

Knowledge Organiser

Year 4

St Mary's Swanage



Autumn Term 2022



Art Y4 Autumn Term

Romans

National Curriculum Aims
• Produce creative work
• Become proficient in drawing and painting
• Evaluate and analyse
• Know about great artists.

Prior Knowledge:

Collage:

- Know how to use ripping as a technique for collage
- Know how to rip material to create a collage

Printing:

- Know how to use the equipment and media with increasing confidence.
- Know how to create repeating patterns

Exploring:

Collage:

- Know how to use the technique of overlaying - building up layers on the surface/ colour mixes

Printing:

- Know relief and impressed printing processes
- Know how to use language that is appropriate to a particular skill

Vocabulary

surface pattern
relief printing
method
approach
purpose
overlapping
carving

Computing Y4 Autumn Term

Computing Systems - The Internet

Prior Knowledge:

Connecting computers: Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks.

Key Knowledge

The internet:

- I know the internet is a global network of networks.
- Know that the world wide web is made of websites and webpages.
- Know the function of routers.
- Know then function of a web browser.
- Know that some websites allow you to create your own content where others don't. eg. Scratch, Newsround.
- To know why security is needed on the internet and begin to know about the reliability of content.

National Curriculum Aims

- Understand computer science.
- Analyse problems and write computer programs to solve them.
- Evaluate information technology.
- Will be a responsible, competent and creative user of ICT.

Vocabulary

internet
Network
System
Webpage
Routers
Web browser
Security
Internet safety



Computing Y4 Autumn Term

Creating Media - Audio Editing

Prior Knowledge:

Stop-frame animation:

Capturing and editing digital still images to produce a stop-frame animation that tells a story

National Curriculum Aims

- Understand computer science.
- Analyse problems and write computer programs to solve them.
- Evaluate information technology.
- Will be a responsible, competent and creative user of ICT.

Key Knowledge

Audio editing:

- Know how to record their voice and ensure the recording is clear.
- Know that output devices are needed to play audio.
- I know how to edit the length of a sound clip to remove unneeded sounds.
- I know how to add background music at an appropriate volume.

Vocabulary

Media
Audio
Capturing
Editing
Stop-frame animation
Record
Output device



DT Y4 Autumn Term

Mechanical systems: levers and linkages

Prior Knowledge:

Explored and used mechanisms such as flaps, sliders and levers.

- Gained experience of basic cutting, joining and finishing techniques with paper and card.

Key Knowledge

Understand and use lever and linkage mechanisms.

- Distinguish between fixed and loose pivots.
- Know and use technical vocabulary relevant to the project.

Vocabulary

mechanism, lever, linkage, pivot, slot, bridge, guide

system, input, process, output

linear, rotary, oscillating, reciprocating

user, purpose, function

prototype, design criteria, innovative, appealing, design brief

National Curriculum Aims

- Develop creative, technical and practical expertise.
- Design and make products for a range of users.
- Evaluate my designs.
- Understand and apply the principles of nutrition and learn how to cook.



English Y4 Summer Term

National Curriculum Aim

Promote high standards of language and literacy by equipping pupils with a strong command of the spoken and written word, and to develop their love of literature through widespread reading for enjoyment.

Reading

- drawing inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence
- reading books that are structured in different ways and reading for a range of purposes
- using dictionaries to check the meaning of words that they have read.
- discussing words and phrases that capture the reader's interest and imagination.
- predicting what might happen from details stated and implied

Spoken Word

- listen and respond appropriately to adults and their peers
- ask relevant questions to extend their understanding and knowledge
- speak audibly and fluently with an increasing command of Standard English
- participate in discussions, presentations, performances, role play, improvisations and debates
- gain, maintain and monitor the interest of the listener(s)

Writing

- composing and rehearsing sentences orally (including dialogue), progressively building a varied and rich vocabulary and an increasing range of sentence structures
- organising paragraphs around a theme
- in narratives, creating settings, characters and plot
- in non-narrative material, using simple organisational devices [for example, headings and sub-headings]
- increase the legibility, consistency and quality of their handwriting.

Grammar and Punctuation

- using fronted adverbials
- extending the range of sentences with more than one clause by using a wider range of conjunctions, including when, if, because, although
- indicating possession by using the possessive apostrophe with plural nouns
- using and punctuating direct speech



Geography Y4 Autumn Term

Mountains

Prior Knowledge:

Using maps; continents and oceans; geographical terms from local and contrasting locality units

Key Knowledge

- A mountain is a landform that sticks up, high above the surrounding land. It is much taller than a hill (600 metres or above, in the UK) and is often found grouped with others in a mountain range.
- Mountains are formed when two of the earth's plates collide and land is pushed upwards or folded.
- Mountains have their own climates.
- What a mountain is.
- The features of a mountain.
- How mountains are formed.
- Mountain climates.
- The UK and world's highest mountains.
- The importance of the Himalayas

National Curriculum Aims

Develop knowledge of globally significant places.

Understand key physical and human geographical features of the world.

Carry out a range of fieldwork

Interpret information from a range of sources.

Vocabulary

Ben Nevis, Himalayas, Mount Snowdon, Pacific Ring of Fire, Scafell Pike, Slieve Donard, alpine, avalanche, landform, slope, summit, valley, altitude, height above sea level, map index, map reference, scale bar



History Y4 Autumn Term

The Romans

Prior Knowledge:

- Ancient Egypt
- Iron Age and the Celts

National Curriculum Aims

Know chronology of topic studied.

Understand significant events.

Understand historical terms.

Understand historical concepts and use them to make connections.

Understand and take part in historical enquiry.

Key Knowledge

- know how the Roman Empire became powerful, its duration and areas of conquest.
- Know the strengths of the Roman army and how it facilitated expansion of the empire.
- Know what Britain was like before the Romans (incorporating previous knowledge from Iron Age study), and that the Iron Age coincided with the Roman conquest.
- Know who Julius Caesar and Emperor Claudius were.
- Know how and why Britain was conquered.
- Know what the Romans believed (religion, Roman Empire) and aspects of their way of life (e.g. housing, clothing, society, food, entertainment), contrasting this with Celtic culture.
- Know the impact of the Roman conquest and how the Romans changed Britain and their impact on the local culture (making connections with Britain and our society today), also giving reasons whether these were positive or negative changes
- Know who Boudicca was and why she led a revolt against the Romans.
- Know that there were tribes and leaders who co-operated with the Romans and why (Cartimandua)
- Know that there can be historical 'bias' in some primary sources and how we must be critical of evidence, understanding its nature, the reasons behind it, creation; assessing its usefulness in certain contexts (e.g. Boudicca's Rebellion)
- Know the duration of the Roman occupation of Britain and why they left.
- Know in what ways life in Britain remained the same after the Romans left.
- Know how Hadrian's Wall had a military and economic role.
- Know that Ancient Egypt was also conquered by the Romans.

Vocabulary

aqueduct

invasion

roads

barbarian

tribes – Durotriges

(local) / Iceni /

Trinovantes

centurion

legion

standard

legionary

chariot

testudo

emperor

empire

amphitheatre

coliseum_

temple

polytheistic

villa

mosaic

hypocaust

tunic

baths

slave

Hadrian's Wall

Londinium (London)

Durnovaria

(Dorchester)

Camulodonum

(Colchester)

Britannia (Britain)

Caledonia (Scotland)

Gaul (France)

AD / BC



Maths Y4 Autumn Term

Power Maths Termly Overview

National Curriculum Aims
Become fluent in the fundamentals of mathematics
Reason mathematically
Solve Problems

Termly Overview		
1	Number - Number and Place Value	Place Value - 4 digit numbers (1)
2	Number - Number and Place Value	Place Value - 4 digit numbers (2)
3	Number - Addition and Subtraction	Addition and Subtraction
4	Measurement	Perimeter
5	Number - Multiplication and Division	Multiplication and Division



MFL Y4 Autumn Term

Las Verduras (Vegetables)

Prior Knowledge:

- Know how to say “hello” and “goodbye”
- Know numbers 1 – 10
- Know ten fruits
- Know how to say I like / I don't like + fruit
- Know that nouns are masculine or feminine
- Know that the word “the” has a plural form
- Read, write and say the masculine and feminine forms of the plural definite article: “the” (los/las)

National Curriculum Aims

Understand spoken and written language.

Speak with accurate pronunciation and intonation.

Write for different audiences.

Discover and develop and. Appreciateion of. The language studied.

Key Knowledge

- Phonetics Review: ch, j, ñ, ll, rr, ca, ce, ci, co, cu
- Name at least five vegetables
- Say, “I would like.. (Quisiera) + one vegetable”
- Say, “I would like a kilo of + one vegetable”
- Say, “Please” and “Thank you”
- Complete a simple conversation buying vegetables

Vocabulary

las verduras – the vegetables
las berenjenas – the aubergines
las espinacas – the spinach
las cebollas – the onions
las patatas – the pototoes
las zanahorias – carrots
las judías verdes – the green beans
los calabacines – the courgettes
los tomates – tomatoes
los guisantes – peas
los champiñones - the mushrooms
un kilo de... - one kilo of...
medio kilo de... - half a kilo of...
Quisiera... - I would like...
por favor – please
y – and
¿Puedo ayudarte? - Can I help you?
¿Algo más? - Anything else? / Is that all?
Gracias - thank you
Hasta luego – goodbye / see you soon
En mi cesta tengo... - In my basket I have...



MFL Y4 Autumn Term

Los Helados (Ice-creams)

Prior Knowledge:

- Know how to say “hello” and “goodbye”
- Know numbers 1 – 10
- Know ten fruits
- Know that nouns are masculine or feminine
- Read, write and say the masculine and feminine forms of the indefinite article: “a” (un/una)
- Know how to say “please” and “thank you”
- Know how to say “I would like...” (quisiera)
- Completed a short conversation buying vegetables

National Curriculum Aims

Understand spoken and written language.

Speak with accurate pronunciation and intonation.

Write for different audiences.

Discover and develop and. Appreciateion of. The language studied.

Key Knowledge

- Recognise, remember and say up to 10 ice-cream flavours
- Ask for an ice-cream using “Quisiera + ice-cream flavour”
- Use conjunction “y” (and) when asking for more than one flavour
- Know how to ask for a small tub and/or a cone
- Say how many scoops they want (up to 3)
- Recall how to say, “Please” and “Thank you” and use accordingly
- Complete a simple conversation buying ice-creams

Vocabulary

Quisiera... - I would like...

Un helado – an ice-cream

...de vainilla – vanilla

...de fresa – strawberry

...de plátano - banana

...de menta – mint

...de pistacho – pistachio

...de chocolate – chocolate

...de café - coffee

...de limón - lemon

...de caramelo – caramel

...de mora – blackberry

y – and

un cucurucho – a cone

una tarrina – a small tub

una bola – one scoop

dos bolas – two scoops

tres bolas – three scoops

scoops

¿Qué sabor? - Which flavour?

¿Cuántas bolas? - How many scoops?

¿Cuánto cuesta? - How much?

Gracias – Thank you

Adiós - Goodbye



Music Y4 Autumn Term

Mamma Mia

Glockenspiel 2

National Curriculum Aims

Perform, listen to and evaluate a range of music.

Learn to sing, create and compose music and play an instrument.

Understand how music is created and use appropriate notation.

Prior Knowledge:

Performing

- Know how to sing in tune with expression.
- Know how to control the voice when singing with clear diction.
- Know how to play clear notes on an instrument

Composing

Know how to use different elements in composition; repeat patterns on a range of instruments and create accompaniments to a melody

- Know how to choose instruments purposefully and combine different sounds to create an intended effect.

Listening and appraising

- Know how to use musical vocabulary to describe a piece of music, discussing likes and dislikes.
- Know how to improve work, stating how it has been improved.
- Know how to recognise the work of at least one famous composer showing awareness of when it was written.

Key Knowledge

Performing

- Know how to perform a simple part including rests.
- Know how to improvise using repeated patterns.
- Know how to maintain a part in a group showing awareness of others.
- Memorise songs and perform with accuracy.

Composing

- Know how to use basic rhythmic notation to transcribe ideas.
- Know how to notate a composition using basic notation and use to record performance.
- Explore and compose a short song (lyrics and melody) and perform

Listening and appraising

- Know and identify the different purposes of music, using musical vocabulary.
- Develop their understanding of a musical timeline, recognising there are different eras of music and being able to recognise their differences.
- Know how silence can affect the overall effect of a musical piece or idea.



Vocabulary

Keyboard, electric guitar, bass, drums, improvise, compose, melody, pulse, rhythm, pitch, tempo, dynamics, texture structure, compose, improvise, hook, riff, melody, solo, pentatonic scale, unison, patterns,

PE Y4 Autumn Term

Gymnastics - Fitness, Football

National Curriculum Aims

Develop competence in a broad range of physical activities.

Be physically active for sustained periods of time.

Engage in competitive sports and activities.

Lead healthy, active lives.

Prior Knowledge:

Gymnastics

- Pupils will execute 'excellent' balances and movements in both symmetrical and asymmetrical ways. Pupils will be able to link these movements and balances together.

Football

- Pupils will develop their passing and moving and dribbling skills to outwit their opponents and keep possession of the ball.

Key Knowledge

Gymnastics

- Pupils will execute 'excellent' balances and movements within the 'bridges' theme. Applying flow, pupils will link these movements and balances together.

Football

- Pupils will be able to apply a secure understanding of passing, moving and dribbling in order to shoot and score goals against another team.

Vocabulary

Gymnastics

Extension, control, interesting, sequence, excellent gymnastics, bridge, levels

Football

Attacker, defender, transition, turning.



PHSE/RSE Y4 Autumn Term

Being My Best

Prior Knowledge:

- Know how different food groups work in our body.
- Know major internal body parts (heart, blood, lungs, stomach, small and large intestines, liver, brain) and how the respiratory and digestive process's function.
- Know how some infectious illnesses are spread from one person to another.
- To identify my achievements and skills to work on.

Key Knowledge

- Know each person is unique and makes unique choices.
- Know that the body gets energy from food, water and oxygen and that exercise and sleep are important to our health.
- Knows some examples of how people can look after their mental health.
- Knows a variety of ways in which they can contribute to the care of the environment
- I know how to help with broken bone and bleeding incidents.

Vocabulary

Unique, individual, choice, balance, refuse, reduce, recycle,



PHSE/RSE Y4 Autumn Term

Keeping Myself Safe

Prior Knowledge:

- Know what a risk and danger are and can explain them both.
- What a drug is and that nicotine and alcohol are drugs.
- I know what risks there may be online and how to report a risk online.
- I know who my trusted adults are.

Key Knowledge

- Difference between danger and risk
- Risks of cigarettes and alcohol on the body.
- How to safely share online and the implications for sharing images without consent.
- I know my body is a gift from God and that it should be respected.

Vocabulary

Risk, danger, hazard, drug, privacy, security, assertive, perseverance



RE Y4 Autumn Term

Come and See

Themes	Topic	Title	Content
Loving	Family	People	The family of God in Scripture
Vocation and commitment	Belonging	Called	Confirmation: a call to witness
Advent/Christmas	Loving	Gift	God's gift of love and friendship in Jesus

Science Y4 Autumn

Electricity

Prior Knowledge:

Children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur and talk about changes. (Early Learning Goal)

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.

Vocabulary

Electricity, electrical appliance/device, mains, plug, electrical circuit, complete circuit, component, cell, battery, positive, negative, connect/connections, loose connection, short circuit, crocodile clip, bulb, switch, buzzer, motor, conductor, insulator, metal, non-metal, symbol



Science Y4 Autumn

Sound

Prior

Knowledge:

- 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 from the sound source increases.

As a Scientist I will be:

Develop scientific knowledge conceptual understanding

Making Observations

Engaging in Practical Activities

Recording and Presenting Evidence

Evaluating and raising questions

Communicating Findings

Vocabulary

Sound, source, vibrate, vibration, travel, pitch (high, low), volume, faint, loud, insulation

