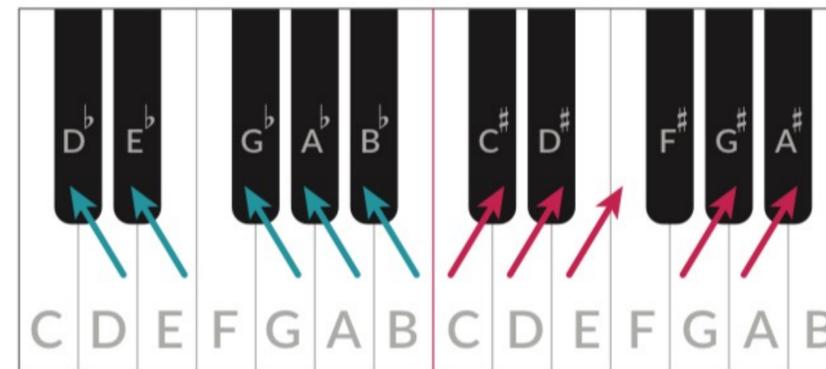
A way of writing musical notes so that the duration of each note is clear.



Did you know? The sharp and flat keys are the black keys on a piano and the top row of keys on a glockenspiel.

Sharp keys

A sharp indicates a higher pitch in the music.



Flat keys

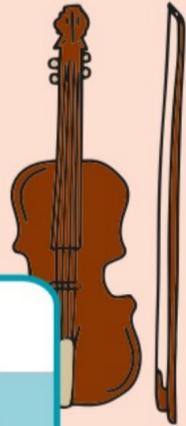
A flat indicates a lower pitch in the music.

Vocabulary and pictures



le piano

the piano



le violon

the violin



le saxophone

the saxophone



le clavier

the keyboard



la guitare

the guitar



la flûte

the flute



la clarinette

the clarinette



la batterie

the drums



la trompette

the trumpet



la flûte à bec

the recorder



La France

France



La Suisse

Switzerland



Le Royaume-Uni

the UK



L'Allemagne (f)

Germany



L'Italie (f)

Italy



Les Pays-Bas

The Netherlands

Les pays de l'Europe

European countries

Sentence structure and phrases



Quel genre de musique préfères-tu?
/What music do you prefer?

J'aime la musique pop mais je déteste la musique classique.



I like pop music but I hate classical music.

Moi, je n'aime pas la musique jazz, je préfère la musique rock.



Me, I don't like jazz music, I prefer rock music.

When saying what instrument you play, Jouer - to play is followed by 'de' + instrument

de changes depending on the definite article le/la/les of the instrument.

de + le = du

de + la = de la

de + les = des

de + l' = de l'

Tu joues d'un instrument? - Do you play an instrument?

Je joue du piano.

Je joue de la batterie.

I play the piano.

I play the drums.

Changing a sentence into the negative form:
Place **ne ... pas** around the verb

Je **ne** joue **pas** d'instrument.

I don't play an instrument.

Key fact

The Eurovision song contest is an annual singing competition where European countries compete to win.

Key phrases

J'aime	I like	Je n'aime pas	I don't like
Je préfère	I prefer	Je déteste	I hate

batik	A technique to create patterns on fabric.
colour palette	A range of colours grouped together to look nice.
craft	Something creative and useful.
design	A decorative pattern or drawing of what something might look like.
industry	Companies and activities that design and make products, sometimes in a factory.
pattern	A design in which shapes, colours or lines are repeated.
repeat	When the same thing occurs more than once.
theme	Similar ideas that work together as a group.

Mood board

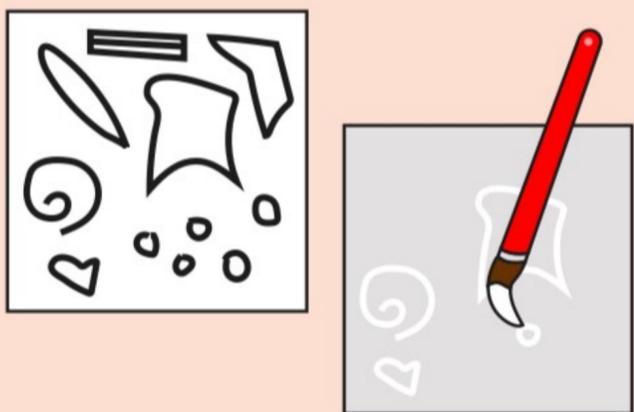


A collection of images and colours showing a project theme.

- Artists**
- Ruth Daniels
 - Senaka Senanayake
 - William Morris
 - Megan Carter

Glue batik

Step 1



Paint the design onto fabric with PVA glue. Then allow it to dry completely.

Step 2



Use acrylic paints to add colour and patterns. Cover the entire piece of fabric, painting over and around the dry glue. Allow to dry.

Step 3



Wash out the glue. As it dissolves it will feel slimy. Keep going until you can't feel any more glue. Lay your fabric flat to dry.



Discovery RE Knowledge Organiser



This knowledge organiser is a guide, offering key information to point the teacher in the right direction as to the beliefs underpinning the particular enquiry.

The summaries must not be taken as the beliefs of ALL members of the particular religion.

Religion /Worldview: Christianity	Enquiry Question: Do people need to go to church to show they are Christians?	Age: 8/9 Year Group: 4 Summer 2
This enquiry looks at some of the rites (or Sacraments) that are performed in churches (the Christian place of worship) and investigates how and why Christians might choose to worship in a church (rather than e.g. just pray at home).		

Core Knowledge (see also background information documents)		Link to other aspects of belief	Personal connection / resonance
<p>Jesus taught about worship in the Bible and praying .</p> <p>Baptism is generally a rite for babies although adults can choose to be baptised later in life. It confers the name of the person and their part in God’s family.</p> <p>Many Christians would choose to get married in church to confer God’s blessing on the marriage.</p> <p>Churches frequently have art or symbols which may remind the Christian of his or her beliefs or the life of Jesus or other figures from the Bible or later saints. These can help the Christian focus when in church which they may find more difficult e.g. at home where there are more distractions.</p> <p>Consider the feelings a place evokes as well as the building and what happens there. These feelings may be one of the reasons a Christian would choose to go to church.</p>		<p>Love of God and love of neighbour can be demonstrated by a Christian through service to the Church and its community (e.g. arranging flowers, reading, taking communion to the sick, contributing to music etc). Other Christians will consider it most important to do good work in the community as well as or instead of helping specifically in the church building or services. These were the commandments given by Jesus in Matthew 22:37-40.</p>	<ul style="list-style-type: none"> • Do I have a special place? • Are there actions or events that can only happen in my special place? Why? What is special about them to me? • Does it feel better to celebrate something or to do something special with other people who feel the same way as I do, or do I prefer to have special moments in private?
Key Terms and definitions	History/Context	Impact on believer/daily life	Spiral curriculum link
<p>Sacraments: rites which are often performed in Churches such as marriages, baptisms and communion/Eucharist.</p> <p>Eucharist/Communion: the taking of bread and wine in remembrance of the events of the Last Supper</p> <p>Saints: Holy people recognised by the Church because of actions in their lives, miracles or the examples they set.</p>	<p>Whilst Holy Communion or Eucharist is usually carried out in church, it should be noted that people who wish to but cannot come to church e.g. because they are sick, can receive communion from a minister who can take it to them. However, for many Christians, the receiving of communion will be the biggest difference between praying and worshipping at home (or away from the church) and attending a service in church where Eucharist is distributed.</p>	<p>Although many Christians will attend church, the regularity and reasons for attending may vary hugely. Some Christians will attend weekly or even daily to pray and receive communion. Some will attend only for larger festivals such as Christmas and Easter or for family events such as weddings, baptisms or funerals. Some Christians will only pray when they go to church, others will also pray at home on a regular or more ad hoc basis.</p>	<p>The Yr5 Summer 2 enquiry builds on this by pulling together all learning about Christianity so far in its discussion about wider commitment including church attendance.</p>

Home learning ideas/questions: If we have ever been to an event at or visited a place of worship (a church or building from another religion) what did we feel about it? Do we have special places we go as a family/household because they have special significance to us? What are they and why are they special?

Key Vocabulary	
vibration	A quick movement back and forth.
sound wave	Vibrations travelling from a sound source.
volume	The loudness of a sound.
amplitude	The size of a vibration . A larger amplitude = a louder sound.
pitch	How low or high a sound is.

Key Knowledge
 Sound is a type of energy. Sounds are created by **vibrations**. The louder the sound, the bigger the **vibration**.

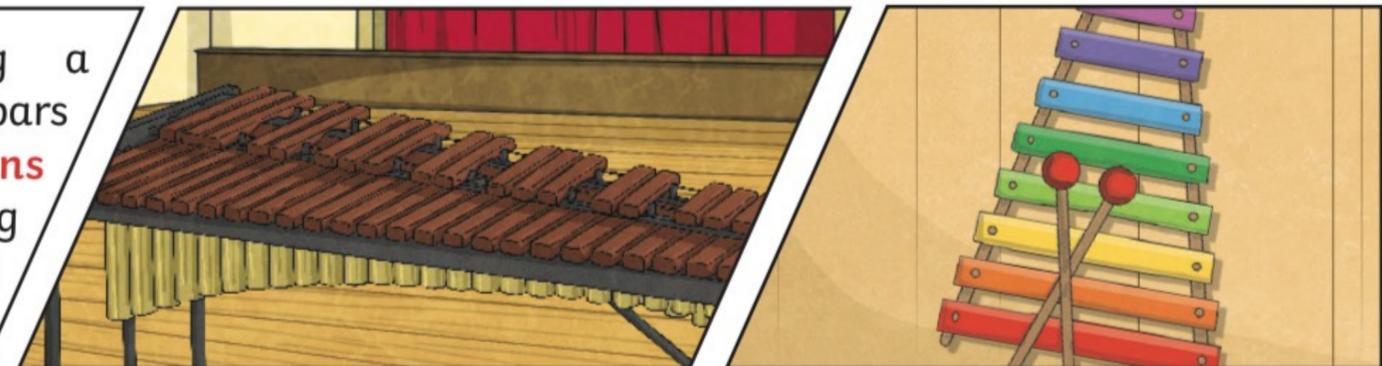


The size of the **vibration** is called the **amplitude**. Louder sounds have a larger **amplitude**, and quieter sounds have a smaller **amplitude**.

Pitch is a measure of how high or low a sound is. A whistle being blown creates a high-**pitched** sound. A rumble of thunder is an example of a low-**pitched** sound.

You can change the **pitch** of a sound in different ways depending on the type of instrument you are playing.

For example, if you are playing a xylophone, striking the smaller bars with the beater causes faster **vibrations** and so a higher **pitched** note. Striking the larger bars causes slower **vibrations** and produces a lower note.



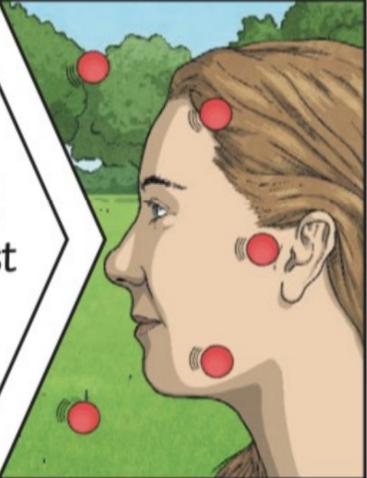
Key Vocabulary	
ear	An organ used for hearing.
particles	Solids, liquids and gases are made of particles . They are so small we are unable to see them.
distance	A measurement of length between two points.
soundproof	To prevent sound from passing through.
absorb sound	To take in sound energy. Absorbent materials have the effect of muffling sound.
vacuum	A space where there is nothing. There are no particles in a vacuum.
eardrum	A part of the ear which is a thin, tough layer of tissue that is stretched out like a drum skin. It separates the outer ear from the middle and inner ear . Sound waves make the eardrum vibrate .

Key Knowledge
 Sound can travel through solids, liquids and gases. Sound travels as a **wave**, **vibrating** the **particles** in the medium it is travelling in. Sound cannot travel through a **vacuum**.

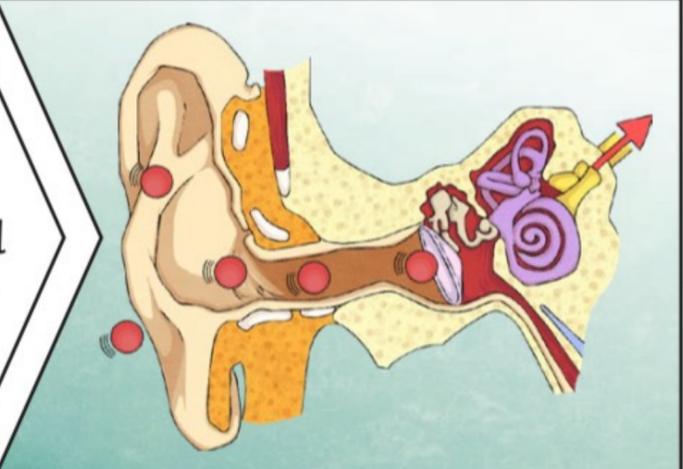
When you hit the drum, the drum skin **vibrates**. This makes the air **particles** closest to the drum start to **vibrate** as well.



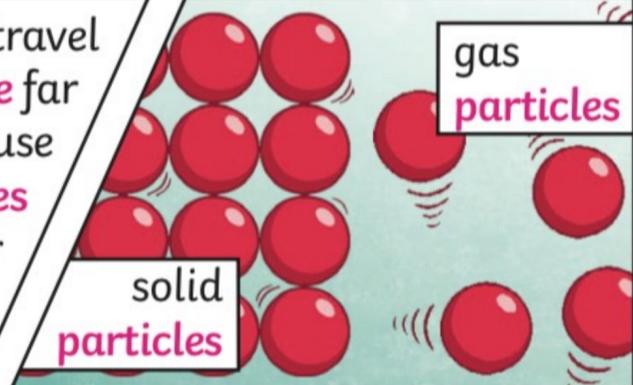
The **vibrations** then pass to the next air **particle**, then the next, then the next. This carries on until the air **particles** closest to your ear **vibrate**, passing the **vibrations** into your **ear**.



Inside your **ear**, the **vibrations** hit the **eardrum** and are then passed to the middle and then the inner **ear**. They are then changed into electrical signals and sent to your brain. Your brain tells you that you are hearing a sound.



Sound energy can travel from **particle** to **particle** far easier in a solid because the **vibrating particles** are closer together than in other states of matter.



If you throw a stone in a pond, it will produce ripples. As the ripples spread out across the pond, they become smaller. When sound **vibrations** spread out over a **distance**, the sound becomes quieter, just like ripples in a pond.





Year 4: Local History - Silk

Key Vocabulary

Industry - An industry is a group of manufacturers or businesses that produce a particular kind of goods or services.

Industrial revolution - The Industrial Revolution was a period of major changes in the way products are made.

Mill Worker - A mill worker is responsible for operating and maintaining machines in a milling environment.

Production - Production is the process of making or manufacturing goods and products from raw materials or components

Weaving - Weaving is the craft of lacing fibres together to make fabric or cloth.

Dyeing - Dyeing is the application of dyes or pigments on textile materials such as fibres, yarns, and fabrics with the goal of achieving colour



What was the Silk industry?

the industry that is involved with the breeding of silkworms and the manufacture of the silk they produce into thread and fabric. The silk industry suffered as synthetics like nylon became more popular.

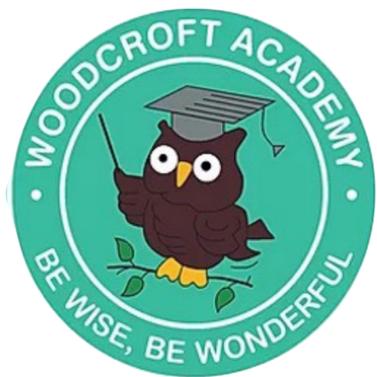
Silk Mills in Leek

Leek has a variety of surviving silk mills (several of which have been converted to other uses including residential), the earliest of which appears to be the Grade II listed Albion Mill (circa 1820s). However, for much of the 19th century silk weaving was concentrated in the homes of the weavers themselves. These properties are identifiable within the townscape for being three storeyed (usually terraces) with elongated windows to the top storeys.



Effect on families

From census data, it would seem that many families worked together in the mills and many families living close by, this would of been a very popular place to work. By the 1990s, service industries such as finance had taken over textiles as being the biggest employer of people in Leek.!



Year 4: E-safety Project Evolve

Self-Image and Identity

Online Relationships

Online Reputation

Online Bullying

Managing Online Information

Health, Well-being and Lifestyle

Privacy and Security

Copyright and Ownership

When searching on the internet for content to use, I can explain why I need to consider who owns it and whether I have the right to reuse it.

Copyright and Ownership

I can give some simple examples of content which I must not use without permission from the owner, e.g. videos, music, images.

Copyright and Ownership

I can describe strategies for keeping personal information private, depending on context.

Privacy and Security

I can explain that internet use is never fully private and is monitored, e.g. adult supervision.

Privacy and Security

I can describe how some online services may seek consent to store information about me; I know how to respond appropriately and who I can ask if I am not sure.

Privacy and Security

I know what the digital age of consent is and the impact this has on online services asking for consent.

Privacy and Security

I can explain how using technology can be a distraction from other things, in both a positive and negative way.

Health, Well-being and Lifestyle

I can identify times or situations when someone may need to limit the amount of time they use technology e.g. I can suggest strategies to help with limiting this time.

Health, Well-being and Lifestyle

I can explain that technology can be designed to act like or impersonate living things (e.g. bots) and describe what the benefits and the risks might be.

Managing Online Information

I can explain what is meant by fake news e.g. why some people will create stories or alter photographs and put them online to pretend something is true when it isn't.

Managing Online Information

I can describe how to find out information about others by searching online.

Online Reputation

I can explain ways that some of the information about anyone online could have been created, copied or shared by others.

Online Reputation

I can describe strategies for safe and fun experiences in a range of online social environments (e.g. livestreaming, gaming platforms)

Online Relationships

I can give examples of how to be respectful to others online and describe how to recognise healthy and unhealthy online behaviours.

Online Relationships

I can explain how content shared online may feel unimportant to one person but may be important to other people's thoughts feelings and beliefs.

Online Relationships

I can recognise when someone is upset, hurt or angry online.

Online Bullying

I can describe ways people can be bullied through a range of media (e.g. image, video, text, chat).

Online Bullying

I can explain why people need to think carefully about how content they post might affect others, their feelings and how it may affect how others feel about them (their reputation).

Online Bullying

I can analyse information to make a judgement about probable accuracy and I understand why it is important to make my own decisions regarding content and that my decisions are respected by others.

Managing Online Information

I can describe how to search for information within a wide group of technologies and make a judgement about the probable accuracy (e.g. social media, image sites, video sites).

Managing Online Information

I can describe some of the methods used to encourage people to buy things online (e.g. advertising offers; in-app purchases, pop-ups) and can recognise some of these when they appear online.

Managing Online Information

I can explain why lots of people sharing the same opinions or beliefs online do not make those opinions or beliefs true.

Managing Online Information

I can explain how my online identity can be different to my offline identity.

Self-Image and Identity

I can describe positive ways for someone to interact with others online and understand how this will positively impact on how others perceive them.

Self-Image and Identity

I can explain that others online can pretend to be someone else, including my friends, and can suggest reasons why they might do this.

Self-Image and Identity