# Knowledge Organiser Year 4 St Mary's Swanage

Autumn Term 2022







# Art Y4 Autumn Term Romans

### **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:

colour mixes

## **Printing:**

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



#### **National Curriculum Aims**

- Produce creative work
- Become proficient in drawing and painting
- Evaluate and analyse
- Know about great artists.

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

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.
- Analyst 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 Securtity 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

### **Key Knowledge**

Audio editing:

- 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.



### **National Curriculum Aims**

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

• Know how to record their voice and ensure the recording is clear.

### 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.

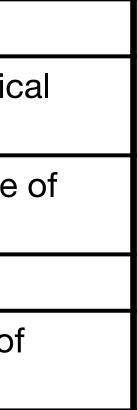
### Vocabulary

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.



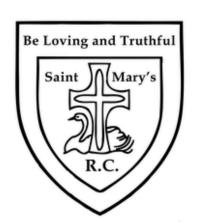
# **English Y4 Summer Term**

### 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 imp

### Writing

- composing and rehearsing sentences orally (including dialogue), progressively building a varied and rich vocabula 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 device [for example, headings and sub-headings]
- increase the legibility, consistency and quality of their ٠ handwriting.



### **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.

÷γ	<ul> <li>Spoken Word</li> <li>listen and respond appropriately to adults and their peers</li> <li>ask relevant questions to extend their understanding and knowledge</li> <li>speak audibly and fluently with an increasing command of Standard English</li> <li>participate in discussions, presentations, performances, role play, improvisations and debates</li> <li>gain, maintain and monitor the interest of the listener(s)</li> </ul>
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lary	<ul> <li>Grammar and Punctuation</li> <li>using fronted adverbials</li> <li>extending the range of sentences with more than one clause by using a wider range of conjunctions, including when, if, because, although</li> <li>indicating possession by using the possessive apostrophe with plural nouns</li> <li>using and punctuating direct speech</li> </ul>



# **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 signifiant places.

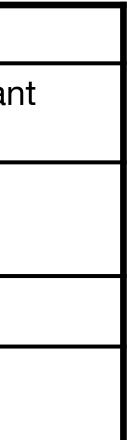
Understand key physical and human geographical features of the world.

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

### 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.
- 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.
- 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, 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.



<b>National</b>	<b>Curriculum Aims</b>
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Know chronology of topic studied.

Understand significant events.

Understand historical terms.

Understand historical concepts and use them to make connections.

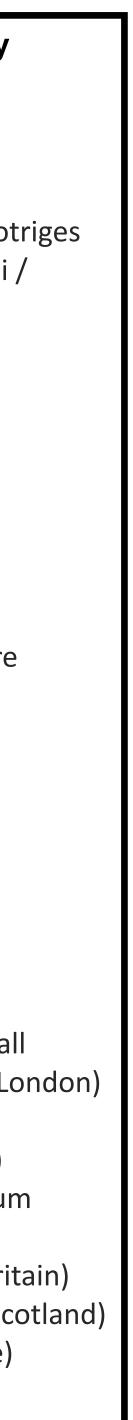
Understand and take part in historical enquiry.

• Know what Britain was like before the Romans (incorporating previous knowledge from Iron Age study), and that the

• 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

understanding its nature, the reasons behind it, creation; assessing its usefulness in certain contexts (e.g. Boudicca's

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**

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		



#### **National Curriculum Aims**

Become fluent in the fundamentals of mathematics

Reason mathematically

Solve Problems

# 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)

### 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



### **National Curriculum Aims**

Understand spoken and written language.

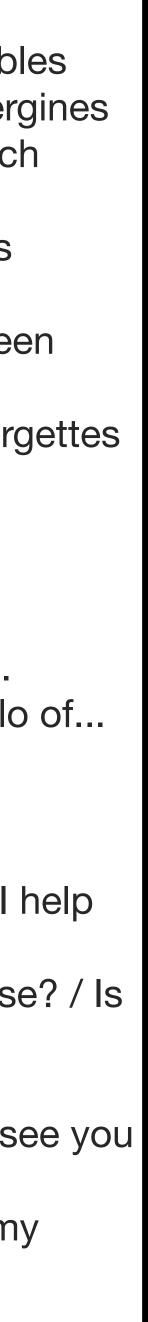
Speak with accurate pronunciation and intonation.

Write for different audiences.

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

### 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 <mark>guisantes</mark> – 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



### **Key Knowledge**

- Know how to ask for a small tub and/or a cone
- Say how many scoops they want (up to 3)
- Complete a simple conversation buying ice-creams

### **National Curriculum Aims**

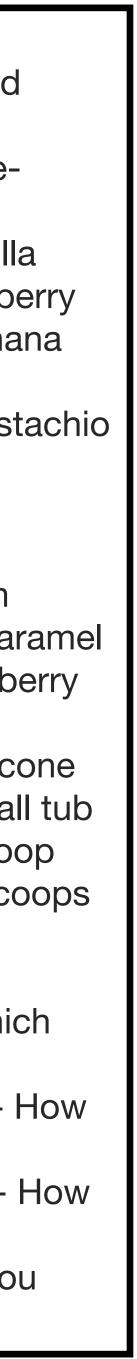
Understand spoken and written language.

Speak with accurate pronunciation and intonation.

Write for different audiences.

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

• 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 • Recall how to say, "Please" and "Thank you" and use accordingly Vocabulary Quisiera... - I would like... Un helado – an icecream ...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 - andun cucurucho – a cone una tarrina – a small tub una bola – one scoop dos bolas – two scoops tres bolas – three 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**

#### 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 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,

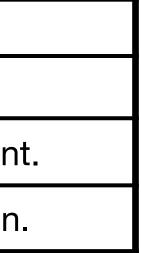
### **National Curriculum Aims**

Perform, listen to and evaluate a range of music.

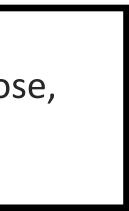
Learn to sing, crate and compose music and play an instrument.

Understand how music is created and use appropriate notation.

Know how to use basic rhythmic notation to transcribe ideas.







# PE Y4 Autumn Term **Gymnastics - Fitness, Football**

### **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**

- Football
- 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.



#### **National Curriculum Aims**

Develop competence in a broad range of physical activities.

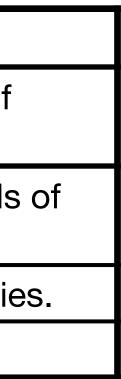
Be physically active for sustained periods of time.

Engage in competitive sports and activities.

Lead healthy, active lives.

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

• Pupils will be able to apply a secure understanding of passing, moving and dribbling





# **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.
- sleep are important to our health.

- I know how to help with broken bone and bleeding incidents.



• Know that the body gets energy from food, water and oxygen and that exercise and

• 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

### 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	Торіс	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.

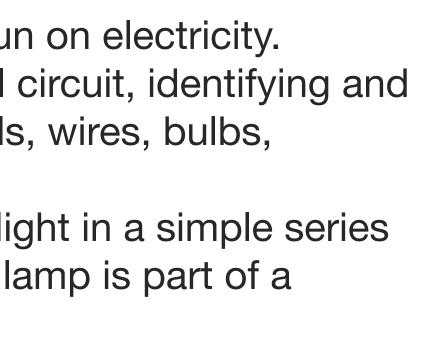
 Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit.

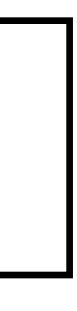
 Recognise some common conductors and insulators, and associate metals with being good conductors.

### **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

