Textiles - Fastenings

Essential Vocabulary	
Aesthetic	How an object or product looks
Assemble	To put parts together
Fastening	Something that holds two pieces of material together securely or shuts something, such as buttons.
Prototype	A simple model that lets you test out your idea, how it will look or work.
Target customer/ audience	A person or group that you will pose your product to.
Template	A stencil you use to help you draw the same shape easily on materials.
Net	A flat 2D shape that can become a 3D shape when assembled.

Key Knowledge

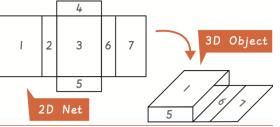
- To know that a fastening is something that holds two pieces of material together.
- · To know that different fastening types are useful for different purposes.
- To know that creating a mock-up (prototype) of their design is useful for checking ideas and proportions.

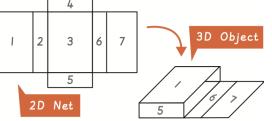
Lime Tree Primary Academy

Net

Key Questions

- Why does a prototype help better your final product?
- What are fastenings and what is their use?
- What allows a net to assemble smoothly?







Links to Prior Learning

- In year 3, Children made Egyptian Collars using a Variety of different fabrics.
- Children will have developed understanding of measuring and ways of attaching fabrics together using the running stitch.
- · Children will have learnt how to develop their applique designs.

Key Skills

- · Writing design Criteria for a product, articulating decisions made.
- Designing a personalised book sleeve.
- Making and testing a paper template with accuracy and in keeping with the design criteria.
- Measuring, marking and cutting fabric using a paper template.
- Selecting a stitch style to join fabric.
- Sewing neatly using small regular stitches.
- Incorporating a fastening to a design.
- Testing and evaluating an end product against the original design criteria.

Electrical systems: Torches

Essential Vocabulary		
Cell	A single unit that provides electrical energy to power a circuit.	
Conductor	A material that allows electricity to flow through it.	
Electrical item	Objects that need electricity to work such as toasters and kettles.	
Insulator	A material that does not allow electricity to flow through it.	
Series Circuit	A closed circuit where the current follows one path.	
Wire	A thin piece of copper thread which conducts electricity to connect circuit components together.	
Copper	A reddish metal that is good at letting heat and electricity through it.	
Battery	Two or more cells put together to provide electrical energy to power a circuit.	

Links to Prior Learning

- In year 3, Children will have learnt about light including the use of torches in science.
- In the autumn term, Children will have learnt about electricity including how electricity flows and what is needed to generate electricity.

Key Knowledge

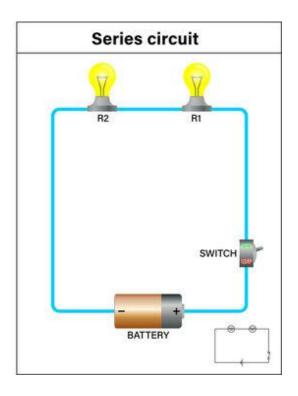
- To understand that electrical conductors are materials which electricity can pass through.
- To understand that electrical insulators are materials which electricity cannot pass through.
- To know that a battery contains stored electricity that can be used to power products.
- To know that an electrical circuit must be complete for electricity to flow.
- To know that a switch can be used to complete and break an electrical circuit.

Key Skills

- Designing a torch, giving consideration to the target audience and creating both design and success criteria focusing on features of individual design ideas.
- Making a torch with a working electrical circuit and switch.
- Using appropriate equipment to Cut and attach materials.
- Assembling a torch according to the design and success criteria.
- Evaluating electrical products.
- Testing and evaluating the success of a final product



- What materials can act as conductors?
- What components are needed for a series circuit to flow efficiently?
- What features can be changed to manipulate the design of your torch?









Essential Vocabulary	
Hot colours	Reds, oranges, yellows and all the off- whites sit on the warm side of the colour wheel
Cold colours	Cool colors are typified by blue, green, and light purple.
Complementi ng	Complementary colours are pairs of colours which, when combined or mixed, cancel each other out
tint	a shade or variety of a colour
tone,	refers to how light or dark a colour is
shade	Shade is a hue or mixture of pure colours to which only black is added.
hue.	The origin of the colours we can see. Primary and Secondary colours are considered hues

Year 4-Painting, Jessi Raulet

Key Knowledge

- Jessi Raulet is an Artist, designer and social media influencer
- She has become well known for her handpainted, bright and bold designs.
- With an ability to Craft Vibrantly Optimistic colour palettes, Jessi's work is packed with good Vibes.
- The American born, Strasbourg, France-based artist has an engaged and rapidly growing social media following of 118K fans

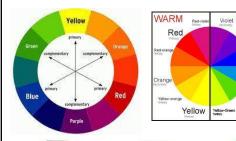
Key Questions

- How do different colours make you feel?
- Who is Jessi Raulet? What is she inspired by?
- Which colours complement each other?
- Can you define tint, tone and shade?



Key skills

Experimenting with the colour wheel.







Links to Prior Learning

- Year 3 painting Steve Mbatia
- Year 2 painting portraits

Year 4 - Autumn 1- Art



Essential Vocabulary		
Democracy	A form of government. The word comes from two Greek words that mean "rule by the people"	
Temple	A building for religious worship	
Parthenon	A temple in the middle of the Acropolis in Athens, Greece	
Myths	A traditional or legendary story, usually concerning some being or hero or event	
Demi-gods	A demigod is a divine mythological figure, a god who is either part human, or a minor god	
Siege	The placing of an army around a fortified place or city to force it to surrender	
Civilisation	A highly developed and organised human society with advanced cultural, technological, and social structures	

Key Knowledge

- The Olympics were first held in ancient Greece in 776 BC. Ancient Greece was not a country instead it was made up of city states.
- The ancient Greeks believed in many different gods and goddesses. Each god/goddess was responsible for certain parts of life.
- Zeus was the most powerful of all the gods. He was god of the sky and the king of Mount Olympus.
- Theatre was used to reflect the politics of the time.
- Hercules was a demigod, he was a hero who helped people and fought monsters.
- In Greek mythology, Jason was the leader of a band of heroes known as the Argonauts. He successfully led them on a quest to retrieve the Golden Fleece.

Key Questions

- Can you locate Greece on a map?
- Why did Athens become the strongest city of ancient Greece?
- How did Greek theatre impact the modern world?
- How did Greek sport impact the modern world?
- Who was Hercules?
- Can you retell the story of Jason and the Golden Fleece?
- What are the different beasts of Greek mythology?
- How can pottery remains inform us of Greek society?
- What impact have the Ancient Greeks had on the modern world?
- What did the Ancient Greeks bring to modern Britain?

Links to Prior Learning

 Builds upon the Year 3 topic of Ancient Civilizations and the importance of artefacts and sources to gather information.







The Music Year Theme: Classical Music (Autumn 1) and Happy Holidays! (Autumn 2)



Essential Vocabulary		
Texture	The layers of sound working together to	
	make music interesting to listen to.	
Timbre	The sound quality of all instruments,	
	including the voice.	
Structure	Referring to how the piece of music is	
	constructed with an introduction, verse,	
	chorus and ending perhaps.	
Notation	The link between sound and symbol.	
Tempo	The speed of music; fast, slow or in between.	
Dynamics	How loud or quiet the music is	

Key Questions Listening

- What is the mood/feeling of pieces of the piece of music?
- Who is the composer/writer?
- · Which genre is the piece of music?

Singing

- What are the key principles to warming up our voices?
- Is your voice ready for singing? Why/why not?

Perform (instrumental and vocal)

- How can you engage with the audience to enhance the quality of your performance?
- What were your reflections on the live/recorded performance?

Links to Prior Learning

In Year 3 (Summer term), Children learned to compose music in response to a non-musical stimuli, for example, a story, a verse or an image. Children structured pieces of music with a beginning, middle and an end.

Key Knowledge

- How to play a tuned/melodic instrument with support from Trafford Music Service.
- Improvisation of a range of pitches on the tuned/melodic instrument being taught.
- Make use of musical features such as 'smooth' and 'detached' when improvising with tuned/melodic instrument being taught.

Wider Opportunities	
Listening suggestions	for this term
Manuface RAVEL Policino Unitario Caldi Manuface Unitario Caldi Manuface Villes mediale Manuface Manufa	Bolero by Maurice Ravel
Rossini Learne Correct Court Court	William Tell overture by Rossini
	Good King Wenceslas by Thomas Helmore

Music groups in our local area

- Trafford Music Service (Choirs and instrument Jessons)
- Sale Youth Choir
- One Education Music Centre
- Greater Manchester Music Hub

Gymnastics - Partner Work - Pushing and Pulling

Essential Vocabulary	
Unison	perform the same movement at exactly the same time as each other.
Contrasting	different movements
Synchrony	two or more things happen, develop, move, etc. at the same time or speed
Sequence	linking together shapes, balances and jumps.
Canon	perform the same movement one after the other

Links to Prior Learning

Key Knowledge

- What a point of contact is
- What a Contrast is
- How to work with a partner and perform in unison
- How to move from the same to a contrasting position with my partner
- How to Communicate and negotiate with others when composing.

Key Skills

- Balance on different points and patches
- Match a partner's moves in synchrony
- Compose a sequence with a partner
- Create a sequence involving matching and contrasts
- Work in a group Help to compose and then perform a sequence with contrasting and matching shapes and moves
- Work at contrasting levels
- Perform in unison and canon



Steps gracefully and with control

Can move from one shape to another gracefully

Holds balance with good control

From Year 3:



Year 4 - Autumn 2 - P.E



- Can I perform with control and poise?
- Can I evaluate the work of others using correct technical language?
- Can I be self-motivated and physically confident and actively engage in competitive situations?
- What affects my balance?
- What Can I do to improve my sequence?



Science Knowledge Organiser Year 4 Autumn 2

Electricity













Essential Vocabulary	
Electricity	Electricity is the flow of tiny particles called electrons and protons.
Electrical conductors	Materials that allow electricity to pass through them.
Circuit	A complete circuit is a loop that allows electrical current to flow through wires.
Fuel sources	Fuel is a substance such as coal, oil, or petrol that is burned to provide heat or power.
Cell	An electric cell is a device, which converts chemical energy into electrical energy.

Key Knowledge

- Identify Common appliances that run on electricity
- Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers
- Identify whether or not a lamp will light in a simple series Circuit, based on whether or not the lamp is part of a Complete loop with a battery
- Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit
- Recognise some common conductors and insulators, and associate metals with being good conductors

Key Questions

What is electricity and how is it made? How does electricity power devices? What is a Circuit? What is a conductor?

Links to Prior Learning

- Natural materials are materials which are found in nature. Man-made materials are materials which have been produced by humans (Year 1)
- A light source is something that emits light by burning, electricity or Chemical reactions (Year 3)



Enquiry Skills - Science Disciplines

Asking relevant questions and using different types of scientific enquiries to answer them.

Setting up simple practical enquiries,

comparative and fair tests.

Making systematic and careful observations and, where appropriate,

taking accurate measurements using standard units.

Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions.

Recording findings using simple scientific language, drawings,

labelled diagrams, keys, bar Charts, and tables Reporting on findings from enquiries, including oral and

written explanations, displays or presentations of results and Conclusions.

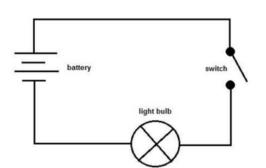
Using results to draw simple conclusions, make predictions for

new Values, suggest improvements and raise further questions.

Identifying differences, similarities or Changes related to simple

scientific ideas and processes.

Using straightforward scientific evidence to answer questions to support their findings.



Addition and Subtraction - Number

Essential Vocabulary	
Total	Including everything added together
Addition	The action or process of adding something to something else
Subtraction	To take away from something else to decrease the size, number or amount
Column method	A mathematical method of Calculation where the numbers to be added or subtracted are set out above one another in Columns
Strategy	How you use numbers, relationships and connections to solve a problem
Efficient	The ability to determine a method to solve a solution quickly with the least amount of effort
Accurate	How close you are to a given true value

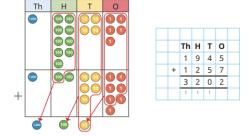
Our Small Steps of Learning

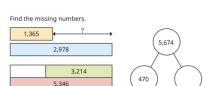


Links to Prior Learning

- Number bonds in Key Stage 1 and EYFS.
- Adding and subtracting mentally in Year 2
- Adding and subtracting numbers mentally in Year 3
- Estimate answers and check using the inverse in Year 3
- Solving problems and missing number problems in Year 3

Jack uses place value counters to work out 1,945 + 1,257







Year 4 - Autumn 1 + 2 - Maths





Key Questions

- If you know 2 + 4 = 6, what else do you know?
- Does it matter which columns you add together first?
- Does it matter which column you subtract first?
- How can you subtract two numbers if one of them has fewer digits than the other?
- If you cannot exchange from the tens/hundreds, what do you need to do?
- What does "difference" mean?
- Mhy do we use estimates?
- What does "inverse" mean?
- Is addition/subtraction commutative?

Key Knowledge

- Add and subtract numbers with up to four digits using the formal written methods of columnar addition and subtraction where appropriate
- Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why
- Add and subtract numbers with up to four digits using the formal written methods of columnar addition and subtraction where appropriate
- Estimate and use inverse operations to check answers to a calculation

Area - Measurement

Essential Vocabulary	
Length	The measurement of something from end to end
Width	the horizontal measurement or distance measured from side to side
Rectilinear Shape	a 2D, flat shape that has straight sides
Equivalent to	equal in value, amount, function, meaning





Links to Prior Learning

- Understand the concepts of length and width in EYFS.
- In Year 2 use rulers to measure length
- In Year 3 measure the perimeter of any 2D shape

Our Small Steps of Learning

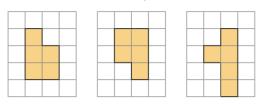




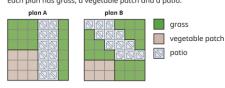




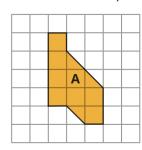
Here are some rectilinear shapes.

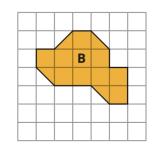


Each plan has grass, a vegetable patch and a patio.



Here are two shapes.





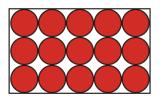
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Key Questions

- How can you measure area?
- · What happens if you use a different unit of measure to find the area?
- What can you do to make sure you do not count a square twice?
- What can you do if the squares are not full squares?
- Is it possible to make a rectangle with an odd number of squares?
- What is different about the numbers of squares covered by the two shapes?
- How can you work systematically?

Key Knowledge

• Find the area of rectilinear shapes by counting squares

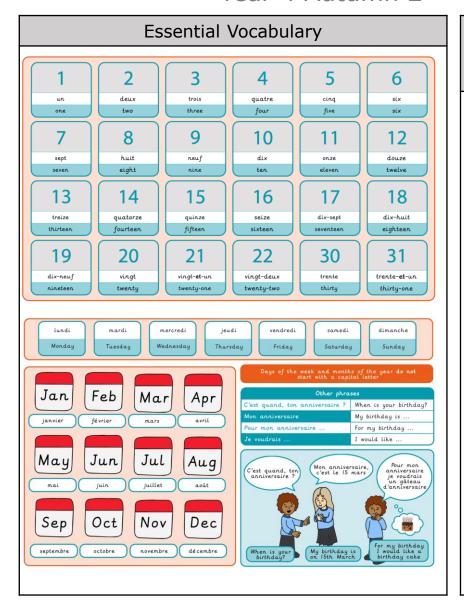


The area of the rectangle is 15 counters.



Numbers, calendars and birthdays Year 4 Autumn 2





Key Questions

- What are the numbers 1 to 31 in French?
- Can you name the days of the week?
- Can you name the months of the year?
- Can you name the seasons in French?
- Can you compare similarities and differences between traditional birthdays in France and England?

Key Skills

- Notice common spellings.
- Recognise familiar French words.
- Use contextual clues to make predictions about meanings.
- Recognising and answering simple questions.
- Using a variety of conversational phrases.
- Recognising sounds and spelling sounds can be different.
- Recognise intonation and gesture to differentiate between statements and questions.
- Repeating short phrases to build confidence.
- Rehearsing and performing a short song/role play.
- French festivals and traditions.

Key Knowledge

To identify sounds created by linking some of the key phonemes.

To know that 'h' is silent.

To know that months, seasons and days aren't capitalised.

To know the equivalents for the word 'the' in French.

PSHE/RSE Knowledge Organiser Year 4 Autumn 2



Essential Vocabulary	
respect	Respect means being kind and polite to others. It's about treating people the way you would like to be treated. When you show respect, you are considerate and mindful of other people's feelings and rights, even if they are different from your own.
dispute	A dispute is when two or more people have a problem or argument that they need to solve or talk about because they don't agree on something. It's like a disagreement that they want to figure out together.
resolve	Resolve means finding a solution or a way to fix a problem. It's when you work together to make things better or solve a disagreement.
reconcile	Reconcile means making up with someone or becoming friends again after having a disagreement or argument. It's like saying sorry and being nice to each other and be friends once more."

Key Knowledge

- know how our behaviour choices affect ourselves and others
- know why should we be polite and courteous
- understand rights and responsibilities
- recognise and understand disrespect and discrimination
- know how to report worries about the behaviour of others, in person or online

Links to Prior Learning.

- how can I be my best? (EYFS)
- what makes a good friend? (Y1)
- how can I be a good friend? (Y2)



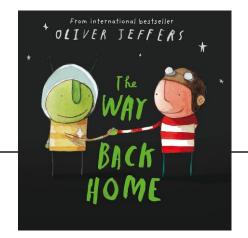


Key Questions

- how does our behaviour affect us and others
- what is the difference between a right and a responsibility?
- what do I do if I see disrespect or discrimination?
- who can I tell if I'm worries about the behaviour of others?

RSE No Outsiders

In discussing the book, Children will consider how languages can be a barrier and how we can overcome this.



Christianity: Christmas: Journeys.

Essential Vocabulary		
New Testament	The second division of the Christian Bible.	
Magi	Magi, singular Magus, also called Wise Men, in Christian tradition, the noble pilgrims "from the East"	
Bethlehem	A town in the West Bank, situated in the Judaean Hills 5 miles (8 km) south of Jerusalem.	
Star	Stars are huge, glowing balls of gases.	
Pilgrimage	A journey, often into an unknown or foreign place, where a person goes in search of new or expanded meaning about their self, others, nature, or a higher good through the experience.	

Links to Prior Learning

- Who is a Christian and what do they believe? Year 1.
- How and why do we celebrate special and sacred times?
 Year 1
- · Christianity and good news. Year 2
- What does it mean to be a Christian today? Year 3

Key Knowledge

- The Gospel of Matthew (2:1-12) speaks of Magi, or wise men, who followed a star from the East to Bethlehem in search of a newborn king.
- Gaspar (or Caspar) wears a green cloak and a gold crown with green jewels. He is the King of Sheba. Gaspar represents the Frankincense brought to Jesus.
- Melchior has long white hair and a white beard and wears a gold cloak. He is the King of Arabia. Melchior represents the Gold brought to Jesus.
- Balthazar has a black beard and wears a purple cloak. He is the King of Tarse and Egypt. Balthazar represents the gift of Myrrh that was brought to Jesus.

· Key Skills

- Gather, select and organise ideas about religion and belief.
- Comment on connections between questions, beliefs, values and practice.
- Suggest meanings for a range of forms of religious expression, including symbols, using appropriate Vocabulary.



- Do we have to travel to see family at Christmas or do people travel to us?
- How is the theme of togetherness or coming together an important theme at Christmas time?
- How far did the three Magi travel to meet Jesus?
- What is a pilgrimage?
- Why do people think that embarking on a pilgrimage is important?

Recount-Diary

Essential Vocabulary	
Chronological order	Chronological order is listing, describing, or discussing when events happened as they relate to time.
paragraphs	A distinct section of a piece of writing, usually dealing with a single theme and indicated by a new line.
sentence structures	Simple sentence- one independent clause Compound sentence- at least two independent clauses linked with a conjunction.
conjunctions	A word used to connect sentences or to coordinate words in the same <u>clause</u> . e.g. and, but, if.
first person	Using the pronouns I, me, my, we, us' throughout a piece of writing.
past tense	A tense expressing that an action has happened.
diary entry	Text written in the first person, in past tense describing events that have happened to the writer with contents ranging from thoughts, emotions and reflections.

Key Knowledge

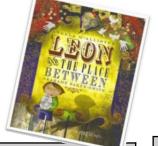
Our writing will be inspired by Grahame Baker-Smith and Angela Mcallister's story 'Leon and the Place Between' We will write Leon's secret diary about what really happened in 'the place between', including conversation between Leon and the boy. Some of us may even choose to write a diary from an alternative character's point of view about what they experienced as an outsider looking in.

We will focus on including a range of sentence structures to create or change the mood of our writing, use conjunctions to express tine, place and cause and group our ideas into structured paragraphs.



Key Skills

- Use Standard English forms for verb inflections
- Extend the range of sentences with more than one clause by using a wider range of conjunctions including when, if, because, although
- Indicate possession by using the possessive apostrophe with plural nouns
- Recognise the difference between plural and
- possessive 's'
 Build a varied and rich vocabulary
- · Write consistently in past tense.



Links to Prior Learning

- R.E Exploring a range of beliefs and cultures (KS1 and Year 3)
- Geography 'The Wider World' (Year 2)
- English-Recount, Diary (Year 1, 2 and 3)

- What do you imagine the 'place between' to be like?
- What does the author mean by 'let the magic begin'?
- Can you identify any characters who have similar traits to the character of Abdul Kazam?