



Knowledge Organiser

Year 5

St Augustine's School, Weymouth



Autumn Term

Y4

Sculpture – Clay tiles

Prior Learning

Painting
Self Portrait

Unit

Y6 Digital Magazine Cover
Art

How Knowledge will be built on

Key Knowledge

- **Colour:** creating a colour contrasts including an understanding of colour theory e.g. warm & cool. Mixing some colours and/or adding white for effect to create tones and shades
- **Mix a full range of colours and shades from a standard palette**
- **Shape :** Understand and represent proportion accurately
- **Space:** Understand how blocking out space projects an image forward
- **Texture:** Understand how to use brushes of different sizes to create effects that re-create texture in a 2D painting e.g. stippling, dabbing, washing. Adding textures to backgrounds using a range of tools e.g. end of paintbrush

Vocabulary

proportion, colour blocking, under painting, wash, base coat, background, detail, stippling, project, stand out, contrast, complementary, colour theory, texture, cool/warm colours, tone, tint, shade, hue

Y4 Mechanical systems
Making a slingshot car.

Prior Learning

Pop up books

Unit

Y6 Electrical systems
Designing a steady hand
game.

How Knowledge will be built on

Key Knowledge

- To know that mechanisms control movement. To know that a design brief is a description of what I am going to design and make
- To understand that mechanisms can be used to change one kind of motion into another
- To understand how to use sliders, pivots and folds to create paper-based mechanisms

Vocabulary

design, input, motion, mechanism, criteria, research, reinforce, model

Y4 Aut
Collaborative Learning

Prior Learning

Computer systems and
networks - Search Engines

Unit

Y6 Aut
Bletchley Park

How Knowledge will be built on

Key Knowledge

- Developing searching skills to help find relevant information on the internet
- Learning how to use search engines effectively to find information, focussing on keyword searches and evaluating search returns
- Learn about different forms of communication that have developed with the use of technology
- Recognising that information on the Internet might not be true or correct and learning ways of checking validity

Vocabulary

Algorithm, Appropriate, Copyright, Correct, Credit, Data leak, Deceive, Fair, Fake, Inappropriate, index, information, keywords, network, privacy, rank, real, search engine, TASK, web crawler, Website

Y4 Aut
Further coding with Scratch

Prior Learning

Programming – Music using
Scratch

Unit

Y6 Aut
Intro to Python

How Knowledge will be built on

Key Knowledge

- Predicting how software will work based on previous experience
- Writing more complex algorithms for a purpose
- Iterating and developing their programming as they work
- Confidently using loops in their programming
- Using a more systematic approach to debugging code, justifying what is wrong and how it can be corrected
- Writing code to create a desired effect using a range of programming commands
- Using repetition within a program
- Amending code within a live scenario
- Using logical thinking to explore software more independently, making predictions
- Using a software programme (Sonic Pi) to create music
- Identify ways to improve and edit programs, videos, images etc
- Beat, Buffer, Bugs, Coding, Commands, Debug, Decompose, Error, Format, Instructions, Live Loops, Loop, Melody, Mindmap, Music, Output, Performance, Pitch, Programming, Rehearsal, repetition, rhythm, sleep, sonic Pi, Soundtrack

Vocabulary

Beat, Buffer, Bugs, Coding, Commands, Debug, Decompose, Error, Format, Instructions, Live Loops, Loop, Melody, Mindmap, Music, Output, Performance, Pitch, Programming, Rehearsal, repetition, rhythm, sleep, sonic Pi, Soundtrack

Y4 Spr
Brazil

Prior Learning

Fairtrade

Unit

Y6 Spr
Migration

How Knowledge will be built on

Key Knowledge

- **Natural resources** are substances that occur naturally in the environment, like **wood, food, water** and **fossil fuels**
- **Fossil fuels** are materials made from fossils over millions of years, like coal and oil. Humans use these to run cars and electrical items
- **Natural resources** are unevenly distributed across the world, and can be renewable or non-renewable South America is comprised of Argentina, Bolivia, Brazil, Chile and Colombia
- **Trade** is the process of buying and selling goods. **Imports** and **Exports**
- UK imports food from across the world.
- There have been changes in what is grown where, how it is farmed, how it is transported and how it is sold. **Agriculture** has moved from **subsistence** to **commercial** so that food can be traded
- **Fair trade** is a way of making sure that farmers are paid a fair price for the food they grow

Vocabulary

Natural Resources – wood, food, water, fossil fuels, North America, Mountainous West, Great Plain, Canadian Shield, Eastern Region, Caribbean, Import, Export, Trade, Agriculture, Subsistence, Commercial, Fair Trade

Year 5 Autumn Term - History

Y4 Sum

The Viking and Anglo struggle
for power.

Prior Learning

Crime and Punishment
throughout the ages.

Unit

Y6

Islamic Civilisation

How Knowledge will be built on

Key Knowledge

- Executions and other physical punishments were the most common punishments, along with fines in courts
- Punishments were carried out in public to act as a deterrent. Prison was only used to hold people awaiting trial – not as a punishment
- Severe punishments brought in for vagrancy and witchcraft. Eventually the authorities realized that there were many genuine cases of poverty and made changes to try and protect the genuine poor leading to the 1601 Great Poor Law Act
- A new system was introduced during the 18th century which became known as the Bloody Code. It increased the number of crimes which were punishable by death from 50 to over some of which seem very trivial
- 19th century saw a massive population increase, which led to increased poverty and increased crime
- This period saw a great increase in growth of prisons – 90 new prisons were built in the first 40 years of Victoria's reign
- The last 100 years has seen new crimes introduced including car crime, cyber crime and hate crimes

Vocabulary

crime, criminal, punishment, justice, community, society, Middle Ages, medieval, fine, execution, deterrent, pillory, stocks, prison, authorities, trial, judge, jury, court, offence, prosecution, defence, lawyer, poverty, vagrancy, witchcraft, petty crime, organised crime, Poor Law

Termly Overview

| | | | |
|---|------------------------------|-----------------------------------|--|
| 1 | Place value within 1,000,000 | Number - number and place value | <ul style="list-style-type: none"> • Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit • Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 • Read Roman numerals to 1000 (M) and recognise years written in Roman numerals |
| 2 | Place value within 1,000,000 | Number - number and place value | <ul style="list-style-type: none"> • Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit • Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 |
| 3 | Addition and subtraction | Number - addition and subtraction | <ul style="list-style-type: none"> • Estimate and use inverse operations to check answers to a calculation • Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) • Add and subtract numbers mentally with increasingly large numbers • Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy • Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why |

Termly Overview

| | | | |
|---|-----------------------------|---|--|
| 4 | Multiplication and division | Number - multiplication and division | <ul style="list-style-type: none"> Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 Recognise and use square numbers and cube numbers, and the notation for squared (²) and cubed (³) |
| 5 | Fractions | Number - fractions (including decimals and percentages) | <ul style="list-style-type: none"> Compare and order fractions whose denominators are all multiples of the same number Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, $2/5 + 4/5 = 6/5 = 1 \frac{1}{5}$] |
| 6 | Fractions | Number - fractions (including decimals and percentages) | <ul style="list-style-type: none"> Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, $2/5 + 4/5 = 6/5 = 1 \frac{1}{5}$] Add and subtract fractions with the same denominator and denominators that are multiples of the same number |

Y4

Early French – Je me
Presente

Prior Learning

Je Me Presente

Unit

Y6 Aut
Chez Moi

How Knowledge will be built on

- Use basic greetings in French, ask somebody how they are feeling and reply when asked
- Ask somebody their name in French and reply when asked
- Recall numbers 1-20 in French
- Ask somebody how old they are in French and reply when asked
- Ask somebody where they live in French and reply when asked
- Express my nationality in French and understand basic gender agreement rule

Vocabulary

onze Salut ! Hi! français/française French douze Ça va ? anglais/anglais treize Ça va bien quatorze Ça va mal.
quinze Comme ci, comme ça. é seizÇa va très bien. . un one dix-sept Ça va très mal. deux dix-huit eighteen très
very trois dix-neuf nineteen Au revoir ! quatre vingt

Y4

Les Animaux – Early French

Prior Learning

As-Tu Un Animal?

Unit

Y6 Spr
Habitats

How Knowledge will be built on

Key Knowledge

- Know the nouns and indefinite articles for 8 common pets
- Ask somebody if they have a pet and give an answer back
- Say in French what pet we have/do not have and give our pet's name
- Start to use the simple conjunctions et (and) and mais (but) to make more complex and interesting sentences

Vocabulary

As-tu un animal ? = Do you have a pet? un = a/an (masculine form) une = a/an (feminine form) un chien = a dog
un chat = a cat un lapin = a rabbit un oiseau = a bird un hamster = a hamster un poisson rouge = a goldfish une
tortue = a tortoise une souris = a mouse

Year 5 Autumn Term - Music 1

Y4

Rock and Roll

Prior Learning

Composition notation
Ancient Egypt

Unit

Y6

Film Music

How Knowledge will be built on

Key Knowledge

- To know that 'transposing' a melody means changing its key, making it higher or lower pitched
- To know that combining different instruments playing different rhythms creates layers of sound called 'texture'
- To know that playing 'in time' requires playing the notes for the correct duration as well as at the correct speed
- To know that a motif in music can be a repeated rhythm
- To know that changing the dynamics of a musical phrase or motif can change the texture of a piece of music
- To know that playing in time means all performers playing together at the same speed
- To know that combining different instruments and different rhythms when we compose can create layers of sound we call 'texture'
- To understand that harmony means playing two notes at the same time, which usually sound good together
- To know that deciding the structure of music when composing can help us create interesting music with contrasting sections
- An ostinato is a musical pattern that is repeated over and over; a vocal ostinato is a pattern created with your voice
- To understand that musical motifs (repeating patterns) are used as a building block in many well-known pieces of music
- To know that 'performance directions' are words added to music notation to tell the performers how to structure (organisation) of music

Vocabulary

Features, notation, repeating, unison, composition, structure, repetition, melody, tempo, compose, ensemble, minor key

Year 5 Autumn Term - Music 2

Year 4
Rock and Roll

Prior Learning

Blues

Unit

Y6
Genres - Baroque

How Knowledge will be built on

Key Knowledge

- To know that 'blues' music aims to share feelings and blues songs tend to be about sadness or worry
- To understand that a chord is the layering of several pitches played at the same time
- To know that 12-bar Blues is a sequence of 12 bars of music, made up of three different chords
- To know that a 'bent note' is a note that varies in its pitch, e.g. the pitch may slide up or down

Vocabulary

blues, chord, 12-bar Blues, bar, scale, Blues scale, bent notes, ascending scale, descending scale, improvisation

Y3
Hockey

Prior Learning

Hockey

Unit

Y6 Sum
Cricket

How Knowledge will be built on

Key Knowledge

- To use attacking skills to beat a defender
- To send and receive under pressure
- To communicate with my team, move into space and take the ball towards goal
- To learn defensive techniques to gain possession
- To use defending tactics to gain possession
- To apply rules, skills and principles to play in a tournament

Vocabulary

Physical: run, dribble, pass, receive, tackle, intercept, shoot,
Social: communication, collaboration, respect, support others
Emotional: honesty, perseverance

Thinking: identify areas of strength and areas for development, select and apply, decision making, comprehension, reflection

Y4 Spr
Gymnastics

Prior Learning

Gymnastics

Unit

Y6 Spr
Gymnastics

How Knowledge will be built on

Key Knowledge

- To perform interesting symmetrical and asymmetrical balances using apparatus
- To perform symmetrical and asymmetrical balances
- To develop the straight, forward, straddle and backward roll
- To develop the straight, forward, straddle and backwards roll into a sequence
- To explore different travelling actions using both canon and synchronisation
- To explore different methods of travelling, linking actions in both canon and synchronisation
- To perform progressions of inverted movements
- To perform progressions of inverted movements
- To explore matching and mirroring in sequence work
- To explore matching and mirroring using actions both on the floor and on apparatus
- To create a partner sequence using apparatus
- To create a group sequence using apparatus

Vocabulary

Physical: symmetrical and asymmetrical balances, rotation jumps, straight roll, forward roll, straddle roll, backward roll, cartwheel, bridge, shoulder stand. Social: work safely, support others, collaboration. Emotional: confidence, perseverance, resilience, determination
Thinking: observe and provide feedback, creativity, reflection, select and apply actions, evaluate and improve sequences

Y4 Spr
Chemistry – particles.

Prior Learning

Properties and changes of
materials

Unit

Y6
Physical and chemical
changes

How Knowledge will be built on

Key Knowledge

- Materials can be compared and grouped based on their properties (including **hardness** and **transparency**)
- Materials can be compared and grouped based on their properties (including **conductivity** of electricity and thermal energy)
- A **pure substance** is one that contains only one substance and only type of particle, e.g. oxygen, iron, pure water
- A **mixture** is two or more different substances, e.g. air, steel
- **Mixtures** can be made of two gases (e.g. air), two solids (e.g. steel), two liquids (e.g. squash and water), or a liquid and a solid (e.g. salt water)
- Two solids can be separated by using **magnets** or **filters** (e.g. sieve)
- A solid and a liquid can be separated by using **filtration** (if the solid is insoluble) or **evaporation** (if the solid is soluble)
- A **reversible** change is a change that can be undone, where the original substances can be recovered. An **irreversible** change is a change that cannot be undone, where the original substances cannot be recovered
- **Dissolving** and **mixing** are mostly **reversible** changes (e.g. through filtering and evaporating).
- The formation of new material is not usually reversible

Vocabulary

rigid, hard, soft, stretchy, flexible, waterproof, absorbent, electrical/thermal conductivity, melting, dissolve, solution, insoluble, saturated, solute, solvent, particle, mixture, filtering, sieving, residue, reversible/non reversible changes, new material, burning, rusting