

Knowledge Organiser

Year 6

St Mary's Swanage



Autumn Term 2022



Art Y6 Autumn Term

3D Sculpture linked to Edward Burne-Jones

National Curriculum Aims

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

Prior Knowledge:

Exploring:

- Create sketch books to record their observations and know how to use them to review and revisit ideas

Evaluating:

- Know how to talk about the work of other artists.
- Know how to comment on ideas, methods and approaches in their own work and the work of others.
- Know how to relate ideas, methods and approaches to context in which a work was created.
- Know how to adapt and improve their own work to realise their own intentions

3D:

- **Know** how to shape, form, model and join with confidence.
- Know how to work directly from observation with confidence. Know how to use appropriate language

Key Knowledge

Exploring:

- Know how to explore and experiment to plan and collect source material for future work.

Evaluating:

- Know how to develop their work taking into account purpose.
- Know how to observe and discuss the work of other artists.
- Know how to adapt and refine their work to reflect and their view of its purpose and meaning

3D:

- Know how to produce more intricate patterns and textures.
- Know how to work directly from imagination with confidence.
- Know how to use appropriate language
- Know how to select and use appropriate media for a specific purpose

Vocabulary

depth, structure, intention, prototype, replicate, tonal contrast, deconstruct, coiling, tessellation, montage, ceramic, element, tactile, influential, installation, annotate

Computing Y6 Autumn Term

Computer Systems - Internet Communication

Prior Knowledge:

Sharing
information:
Identifying and
exploring how
information is
shared between
digital systems.

Key Knowledge

Internet communication:

- Know why search engines exist and know there are a number of search engines and compare results from different ones.
- Know that search terms need to be chosen carefully.
- Know the role of web crawlers.
- Know that search results are ordered and this is known as ranking.
- Know that some information isn't searchable.

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

IP address
Protocol
Domain Name Survey (DNS)
Data
Data payload
Copyright
Communication

Computing Y6 Autumn Term

Creating Media - 3D Modelling

Prior Knowledge:

Vector drawing:

Creating images in a drawing program by using layers and groups of objects.

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

3D modelling:

- Know how to create 3D objects using a computer program and be able to duplicate them.
- Know the differences when working in 2D and 3D.
- Know how to re-size, rotate, re-colour objects in 3D.
- Know how to group objects.

Vocabulary

3D Modelling

Workplane

Manipulate

Dimensions

Placeholder

DT Y6 Autumn Term

Electrical Systems

Prior Knowledge:

Understanding of the essential characteristics of a series circuit and experience of creating a battery-powered, functional, electrical product.

- Initial experience of using computer control software and an interface box or a standalone box, e.g. writing and modifying a program to make a light flash on and off.

Key Knowledge

- Understand and use electrical systems in their products.
- Apply their understanding of computing to program, monitor and control their products.
- Know and use technical vocabulary relevant to the project.

Vocabulary

series circuit, parallel circuit, names of switches and components, input device, output device, system, monitor, control, program, flowchart
function, innovative, design specification, design brief, user, purpose

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 Y6 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

- Take part in play readings and perform, showing understanding through intonation, tone and volume and an appreciation of the impact on an audience
- Check that the book makes sense and discuss new and unfamiliar vocabulary.
- Drawing inferences about characters' feelings, thoughts and motives from their actions, using the text to support ideas.
- Discuss how the authors use of language, including figurative language, has an impact on the reader.

Spoken Word

- Speak clearly and audibly showing an increasing awareness of the listener.
- Take part in a group performance showing awareness of the other performers.
- In discussions justify arguments and opinions.
- Challenge other's views courteously.
- Maintain the attention of an audience.
- Ask relevant questions of a speaker.
- Keep to the topic/ discussion/ theme.

Writing

- Write for a range of audiences and purposes: diary/ letter/ narratives/ play scripts/ newspaper articles/ NF reports/ explanations
- Select interesting and adventurous vocabulary and identify how choices might change and improve meaning.
- In narrative writing use texts as a model.
- Use organisational devices e.g. bullet points/ headings etc
- Proof-read for spelling and punctuation errors
- Edit writing for improvements.

Grammar and Punctuation

- Use full stops, commas, exclamation marks, speech marks and question marks to punctuate sentences correctly.
- Use a wide range of adjectives and adjectival phrases, adverbs, adverbials and prepositional phrases to add description and elaboration to writing.
- Use a wide range of conjunctions to create compound and complex sentences
- Use expanded noun phrases to convey complicated information concisely



History Y6 Autumn Term

Ancient Greeks

Prior Knowledge:

Studies of other Ancient Civilisations and the Romans for comparison

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

- Place the Ancient Greeks into a chronology context, comparing with other periods previously studied.
- Know that Ancient Greece was organised into different city states, each with their own set of rules and customs.
- Understand that we know so much about the Ancient Greeks through exploring artefacts found by archeologists and through their writing, as well as through the extensive influence the Greeks had on the Roman Empire.
- Know about the development of democracy in Athens, the impact it had on the development of the city state, and how it became an enduring legacy of Ancient Greece to the rest of the world.
- Know about Ancient Greek philosophers Socrates, Plato and Aristotle and how their thinking remains influential to this day.
- Know what and when the Golden Age of Greece was, its important cultural contributions and how some of these influential to this day.
- Know what the religious beliefs of the Ancient Greeks were.
- Know what the great achievements were of the Ancient Greeks and their influence on the Western World (democracy, philosophy, medicine, language etc.).
- Make comparisons with Ancient Greece and civilisations studied before.

Vocabulary

democracy
 Acropolis
 Elgin Marbles
 city state
 Parthenon
 citizen
 philosopher
 philosophy
 literature
 architecture
 alphabet
 agora
 Hellenistic
 phalanx
 mythology
 Oracle
 Delphi
 column
 Sparta
 peninsula
 terraced

Maths Y6 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	Number to 10,000,000
2	Number	Four Operations
3	Number - Number and Place Value	Fractions
4	Number - Number and Place Value	Decimals
5	Measurement	Measurement
6	Problem Solving	Word Problems



MFL Y6 Autumn Term

El Día de los Muertos

Prior Knowledge:

- Know the negative form for the first person for the verb have: no tengo (I don't have)
- Greetings: hello / goodbye / how are you and appropriate responses
- Classroom Commands
- Numbers 1 – 100
- Identified Spain and other Spanish-speaking countries on maps

Key Knowledge

- Phonetics Review: ga, ge, gi, go, gu
- New Phonetics: b, v, cc, qu, z
- Core Vocabulary revision: Commands / Numbers / Calculations / Months and Days
- Learn about aspects of Mexican culture
- Know key information about El Día de los Muertos

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

más - plus (+)

menos – minus (-)

por – times (x)

dividido por – divided by (÷)

igual a – equals

Commands (using 2nd person plural – vosotros – imperative form)

¡Escuchad! - listen

¡Escribid! - write

¡Repetid! - repeat

¡Leed! - read

¡Silencio! - silence

¡Cerrad los libros! - close your books

¡Abrid los libros! - open your books

¡Pensad! - think

¡Preguntad! - ask

¡Levantad la mano! - raise your hand

MFL Y6 Autumn Term

La Ropa (Clothes)

Prior Knowledge:

- Understand that all nouns in Spanish are either masculine or feminine
- Read, write and say the masculine and feminine forms of the indefinite article: “a” (un/una)
- Conjugated these verbs in first person: soy / vivo / **quiero** / quisiera
- Conjugated these verbs in first, second and third person: tengo / tienes / tiene
me llamo / te llamas / se llama
- Used “mi” (my) to refer to members of the family
- Encountered basic examples (with no overt focus on) adjectival agreement (ending –o or –a) with masculine and feminine plural and singular nouns (hijo único / hija única Masculine singular: el Imperio romano / Feminine Singular: la historia romana / masculine plural: los baños romanos / Feminine plural: las esculturas romanas



National Curriculum Aims

Understand spoken and written language.

Speak with accurate pronunciation and intonation.

Write for different audiences.

Discover and develop an appreciation of the language studied.

Key Knowledge

- Say and write the vocabulary (nouns with the correct gender and article) for a range of clothes
- Use the verb *llevar* (to wear) conjugated correctly (first, second, third person singular and plural) to describe what I am wearing, and possibly conjugated correctly to describe what other people are wearing
- Say what different clothes I wear in different situations and different weather
- Describe what I am wearing in terms of colours and correct adjectival agreement, and possibly able to describe what other people are wearing
- Use the correct possessive adjective for “my” related to items of clothing

Vocabulary

la ropa – the clothes
 unos pantalones – a pair of trousers
 un traje de baño - swimwear
 un suéter - a jumper
 una camiseta – a t-shirt
 un abrigo – a coat
 un vestido – a dress
 una blusa – a blouse
 una corbata – a tie
 una bufanda – a scarf
 una falda – a skirt
 una chaqueta – a jacket
 una camisa – a shirt
 una gorra – a cap
 unos guantes – a pair of gloves
 unas botas – boots
 unas medias – tights
 unas sandalias – sandals
 unas gafas – sunglasses
 unos pantalones cortos – a pair of shorts
 unos zapatos – a pair of shoes
 unos calcetines – a pair of socks
 yo llevo – I wear
 tú llevas – you wear (singular)
 él lleva – he wears
 ella lleva – she wears
 Nosotros llevamos – we wear (masculine and mixed group)
 Nosotras llevamos – we wear (all feminine group)
 Vosotros lleváis - you wear (plural masculine and mixed groups)
 Vosotras lleváis - you wear (plural all feminine group)
 Ellos llevan – they wear (masculine and mixed groups)
 Ellas llevan – they wear (all feminine group)
 Para la escuela llevo... - For school I wear...
 Cuando hace buen tiempo llevo...- When it is nice weather, I wear...
 Cuando nieva llevo... - When it snows, I wear...
 Cuando estoy de vacaciones llevo – When I’m on holiday, I wear...

Music Y6 Autumn Term

Happy Classroom

Jazz 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 or play using correct phrasing and demonstrate understanding of how to add expression.
- Know how to hold a part in a group
- Know how to perform music using a variety of structural forms
- Know how to perform by ear and using simple notations

Composing

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

Listening and appraising

- Know how to refine and improve compositions and performances; and suggest improvements to the work of others.
- Know how to evaluate work using appropriate musical vocabulary
- Know how to use standard musical notation to record ideas.

Key Knowledge

Performing

- Know how to provide rhythmic support in a performance from notation.
- Know how to perform from a variety of notations.
- Know how to sing a harmony part with accuracy and be able to perform from memory.
- Developing confidence to perform, being able to take a lead role in a performance.

Composing

- Know how to use different elements in their work, compose repeated 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.

Appraising

- Know how to improve performances and compositions.
- Know how to identify different musical devices in a variety of musical genres and show some awareness of the influence and place music has had in society over time.



Vocabulary

style indicators, melody, compose, improvise, cover, pulse, rhythm, pitch, tempo, dynamics, timbre, texture, structure, dimensions of music, neo soul, producer, groove, Motown, hook, riff, solo
Blues, Jazz, improvisation, by ear, melody, compose, improvise,

PE Y6 Autumn Term

Gymnastics, 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 within the Counter Balance and Tension theme, accurately applying flow as they link their balances with movement.

Football

- Pupils will pass, move, dribble and shoot accurately and consistently, switching fluidly between attack and defence as possession changes

Key Knowledge

Gymnastics

- Pupils will create a sequence containing both matching and mirroring movements, executed with accuracy and fluidity using a range of apparatus.

Football

- Pupils will apply a refined understanding of passing and moving and dribbling to score points against another team

Vocabulary

Gymnastics

Excellent gymnastics, flow, levels

Football

Tactics, transition, through ball, man to man marking, counter attack, referee.

PHSE/RSE Y6 Autumn Term

Being My Best

Prior Knowledge:

- Knows the common misconceptions of smoking and understands the norm.
- Knows skills and qualities that makes themselves successful.
- Knows that the way people are portrayed in the media isn't always an accurate reflection of them in real life
- Knows the different responsibilities that they and others have for their own health and wellbeing.

Key Knowledge

- Knows that risk-taking behaviour, including emotional risk, has an outcome.
- Knows that making good choices impacts on success and aspiration.
- Knows that challenges will be met and can be overcome in life.
- I know how to help with unresponsive casualties.

Vocabulary

Aspiration, perseverance,
Connect, be active, take notice, mindful, risk, weigh up, influence, responsive, unresponsive



PHSE/RSE Y6 Autumn Term

Keeping Myself Safe

Prior Knowledge:

- I know the legal implications of communicating and sharing online.
- I know the laws, categories and uses of medical and non-medical drugs.
- I know what an emotional need is and how it can be met.
- I know that being thankful builds my resilience against negative emotions and, peer and media pressure.

Key Knowledge

- I know the legal implications of communicating and sharing online.
- I know the laws, categories and uses of medical and non-medical drugs.
- I know what an emotional need is and how it can be met.
- I know that being thankful builds my resilience against negative emotions and, peer and media pressure.

Vocabulary

Social media, trolling, permission, sexual imagery, medical, non-medical drugs, possess, supply, Conflicting emotions, resilience, thankfulness

RE Y6 Autumn Term

Come and See

Themes	Topic	Title	Content
Loving	Family	Loving	God who never stops loving
Vocation and commitment	Belonging	Vocation and commitment	The vocation of priesthood and religious life
Advent/Christmas	Loving	Expectations	Jesus born to show God to the World

Science Y6 Autumn

Electricity

Prior Knowledge:

- Identify common appliances that run on electricity. (Y4 - Electricity)
- Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. (Y4 - Electricity)
- 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. (Y4 - Electricity)
- Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit. (Y4 - Electricity)
- Recognise some common conductors and insulators, and associate metals with being good conductors. (Y4 - Electricity)

Key Knowledge

- Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.
- Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.
- Use recognised symbols when representing a simple circuit in a diagram.

Vocabulary

Circuit, complete circuit, circuit diagram, circuit symbol, cell, battery, bulb, buzzer, motor, switch, voltage

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



Science Y6 Autumn

Light

Prior Knowledge:

- Recognise that they need light in order to see things and that dark is the absence of light. (Y3 - Light)
- Notice that light is reflected from surfaces. (Y3 - Light)
- Recognise that light from the sun can be dangerous and that there are ways to protect their eyes. (Y3 - Light)
- Recognise that shadows are formed when the light from a light source is blocked by an opaque object. (Y3 - Light)
- Find patterns in the way that the size of shadows change. (Y3 - Light)
- Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets. (Y5 - Properties and changes of materials)



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

Key Knowledge

- Recognise that light appears to travel in straight lines.
- Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye.
- Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes.
- Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.

Vocabulary

As for Year 3 - Light, plus straight lines, light rays