

# Year 4 Knowledge Organisers



#### **Useful Information**

- Home Learning will be sent home every Friday on Google Classroom and should be completed by the following
  Thursday and handed in to the class teacher (You will find your child's login information in the front of the yellow
  reading record/diary).
- Spellings Spellings will be shared on Google Classroom and with the children each week. There will be a spelling test every Friday. Please support your child by practising their spellings with them.
- Children will continue to wear their PE kits to school on PE/Enrichment days (if in Mr Hambleton's group see below).
- There will be plenty of other occasions for sport throughout the week and as such a spare pair of trainers must be left in school at all times. These may need replacing as children outgrow them.
- Wellies are also to be in school at all times so that children have access to the full curriculum.
- Your child's enrichment group for each term will be communicated to them and to parents/carers via google classroom.

Please note, on your child's Enrichment day they will need:-

- •Cookery a plastic food container to bring their food home.
- •Mr Hambleton to come into school wearing their PE kits.
- Earth Adventures A spare pair of jogging bottoms/trousers in case they get wet.

Monday	Tuesday	Wednesday	Thursday	Friday
PE (Remember to come in your PE kit for the day!)			Link Learning from the previous week due in  Enrichment  Mr Hambleton's group to be in PE kit  Mrs Terry's cooking group to bring a pot to transfer scrumptious make home!	Spelling Test  New Link Learning provided on Google Classroom and sent home

## Tag Rugby

Essential Vocabulary		
Accuracy	The quality or state of being correct or precise	
Attacking	To make a attempt to score a goal or point	
Defending	The action of preventing an opponent from scoring	
Pocket pass	An offensive ruse, where the ball carrier moves as if to pass the ball to a teammate, but then continues to run with the ball himself	
Offside	When a player is too far forward	
Tag	A special belt that has two tags attached to it	
Restart	The game begins again after the ball has gone out of play.	

#### Links to Prior Learning

- · Learn to control objects in Reception
- · Catch different types of balls in Year 3
- How to get my body in the right position to throw a ball in Year
   3.

#### Key Knowledge

- · How to hold a rugby ball
- How to score a try
- How to restart games after a try has been scored
- To run at pace and commit a defender when attacking.
   To close the space down quickly when defending and then brace myself to grab a tag.
- To support the ball Carrier by staying just behind them when in the attacking line.
- What a knock on and forward pass are.
- To stagger the attacking line and why we do that.
- · The offside rule.

#### Key Skills

- Scoop a ball up from the floor.
- Dodge to avoid being tagged by an opponent.
- · Tag safely
- · Pocket pass with accuracy from my right and left.
- Make a target to receive the ball. Send and receive a ball under pressure.
- Pass a rugby ball backwards accurately
- Dummy a pass
- Pass backwards consistently
- · Create an overlap
- · Pass, missing out players in a line.
- Set up defensively opposite an opponent



- How did you score a try?
- What should you do to pass accurately?
- How do you scoop up a ball effectively?
- What is a dummy pass?
- What is the benefit of a dummy pass?
- How can you defend effectively?
- When someone on your team has a ball, how can you help them?









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.







# PSHE/RSE Knowledge Organiser Year 4 Autumn 1



	Essential Vocabulary
Qualities	Personal qualities are the special things that make us unique and special. They are like the superpowers we have inside us that help us be good friends, be kind, and do things well. Personal qualities can include being kind, brave, helpful, funny, smart, patient, honest, or caring.
Self-worth	Self-worth is feeling good about who we am inside. It means knowing that we're important and special in our own way, just like everyone else. It's about liking myself, being proud of what I can do, and believing in myself. Even if I make mistakes or have things I'm not good at, self-worth means knowing that I'm still valuable and deserving of love and respect.
Self esteem	Self-esteem is how you feel about yourself inside. It's when you believe in yourself and think you're important and special. It's like having a good feeling about who you are and what you can do.
goals	Goals are like dreams that I want to make come true. If I want to be an artist, my goal is to paint beautiful pictures and have my own art show.

#### Key Knowledge

- how to recognise personal qualities and individuality
- to develop self-worth by identifying positive things about themselves and their achievements
- how their personal attributes, strengths, skills and interests contribute to their self-esteem
- · how to set goals for themselves
- how to manage when there are setbacks, learn from mistakes and reframe unhelpful thinking

#### Links to Prior Learning.

- What is special about me? (Nursery and Reception)
- How can I be my best? (Nursery and Reception)
- How can we be a good friend? (Year 3)

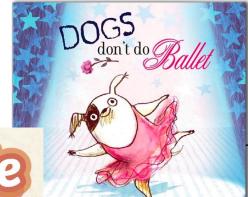
# Lime Tree Primary Academy BIGHT PUTURES EDUCATIONAL TRUST

#### Key Questions

- How can I learn to recognize my personal qualities?
- What is self-esteem?
- How do my personal qualities affect my self-esteem?
- What is a SMART goal?
- How do I manage my thoughts and feelings when I have a set back!
- What is a growth mindset?

#### RSE No Outsiders

Children will discuss "Pupil Voice" and what it means to be assertive. They will also consider how it is sometimes difficult to be assertive.











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

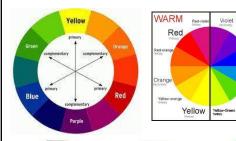
#### Key Questions

- 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

# Mechanical systems - Making a slingshot car



Essential Vocabulary	
Air resistance	The kevel of drag on an object as it is forced through the air.
Aesthetic	How an object or product looks.
Chassis	The body of a Car.
Kinetic energy	The energy that Causes an Object to move.
Net	A flat 2D shape, that can become a 3D shape once assembled.
StruCture	Something that has been made and put together and Can usually stand on its own.
Mechanism	The parts of an object that move together as part of a machine.

#### Key Knowledge

- To understand that all moving things have kinetic energy.
- To understand that kinetic energy is the energy that something (object/person) has by being in motion.
- To know that air resistance is the level of drag on an object as it is forced through the air.
- To understand that the shape of a moving object will affect how it moves due to air resistance.

#### Key Skills

- Designing a shape that reduces air resistance.
- · Drawing a net to create a structure from.
- Choosing shapes that increase or decrease speed as a result of air resistance.
- Personalising a design.
- Measuring, marking, Cutting and assembling with increasing accuracy.
- Making a model based on a chosen design.
- Evaluating the speed of a final product based on: the effect of shape on speed and the accuracy of workmanship on performance.

#### Key Questions

What can affect air resistance?

What variables can stop the motion of a moving object?

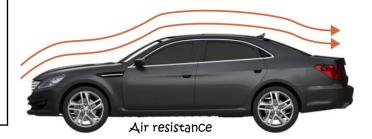
What is a net?

When an object moves quickly through the air, what do we call the object?

What materials are best to reduce air resistance?

Can the structure of a chassis be modified?

What is kinetic energy?



#### Links to Prior Learning

- In year 3 we learnt how to design and Create a pneumatic toy.
- What a pivot is and the motion they can create.
- What a lever is.

# Place Value - Number

Essential Vocabulary	
Place value	The numerical value that a digit has
Partition	A way of splitting numbers into smaller parts to make them easier to work with
Rounding	Alter a number to one less exact but more convenient for calculations
Numeral	A figure or symbol to represent a number
Nearest	Closest to
Ascending	Increasing in size
Descending	Decreasing in size
Less than	Where one is less than the other
Greater than	Where one is more than the other

#### Links to Prior Learning

- Recognise the place value of each digit in a 3-digit number (hundreds, tens, ones) in Year 3
- Read and write numbers up to 1,000 in numerals and words in Year 3
- Representing numbers in different ways in KS1 and EYFS

# Our Small Steps of Learning



Choose the correct answer to each calculation.













XC















#### Key Questions

- What is the difference in value between the start and end points?
- How can you work out what each interval is worth?
- Counting back in 1,000s from 7,000, tell me a number you would say. How do you know?
- What is the value of each digit in 4,715?
- How does knowing the midpoint help you to place the number on the number
- When comparing two numbers, if the first digits are equal in value, what do you look at next?
- What is the difference between ascending and descending order?
- What patterns can you see in the Roman number system?
- What letters are used in the Roman number system? What does each letter represent?
- Which place value column do you need to look at to decide which multiple to round to?

#### Key Knowledge

- Identify, represent and estimate numbers using different representations
- Recognise the place value of each digit in a 3-digit number (hundreds, tens, ones)
- Count in multiples of 6, 7, 9, 25 and 1,000
- Recognise the place value of each digit in a 4-digit number (thousands, hundreds, tens and ones)
- Find 1,000 more or less than a given number
- Order and compare numbers beyond 1,000
- Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value
- Round any number to the nearest 10, 100 or 1,000

# 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

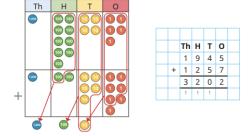
#### Our Small Steps of Learning

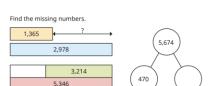


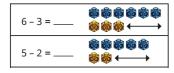
#### Links to Prior Learning

- 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

# Science Knowledge Organiser Year 4 Autumn 1

# SOUND

Essential Vocabulary		
Vibration	Sounds are created when something vibrates (shakes back and forth).	
pitCh	Pitch is the highness or lowness of sounds.	
volume	Volume is the loudness of a sound.	
medium	Things that sound can travel through – air, water and wood.	

#### Links to Prior Learning

Explore how things work. (Nursery - Sound)

Describe what they see, hear and feel whilst outside.

(Reception - Sound)

Identify, name, draw and label the basic parts of the human body and say

which part of the body is associated with each sense. (Y1 - Animals, including humans)

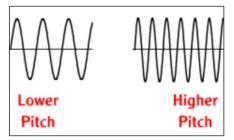
#### Key Knowledge

Identify how sounds are made, associating some of them with something vibrating
Recognise that vibrations from sounds travel through a medium to the ear
Find patterns between the pitch of a sound and features of the object that produced it
Find patterns between the volume of a sound and the strength of the vibrations that produced it
Recognise that sounds get fainter as the distance

#### Key Questions

What is sound and how is it made?
What is vibration?
Can sound ever be stopped?
How does sound travel?
How does the ear and brain hear sound?
What is pitch?
What is volume?

from the sound source increases





#### 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.

## Computing systems and networks - The internet

	Essential Vocabulary		
Network	A group or system of interconnected people or things.		
Router	A device that forwards information to the appropriate parts of a Computer network.		
Network security	A set of rules designed to protect the confidentiality of a computer user.		
Files	A resource for recording and storing data.		
Content	The information within a particular topic.		

#### Key Knowledge

- Recognise the WWW is part of the internet.
- Explain that the global interconnection of networks is the internet.
- · Recognise the need for security on the internet.
- Describe how to access the WWW.
- Explain that the WWW comprises of webpages and websites.
- To understand the risks of reliability of information on the WWW.

#### Key Skills

- Demonstrate how to search on the WWW.
- Explain how to ensure your safety when using the internet.
- Describe how networks connect to other networks.
- Outline how information can be shared on the WWW.



#### Key Questions

- Why is it called the World Wide Web?
- Why is security vital when accessing the internet?
- How can we access the WWW?
- What information is safe to share online?
- What are the current limitations of the WWW?
- How reliable is the content on the WWW?



#### Links to Prior Learning

 This unit allows you to progress your knowledge and understanding of networks in Year 3.

World Wide Web

- In Year 3 you explored how a digital device works.
- · You explored how computers are connected.

WWW

## Fiction - Fantasy Narrative

Essential Vocabulary	
fronted adverbial	An adverb or an adverbial phrase at the start of a sentence, which is always separated from the main clause with a comma.  For example: In the distance, she could see
noun phrase	A group of words which contains a noun and words to describe it, but not a verb. For example: the majestic, endangered gorillas
prepositional phrase	Provide descriptions about people and things, giving information about their locations, relationships, and existence in time.  For example: The gorilla Crept into the bedroom after Checking everyone was asleep.
direct speech	The exact words that are spoken by a Character are written in inverted commas. For example: "Oh, there you are!" he exclaimed.
first person	Writing uses the pronouns I, we, me, our, ours, mine.
third person	Writing uses the pronouns he, she, they, them, theirs, his, hers.
diary entry	Usually written by a Character to their diary in an informal letter format, explaining and giving opinions about something that has happened to them.

#### Key Knowledge

Our writing will be inspired by Anthony Browne's story 'Gorilla.' We will write 5-part stories, produce fact files on gorillas using information that we have researched ourselves and write diary entries in Character. Some of us may even change the author and write a story from the animal's viewpoint.

We will focus on including small details to create or change the mood of our writing, and on punctuating characters' speech to give extra details and move the action forward.

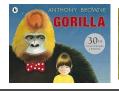
We will also consider our own opinions of the story, producing book reviews that aim to give reasons for our conclusions.



# Lime Tree Primary Academy

#### Key Skills

- Expand noun phrases with modifying adjectives, nouns and prepositional phrases
- Choose nouns or pronouns for Clarity and cohesion, and to avoid repetition
- Use fronted adverbials (and a comma after them)
- Organise paragraphs around a theme in extended narrative structures
- Use small details to describe characters and for time, place and mood
- (Jse 1st or 3rd person consistently
- Use tenses appropriately
- Sequence stories in different stages: introduction, build up, Climax, resolution
- Use inverted commas for direct speech





#### Links to Prior Learning

- Science 'Living Things and their Habitats' (KS1) and 'Animals Including Humans' (Year 3)
- Geography 'The Wider World' (Year 2)
- English 5-part narratives including speech (Year 3)

- If you had one night to do anything you like, where would you go and what would you do?
- How important are human relationships?
- How important are relationships with animals?
- What does it mean to be lonely?

### 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

Essential Vocabulary	
Ceremony	A formal religious or public occasion, especially one celebrating a particular event, achievement, or anniversary.
Milestone	A significant stage or event in the development of something.
Confession	A statement admitting to a mistake or wrongdoing.
Communion	The service of Christian worship at which bread and wine are consecrated and shared.
Humanist	A follower of the principles of humanism.
Tradition	The transmission of customs or beliefs from generation to generation
Metaphor	A figure of speech in which a word or phrase is applied to an object or action to which it is not literally applicable.

#### Links to Prior Learning

- What times are special and why? EYFS
- How and why do we celebrate special and sacred times?
   Year 1

#### Key Knowledge

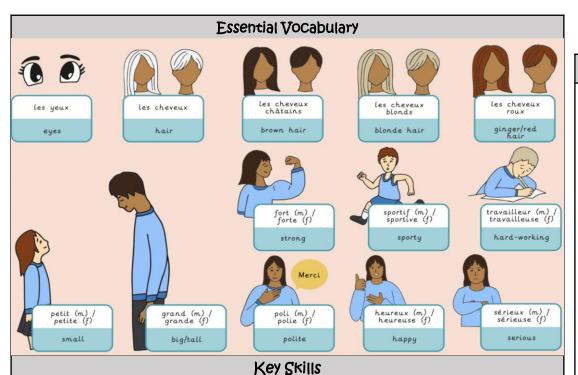
- I know significant milestones in my own life but also I can talk about the different milestones that come along a journey of faith.
- Baptism can happen at any point in life and marks the start of a journey of faith for Christians.
- Going on a journey, religious or not, is a huge commitment and won't always be easy.
- Different life experiences can signify different things such as marking relationships, death and birth.

#### · 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.



- What are the significant milestones on life's journey?
- What metaphors could be used for life?
- What are the values and meanings of ceremonies which mark milestones in life?
- Do non-religious people e.g.
   Humanists mark special moments?
- What promises are made in Certain ceremonies? Why are they important?
- How do Jewish people mark the end of life?
- Does religious or spiritual teaching help believers to move on in life's journey?



- [Jsing a model to form a spoken sentence.
- · Listening and repeating further key phonemes with care.
- Choosing appropriate adjectives from a wider range of adjectives.
- Identifying items by colour and other adjectives.
- · Listening and selecting information.
- Using language detective skills to decode vocabulary.
- · Noticing and beginning to predict key word patterns and spellings.
- Following a short text or rhyme, listening and reading at the same time.
- Selecting and writing short words and phrases.
- Making short phrases or sentences using word cards.
- Using adapted phrases to describe an object or person.
- Recognising and beginning to apply rules for placement and agreement of adjectives.

# French 'Portraits' Year 4 Autumn 1

#### Key Knowledge

- Know that, in French, adjectives change if they
  describe a girl or a feminine noun and that this
  is called adjectival agreement.
- Know that most (but not all) adjectives take an extra 'e' at the end of the word to make it feminine.
- Know that most adjectives go after the noun in French.
- Know that if the noun in a sentence is plural then the adjective describing it also becomes plural.
- Know that the Louvre is a famous French art gallery.
- Know that the feminine and masculine form of some adjectives can sound quite different e.g. vert/verte, heureux/heureuse.

#### Links to Prior Learning

- To know that a cognate is a word that is the same in both French and English e.g. un triangle.
- To know that a near-cognate is a word that is very similar but not identical in French and English e.g. un cercle.
- To know that adjectives of size are positioned in front of the noun in French e.g. un grand cercle.
- To know that adjectives of colour are positioned after the noun in French e.g. un cercle bleu.



- What do the words it and elle mean?
- What kind of word are happy and serious?
- Why are there two words for happy and serious?
- What do the words, les cheveux mean? (Hair.)
- Why do the words blonds and noirs have an 's' at the end? (To agree with the noun cheveux – hair.)
- What does the word, Châtains mean? (Chestnut brown).
- What is the French word for hair and is it masculine or feminine, singular or plural?
- What is the French word for eyes and is it masculine or feminine, singular or plural?
- What do you do to most adjectives to make them masculine and plural? (Add an 's'.)
- Where does the colour adjective go in the sentence? (After the noun that it describes.)