Science Forces:

Explore gravity and the life and work of Isaac Newton. Examine the connection between air resistance and parachutes .

Explore factors which affect an object's ability to resist water.

Investigate the effects of friction on different surfaces. Investigate mechanisms – levers, pulleys and gears.

History and Science Scientists and Inventors

Explain whether evidence supports or refutes ideas; • explain how Margaret Hamilton's software inventions changed the way computer programmes were used; • explain Neil deGrasse Tyson's ideas about Pluto; • identify the largest and smallest planets in our solar system.

Smashing Stereotypes in Science

To learn about stereotypes; how they can negatively influence behaviours and attitudes towards others; strategies for challenging stereotypes.

To learn about stereotypes in the workplace and that a person's career aspirations should not be limited by them To learn about what might influence people's decisions about a job or career (e.g. personal interests and values, family connections to certain trades or businesses, strengths and qualities, ways in which stereotypical assumptions can deter people from aspiring to certain jobs)

To learn about some of the skills that will help them in their future careers e.g. teamwork, communication and negotiation To identify the kind of job that they might like to do when they are older.

PSHE

Celebrating Differences

I understand that, sometimes, we make assumptions based on what people look like. I try to accept people for who they are. I understand what influences me to make assumptions based on how people look.

I know that sometimes bullying is hard to spot and I know what to do if I think it is going on but I'm not sure. I know how it might feel to be a witness to and a target of bullying. I can tell you why witnesses sometimes join in with bullying and sometimes don't tell. I can problem-solve a bullying situation with others.

I can identify what is special about me and value the ways in which I am unique. I like and respect the unique features of my physical appearance.

I can tell you a time when my first impression of someone changed when I got to know them

I can explain why it is good to accept people for who they are.

Values November - Patience December - Peace

Earth in Space

English

Quality Text: The Jamie Drake Equation Fiction unit: Narrative (Science Fiction / Space Story) Expanded noun phrases

Expressing time, place and cause using conjunctions, verbs or prepositions. Punctuation for direct speech.

Non-Fiction unit:

Newspaper report: Alien crash landing Standard English verb inflections Fronted adverbials Pronouns to avoid repetition. Brackets for parenthesis.



Maths Y4

Add and subtract numbers with up to 4-digits mentally Know and use multiplication facts for 6, 7 and 9 multiplication tables Know and use division facts for 6, 7 and 9 multiplication tables

Maths Y5

Add and subtract whole numbers with more than 4 digits choosing efficient methods Add and subtract decimals with up to 3 decimal places choosing efficient methods Multiply and divide whole numbers and decimals by 10, 100 and 1000 Identify and use multiples, factors and prime numbers.

Computing E-safety: Online Bullying

Creating Media: Audio Editing

To identify that sound can be digitally recorded.

To use a digital device to record sound.

To explain that a digital recording is stored as a file.

To explain that audio can be changed through editing.

To show that different types of audio can be combined and played together.

To evaluate editing choices made.

HWP Core Values



Respect Responsibility Resilience

RE The True Meaning of Christmas Love Cards Carols The Holy Trinity Power and Vulnerability

PE

Yoga and Hockey

Geography

The Water cycle, flooding and water treatment

French Getting dressed in France

DT Electrical systems: Torches

Music

Badgers: Swindon Music Service: Clarinet lessons.

(Badgers will complete Charanga in the second half of the academic year)

Otters: Charanga

(Otters will receive clarinet lessons in the second half of the academic year)

Homework at Haydon Wick Primary School

At Haydon Wick we have four golden threads which are woven through all we do and all the teaching decisions we make.

We are a values-based school and we have 22 core values we focus on but at the heart of our values we have the 3R's – Respect, Resilience and Responsibility.

With these golden threads and core values at the heart of everything we do we have considered our homework and have developed a clear plan of our expectations for the year 2023 – 2024.

Weekly Expectations

Each week we expect the children to:

- Read to an adult at least 3 times a week and record this in the reading record.
- · Practise spellings 3x a week (weekly spellings tested on Mondays)
- Play on TTRS 3 times per week for Year 4s. Year 5s once a week to maintain knowledge and increase speed of recall if they already know their tables up to 12x12, more often if they don't.

Practising reading, spellings and playing on TTRS will help develop our children in English and Maths and help them to become lifelong learners who have the skills knowledge, and curiosity needed to take full advantage of every opportunity in life. Talking about their reading or having discussions about spellings and their meanings or how they can be used in sentences will help ensure our children's *language* is developed.

Pick and Mix Homework

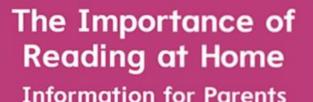
At Haydon Wick we also set Pick and Mix homework once a term. We aim to send these out before the holidays or in the first week of the new term to ensure sufficient time to complete it. We believe this homework enriches our children allowing them to gain further knowledge of the topics in school. We feel that the pick and mix style homework is *inclusive* as it allows every child to achieve and demonstrate their own potential and gives children *responsibility* in choosing the homework style which suits them best.

We expect ALL children to complete at least 1 activity from the pick and mix offer. If they have a different idea, related to our learning, that they wish to pursue then they are more than welcome to do so – we embrace their creativity!

Children are *responsible* for making sure that the work they complete at home is consistent to the work we see from the child in class. We want everyone to try their best and be proud of what they have achieved!

Parents will be invited into school to share and celebrate this homework and have a discussion about what the class have been learning.

We hope you all understand our vision for homework. We look forward to seeing wonderful work from the children this year and sharing this with all our parents.







Reading improves student concentration.

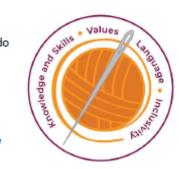
Reading helps students develop language skills.





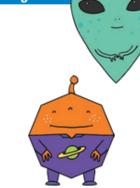
Reading fosters curiosity about the world we live in.

Reading helps students do better in all school subjects.



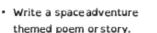
Numeracy

- Draw a space scene using only 2D shapes.
- Create some space-themed word problems.
- Work out the distance of each planet from the sun in miles. kilometres, and metres.



Out and About

- Build and launch a rocket. What did you do?
- Visit your local library. Find some non- fiction books about space.
- Observe the night sky and note any constellations you see.
- Research constellations.



- Write a poem/story aboutan alien visiting Earth.
- Write an acrostic poem for a planet.
- Write a newspaper report on the Moon landing.
- Read a novel with a space theme.



Working with Others

- Create a space-themed board or card game, and teach friends or family members how to play.
- Work with a friend or family member to design an alien. Draw and label any unique features.
- Create a mnemonic to help friends or family members remember the order of the planets.
- Make up a space quiz! You need to know the answers!



Pick and Mix Homework Earth & Space Due: Friday 8th December

If you have your own ideas, please feel free to do that instead.

Health and Wellbeing

- Create a painting or drawing of a space scene using your choice of materials.

Art

 Ask your friends and family to help you create a list with as many song titles that have space-themed words in them (i.e. star, rocket, planet, moon).

English

Write a space rap or song.



Science and Technology

- Find out and writedown ten amazing facts about space travel.
- Make a rocket with a parachute to aid re-entry.
- Create a space mobile to hang in the classroom.
- Use 2Quiz in Purple Mash to create a quiz about space.



- · Find and make a space-themed recipe.
- What ten things would you take with you on a trip to outer space? Write a list and give a reason for each object.
- Complete a labelled diagram showing the effects that spacehas on an astronaut's body.
- Astronauts need to be healthy. Create a workout and share.



- Armstrong or another famous astronaut.
- Create a timeline of space travel and exploration events.
- What countries have put astronauts into space? Mark them on amap.



Jamie Drake's Homework

INVENT AN ALIEN

"Imagine the planets the Light Swarm probes might discover orbiting Tau Ceti. What strange alien creatures could they find there? For your homework, I want you to invent your own alien species. Think about the kind of world that it's from. Does this have jungles or deserts, or might it be some kind of water world? How will this affect the type of alien you invent? Will it need tentacles instead of arms and legs like you and me? Maybe it could fly like a bird through clouds of ice and dust? Use your imagination to answer the following questions: where will this alien live, what might it eat and how could it communicate?"

Knowledge Organiser: Year 5 - Forces

Careers connected to Forces: Aerodynamics engineer, forensic investigator

Forces in Action

Lesson Sequence



1. Explore gravity and the life and work of Isaac Newton



2. Examine the connection between air resistance and parachutes



3. Explore factors which affect an object's ability to resist water



4. Investigate the effects of friction on different surfaces



5. Investigate mechanism - levers and



pulleys







Mechanisms



Pulleys A pulley is a wheel over which a belt, rope, or chain is pulled to lift or lower a heavy object.

Levers Levers are a bar that rotates around a point. They make it easier to lift a heavy load.

Gears/Cogs Gears are toothed wheels that mesh together, they rotate in opposite directions.

Mass and Weight

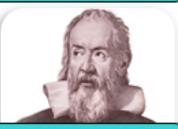


The mass of an item can be measured in Grams/ Kilograms.

Weight is how much force is needed to pull an object and is measured in Newtons.



Sir Isaac Newton developed his theory of gravity.



Galileo conducted experiments to test mass.

Unit Rocket Words: Year 5 - forces

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Rocket Words

	Sir Isaac Newton	an English physicist and mathematician
- Merican Contraction	gravity	force which draws objects towards the centre of a planet
1	Galileo Galilei	an Italian scientist, and the first astronomer
, o	parachute	a device, usually made from cloth, designed to create air resistance and slow descent
	water resistance	friction which acts on an object as it moves through water
18	streamlined	an object that is shaped to travel through air or water with little resistance
Q	buoyant	to float
	upthrust	any force that is causing something to be pushed upwards
	friction	the resistance of motion when one object rubs against another
	newton	the international metric unit of force
0	lever	a long arm that rests on a support called a fulcrum
6	pulley	a wheel over which a belt, rope, or chain is pulled to lift or lower a heavy object

Scientists and Inventors

Mission to the Moon

On 20th July 1969, the Apollo II spacecraft reached the moon, carrying the astronauts Neil Armstrong, Buzz Aldrin and Michael Collins. Neil and Buzz became the first people to ever set foot on the Moon.



The Solar System

A solar system includes a star and everything that orbits around it. Our solar system includes the Sun (which is actually a star), eight main planets, dwarf planets, moons orbiting the planets, asteroids, comets and small pieces of space debris.

Stonehenge Astronomy

Stonehenge is one of the world's most famous and recognisable monuments. It has been around for 5000 years. Some people believe the stones were a place for healing; others think it was used for religious ceremonies. There is also evidence that it was used as a calendar to track the sunrise and sunset.



Key Vocabulary geology The study of what the Earth is made of, including rocks and soils. physicist A scientist who specialises in the study of physics, which includes electricity, astronomy, forces, light and sound.

Key Individuals

Margaret Hamilton	Margaret worked for NASA and was responsible for programming the on- board flight software on the Apollo spacecraft computers. She wrote the code that the computer used to navigate from Earth to the Moon and made sure that the computer would land the spacecraft safely on the Moon.
Neil deGrasse Tyson	In 2006, Pluto was reclassified as a dwarf planet and Neil was a big part of making this decision. He works as a planetary scientist (studying planets) and actually thinks we shouldn't use the name 'planets' but instead group them according to their type, such as gas giant, ice giant and terrestrial planet.











Knowledge Organiser: Yoga Year 3 and Year 4

Links to the PE National Curriculum

Pupils should continue to apply and develop a broader range of skills, learning how to use them in different ways and to link them to make actions and sequences of movement.

• Pupils should be taught to develop flexibility, strength, technique, control and balance.

Key Skills: Physical

Key Skills: S.E.T

- Breathing
- Balance
- Flexibility
- Strength

- Emotional: Focus
- Emotional: Confidence

Social: Working safely

Social: Sharing ideas

• Emotional: Calmness

Social: Leadership

- Thinking: Selecting actions
- Thinking: Creating poses and flows
- Thinking: Providing feedback

- Top Tips for Teachers
- Repetition helps to reinforce learning. Repeat poses to allow the children to build on their yoga practise.
- Children will find it hard to concentrate for long periods of time. Mix up your teaching and know that children will be able to remain focused for different lengths of time and that that is ok.
- Keep safety in mind and ensure children work at a level they feel comfortable with.
- Use the word "try" so that the children learn to appreciate the process rather than the result.

Key Vocabulary:

Encourage pupils to use this language in your lessons. *Year 4 would use Year 3 and Year 4 vocabulary

Year 3		Strength Flexibility		Technique Perform		Link Try
Year 4	•	Stable •		Mindfulness Grounded	•	Down Dog
		Teach	ne	er Glossary		

Mindfulness: The process of purposely bringing one's attention to experiences occurring in the present moment.

Asana: Refers to physical poses and postures.

Pranayama: Refers to breathing techniques. Prana is our life force, our breath.

Namaste: In yoga this means 'the divine in me acknowledges the divine in you' and is a respectful way to start or end a class.

Knowledge Organiser: Hockey Year 3 and Year 4

Links to the PE National Curriculum

- Pupils should continue to apply and develop a broader range of skills, learning how to use them in different ways and to link them to make actions and sequences of movement.
- They should enjoy communicating, collaborating and competing with each other.
- They should develop an understanding of how to improve in different physical activities and sports and learn how to evaluate and recognise their own success.
- Pupils should be taught to use running, jumping, throwing and catching in isolation and in combination.
- Pupils should be taught to play competitive games, modified where appropriate and apply basic principles suitable for attacking and defending.

Key Skills: Physical

- Passing
- Dribbling

Get Set 4 P.E.

- Receiving
- Intercepting
- Tackling

Key Skills: S.E.T

- Social: Communication
- Social: Collaboration
- Social: Inclusive
- Emotional: Honesty and fair play
- Emotional: Perseverance
- Emotional: Empathy
- Thinking: Planning strategies and using tactics
- Thinking: Observing and providing feedback
- Thinking: Decision making

Key princip	les	of Invasion
Attacking		Defending
Score goals		Stop goals
Create space		Deny space
Maintain		Gain
possession		possession
Move the ball		
towards goal		



Key Rules

- Foot: Players must try not to let the ball hit their feet. If the ball touches a player's foot
 and it breaks down play or creates a disadvantage, the opposition is awarded a Free
 Pass.
- Back sticks: A player can only use one side of their stick (the face of the stick) to hit the ball.
- High stick: When a player attempts to play at any high ball (over knee height) with the stick.
- Obstruction: When a player uses either their stick or their body to block or keep another player from hitting the ball.

Key Vocabulary:

Encourage pupils to use this language in your lessons. *Year 4 would use Year 3 and Year 4 vocabulary



Teacher Glossary

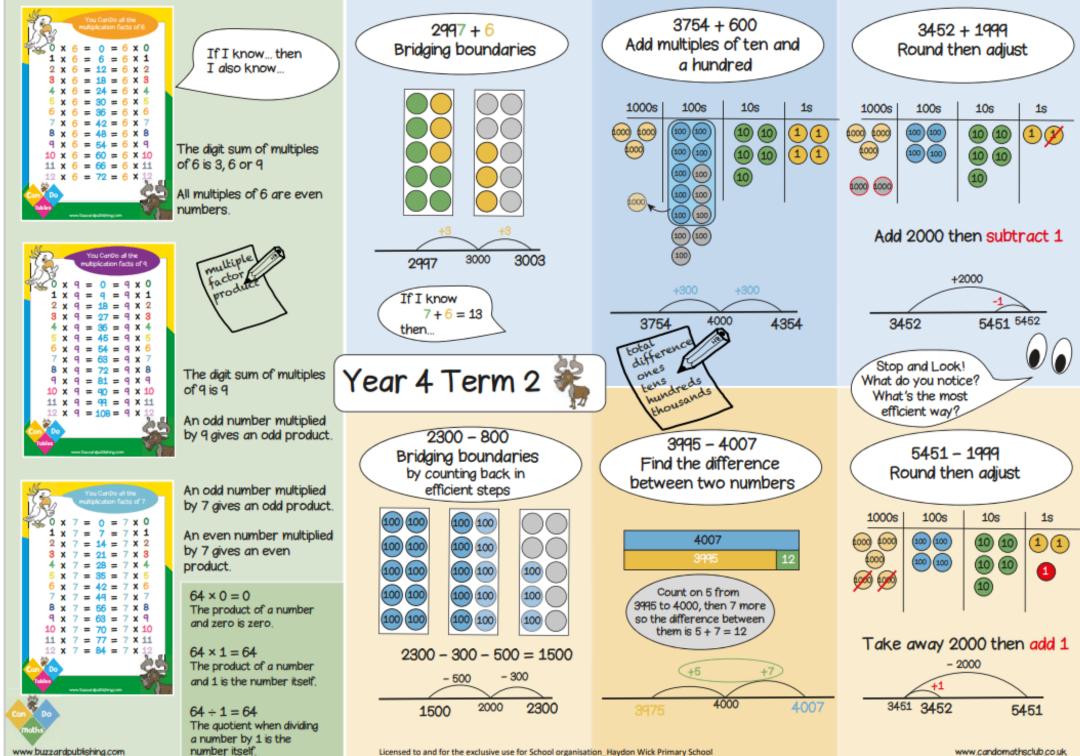
Interception: when a player takes possession of the ball away from the opposition as the ball is passed

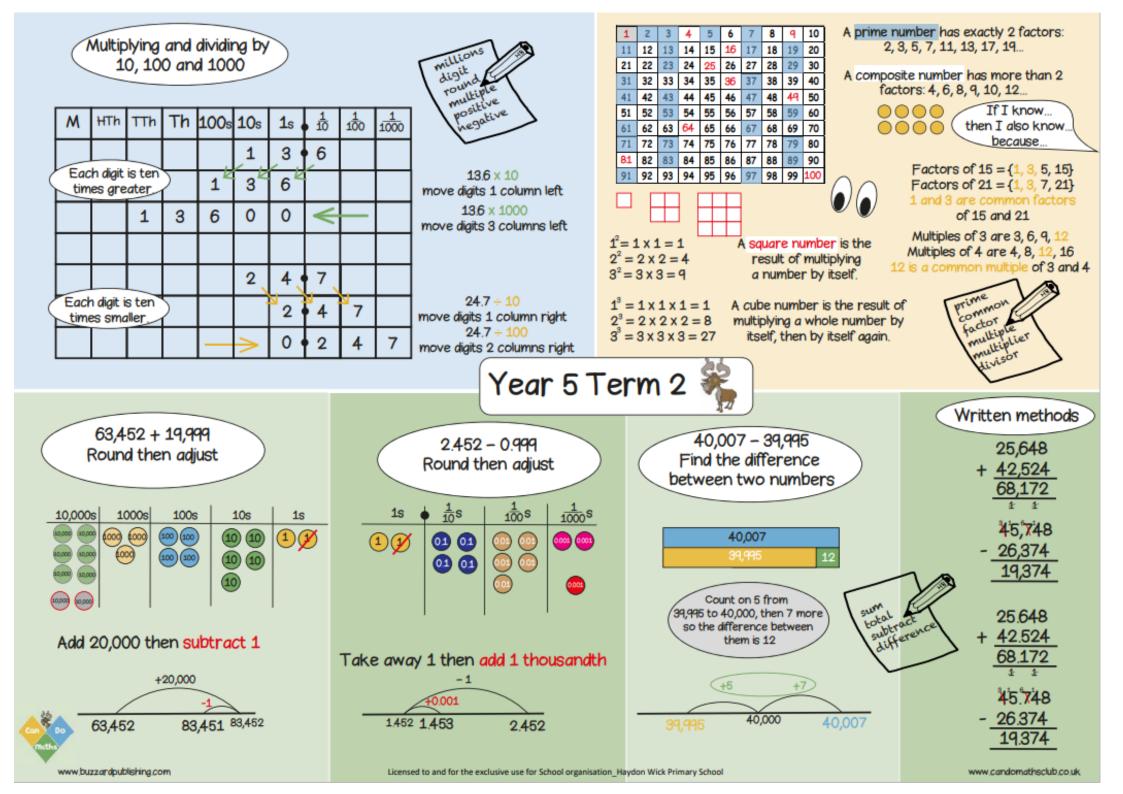
Possession: when a team has the ball they are in possession

Marking: when a player defends an opponent

Trapping the ball: getting down low to stop and receive a pass on the stick with control

Centre pass: a pass used to begin the game or the second half, or to restart play following a goal





The True Meaning of Christmas

Key Vocabulary

Christmas	A Christian festival that celebrates the birth of Jesus Christ.		
gratitude	The quallity of being thankful or showing appreciation.		
love	There is more than one type of love. There is philia which is brotherly love and romantic love known as eros. Christians also believe there is familial love (storge) and unconditional love (apage).		
sacrifice	An act of offering or giving up something. Jesus sacrificed himself when he was crucified.		
secular	Not connected to religion.		
tradition	Passing on different ways of thinking, acting or believing.		

Jesus' arrival on Earth reminds Christians of the importance of God. It is a reminder that God took human form through Jesus to save humans from their sins.



Love

Christians celebrate Christmas every year and believe that it is a time to show gratitude. For Christians, Christmas is an important festival because it celebrates the arrival of their Saviour, Jesus Christ. Christians believe that Jesus died for their sins by sacrificing his life on the cross. On Christmas Day, Christians remember the sacrifice that Jesus made and use this time to pray and reflect. This time of year is focused on love and practising traditions such as giving one another gifts that demonstrate love.

Christmas Traditions

There are many different words, acts and ideas that that all acts of are associated with Christmas. These might be with Christmas are acts such as gifting and wrapping presents, decorating Christmas trees or attending church services.

Christians believe God associated connected to love.



There are both religious and secular Christmas traditions including:

- giving Christmas cards:
- singing carols;
- decorating a tree;
- watching Christmas films;
- eating Christmas dinner.



The True Meaning of Christmas

Key Vocabulary

commercialisation

This is when something becomes about financial gain. Some people believe that Christmas has become commercialised as there is a greater emphasis on presents rather than remembering the life of Jesus.

the Holy Trinity

The word 'trinity' comes from 'tri' which means three. Christians believe in one God. God also took human form on Earth as Jesus and He exists in the form of the Holy Spirit. All three parts of the Holy Trinity are equal and God is all three parts at the same time.

incarnation

This means 'to come to flesh.' God came to Earth in human form as Jesus.

vulnerability

The state of needing additional support, care or protection because of age or a disability, or due to a risk of harm.

Power and Vulnerability

Christians believe that God came to Earth in human form (incarnation) as Jesus and suffered as all humans do. Jesus shared the experiences of the people that he met and had the opportunity to help them in special ways. In Christianity, God is all-powerful but when he came to earth, he expressed vulnerability.



Every year, Christians celebrate Christmas. However, some people argue that the true meaning of Christmas has now been lost because of **commercialisation** and the increase in secular traditions. Whereas, other people disagree and think the true message of Christmas is still being remembered.

For Christians, the Holy Trinity is important because it demonstrates how God can exist in different forms and that He us always with us.

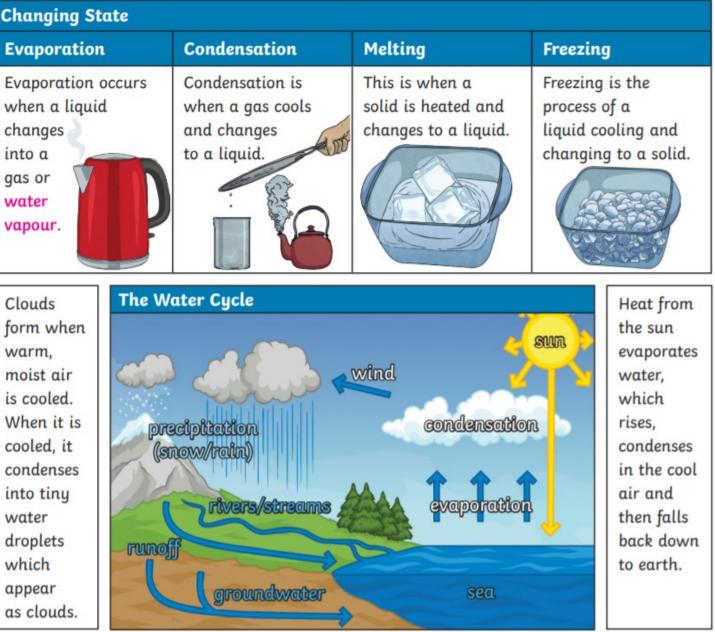
The True Meaning of Christmas

For the Christians who do believe in the true meaning of Christmas, their Christmas Day involves showing gratitude to God and remembering the sacrifice of Jesus. On this day, Christians will volunteer, give to charity and help the less fortunate. Some of the Christmas traditions we have today are secular. For example, secular Christmas cards which have non-religious images and greetings. Religious Christmas cards may have illustrations of the Nativity and other Christian messages and symbols. Christmas carols are often a part of Christmas. Some carols help remember the life of Jesus, others are more focused on the general Christmas festival.



Water

Key Vocabulary			
dam	A barrier that blocks off flowing water.		
fertiliser	A substance that helps make plants grow.		
particles	Everything is made up of matter. Particles are tiny bits of matter.		
pesticides	A substance used to destroy pests such as small animals, insects and weeds.		
pollution	Anything that is introduced into a habitat which has a harmful effect on plants and animals living there.		
reservoir	A man made lake that is used to store water.		
water vapour	Water that is in the form of a gas.		







Water

Treating Wate	r			
Water is stored in reservoirs to allow solids to settle at the bottom.	Chemicals are added to help remove small particles.	Water passes through gravel and carbon to filter out tiny particles.	Chlorine is added to kill off bacteria.	Water is clean and safe to drink.

Flooding			
Fluvial	Pluvial	Coastal	Plumbing
	-		
Lots of rainfall causing rivers to	Heavy rainfall cannot	High tides and storms.	Broken pipes in buildings.
burst their banks.	drain away quickly enough.		
	evented in some areas a river at one location		

Pollution

- · Chemicals can poison animals.
- Litter can be ingested by animals or trap them.
- Fertilisers can cause a lack of oxygen and kill animals.



Reducing Pollution

- Be careful what you throw down the sink or toilet.
- Don't throw litter into lakes, rivers or oceans.
- Use environmentally-friendly household cleaning products.
- Have more plants in the garden to stop contaminated water running into the water supply.
- Don't over use fertilisers or pesticides.

Marine Protection and Conservation Areas

- Just under 25% of the UK coastal waters are protected.
- Over 6,500 species of plants and animals are found here.



downstream.



Y4 PSHE Jigsaw Knowledge Organiser Celebrating Difference

Puzzle Outcomes

- I understand that, sometimes, we make assumptions based on what people look like and try to accept people for who they are.
- I understand what influences me to make assumptions based on how people look and question why I think what I do about other people.
- I know that sometimes bullying is hard to spot and I know what to do if I think it is going on but I'm not sure.
- I know how it might feel to be a witness to and a target of bullying.
- I can tell you why witnesses sometimes join in with bullying and sometimes don't tell.
- I can problem-solve a bullying situation with others.
- I can identify what is special about me and value the ways in which I am unique.
- I can tell you a time when my first impression of someone changed when I got to know them and explain why it is good to accept people for who they are.

Weekly Celebrations

- Week I: Accept that everyone is different
- Week 2: Include others when working and playing.
- Week 3: Know how to help when someone is being bullied.
- Week 4: Try to solve problems.
- Week 5: Use kind words.
- Week 6: Know how to give and receive compliments

Celebrating: Difference at Haydon Wick Primary School

As good citizens of Haydon Wick Primary School, we understand that everybody is unique and we should respect and celebrate everyone's differences.

Anti-bullying week: One Kind Word



Our Values of the term; Patience and Peace



Assumption	Something that is supposed or believed
	without questioning.
Judgement	Making a decision carefully, after studying
	and comparing all evidence that is available.
Difference	The way in which things are not the same,
Bullying	Unwanted, aggressive behaviour that
	involves a real or perceived power
	imbalance,
Bystander	Someone who happens to be present when
	something takes place but does not take part
	in the
Witness	A person who sees or otherwise has personal
	knowledge of something,
Cyber-	The use of digital-communication tools to
	make another person feel angry, sad, or

Knowledge Organiser – Glockenspiel Stage 2 – Year 4, Unit 2



Learn more complex rhythm patterns.

Revise, play and read the notesC, D, E, F + G.

Learn to play these tunes:

- Mardi Gras Groovin'
- Two-Way Radio
- Flea Fly
- Rigadoon
- Mamma Mia

Revisit these tunes from Stage 1:

- Portsmouth
- Strictly D
- Play Your Music
- Drive

Compose using the notes C, D, E, F + G.

2 – Perform & Share

Decide how your class will introduce the performance. Tell your audience how you learnt the music and why. Record the performance and talk about it afterwards.

The performance will include one or more of the following:

Improvisations • Instrumental performances • Compositions

charanga MUSIC WORLD Stage 2

Lorem ipsum



About this Unit

Theme: Exploring and developing playing skills using the glockenspiel.

Vocabulary: Rhythm patterns, compose, melody, pulse, rhythm, pitch, tempo, dynamics, texture structure,

Reflection

What did you like best about this Unit? Why? Was there anything you didn't enjoy about it? Why?

Did you have any strong feelings about it? Were you proud of yourself, happy or annoyed?

French Year 4 - Clothes: Getting dressed



Vocabulary and pictures

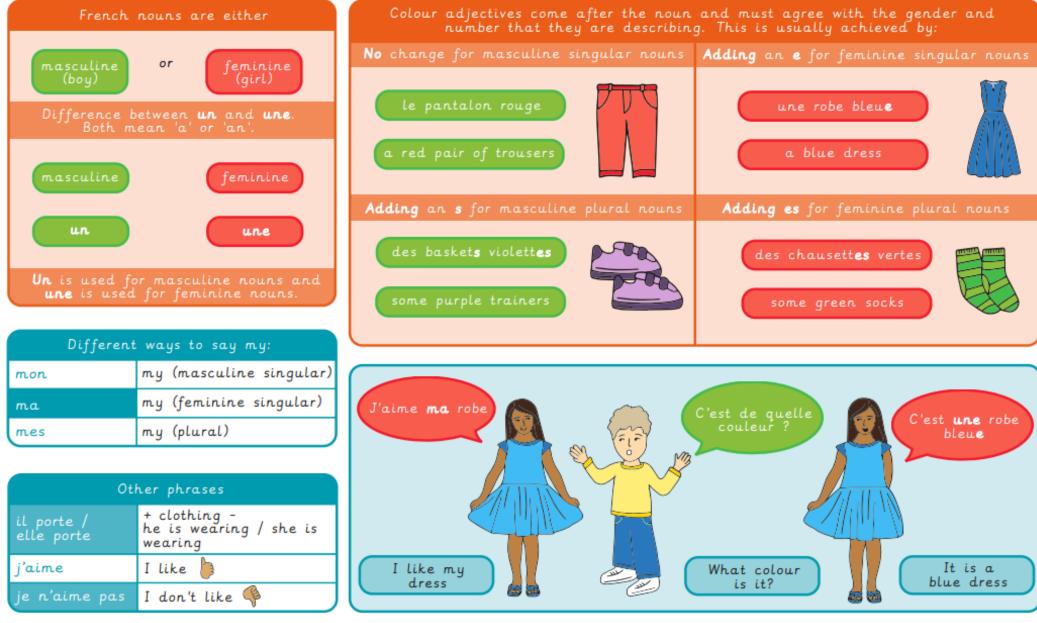


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French Year 4 - Clothes: Getting dressed

Kapow Primary

Sentence structure and phrases



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