



# Knowledge Organiser

## Year 5

**St Augustine's School, Weymouth**



**Spring Term**

Y4

Ancient Egypt Collage

Prior Learning

Prior Learning

Mayan Collage

Unit

Y6 Spr  
Islamic Art

How Knowledge will be built on

## Key Knowledge

- **Colour:** Experiment with colour to portray a cultural message; Select colours to overlap for effect and to create mood
- **Texture:** Work in raised relief, using smaller tiles (coloured paper/card) to create an image on a larger clay tile
- **Shape:** Understand how an overall image is made from the placement of a series of coloured squares
- **Pattern:** Apply previous knowledge of band patterns, considering rotation, reflection
- **Form:** Build complexity into the surface of a 3D piece

## Vocabulary

mosaic, embed, fixing, secure, band pattern, reflection, rotation, border, smooth, foreground, middle ground, background, texture, composition, scale, construct

Y4

Further coding with Scratch

Prior Learning

Creating Media -  
Stop motion animation

Unit

Y6 Sum  
Inventing a product

How Knowledge will be built on

## Key Knowledge

- To understand that stop motion animation is an animation filmed one frame at a time using models, and with tiny changes between each photograph.
- To know that decomposition of an idea is important when creating stop-motion animations.
- To know that editing is an important feature of making and improving a stop motion animation.
- To understand how to evaluate a piece of work effectively to make changes.

## Vocabulary

Animation, Animator, Background, Character, Decomposition, Design, Digital device, Edit, Evaluate, Flip book, Fluid movement, Frames, Model Moving, images, Onion skinning, still images, stop motion, storyboard, Thaumatrope, Zoetrope.

Data Handling (Y4 Sum)

Prior Learning

Data handling: Mars Rover 1

Unit

Data handling 1: Big Data 1  
(Y6 Spr)

How Knowledge will be built on

## Key Knowledge

- To know that Mars Rover is a motor vehicle that collects data from space by taking photos and examining samples of rock.
- To know what numbers using binary code look like and be able to identify how messages can be sent in this format.
- To know what simple operations can be used to calculate bit patterns.
- To understand that RAM is Random Access Memory and acts as the computer's working memory.

## Vocabulary

8-bit binary, Addition, ASCII, Binary code, Boolean, Byte, Communicate, Construction, CPU, Data transmission, Decimal numbers, Design, Discovery, Distance, Hexadecimal, Input, Instructions, Internet, Mars, Rover, Moon, Numerical data, Output, Planet, Radio signal, RAM, Research, Scientist, Sequence, Signal, Simulation.



Structures - Constructing a  
Castle (Y3)

Prior Learning

Structures: Bridges

Unit

Structures - Make a  
playground (Y6)

How Knowledge will be built on

## Key Knowledge

- To explore how to reinforce a beam (structure) to improve its strength
- To understand some different ways to reinforce structures.
- To understand how triangles can be used to reinforce bridges.
- To understand the material (functional and aesthetic) properties of wood.
- To know that properties are words that describe the form and function of materials. To understand why material selection is important based on their properties.
- To understand why material selection is important based on their properties.
- To complete and reinforce my truss bridge.
- To evaluate their truss bridge against their design brief and criteria, suggesting improvements.

## Vocabulary

beam bridge, arch bridge, truss bridge, strength, technique, corrugation, lamination, stiffness, rigid, factors, stability, visual, appeal, aesthetics, joints, mark out, hardwood, softwood, wood, file/rasp, sandpaper/glasspaper, bench hook/vice, tenon, saw/coping saw, assemble, material properties, reinforce, wood, sourcing, evaluate, quality of finish, accuracy

The three longest rivers in the UK are the Severn, Thames and Trent (Y3 Aut)

Prior Learning

How is land used around significant rivers?

Unit

I am a Geographer (Y6 Sum)

How Knowledge will be built on

## Key Knowledge

- The amount of water on Earth is constant Water cycle.
- **Surface runoff** is where water collects in lakes or rivers and is taken back to sea
- A river has three **courses: upper, middle and lower**
- Three river processes: **erosion, transportation, deposition**
- **Floodplains** form in the lower course, by deposition
- Know facts about the **Mississippi** River, **Danube** River, the **Severn** River, the River **Wey** and the **Wareham** River.
- The key features of an OS map include compass directions, the key, grid references, grid squares, scale, and contour lines.
- Identify and explain patterns in land use along the rivers.

## Vocabulary

Transpiration, Surface runoff, Saltwater, Solution, Freshwater, Precipitation, Mississippi/Danube/Severn River, Courses, Upper/middle/lower, Erosion, Transportation, Deposition, Waterfalls, Floodplains, Meanders, Land use, agriculture/recreational/residential/industry/defense/transport, Poor/wealthy, rural/urban.

Y4  
Anglo Saxons

Prior Learning

The Ancient Maya

Unit

Y6  
Early Islamic Civilisation

How Knowledge will be built on

## Key Knowledge

- significance – pupils can identify and explain the significance of the Maya and give reasons to support their inclusion in the curriculum.
- cause and effect – identify and give reasons for the strength and duration of Mayan civilisation.
- using sources as evidence – pupils know that artist's reconstructions of the Maya are based on a mixture of physical evidence and imagination. They know that the lives of the common people were very poorly recorded.
- historical enquiry – pupils are able to ask and answer questions to detect patterns in images of everyday life.
- using sources as evidence – pupils know that historians have learnt about the Maya from sources including: present day Maya peoples, archaeological remains, Spanish conquest sources, artefacts and hieroglyphs, oral tradition.
- historical enquiry – make deductions about the purpose of an object based on their knowledge.
- similarity and difference – pupils appreciate that over 1000 years ago, moral values were also different in England, with practices that we might consider uncivilised today.

## Vocabulary

Maya, civilisation, society, step pyramid, Chichen Itza, royal court, hierarchical, astronomy, agriculture, irrigation, slash and burn, maize, glyph, codices, human sacrifice, monument



## Half Termly Overview

|    |             |                             |  |
|----|-------------|-----------------------------|--|
| 7  | Number      | Multiplication and Division | <ul style="list-style-type: none"> <li>multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers</li> <li>multiply and divide numbers mentally drawing upon known facts</li> <li>divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context</li> </ul>  |
| 8  | Number      | Fractions                   | <ul style="list-style-type: none"> <li>Number - fractions (including decimals and percentages) recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements <math>&gt; 1</math> as a mixed number [for example, <math>2/5 + 4/5 = 6/5 = 1 \frac{1}{5}</math>]</li> <li>Number - fractions (including decimals and percentages) multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams</li> </ul>   |
| 9  | Number      | Fractions                   | <ul style="list-style-type: none"> <li>read and write decimal numbers as fractions [for example, <math>0.71 = 71/100</math>]</li> <li>recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents</li> <li>round decimals with two decimal places to the nearest whole number and to one decimal place</li> <li>read, write, order and compare numbers with up to three decimal places</li> <li>recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal</li> <li>solve problems which require knowing percentage and decimal equivalents of <math>1/2</math>, <math>1/4</math>, <math>1/5</math>, <math>2/5</math>, <math>4/5</math> and those fractions with a denominator of a multiple of 10 or 25</li> </ul> |
| 10 | Measurement | Perimeter and Area          | <ul style="list-style-type: none"> <li>measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres</li> <li>calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (<math>\text{cm}^2</math>) and square metres (<math>\text{m}^2</math>) and estimate the area of irregular shapes</li> </ul>   |
| 11 | Statistics  | Graphs and Tables           | <ul style="list-style-type: none"> <li>solve comparison, sum and difference problems using information presented in a line graph</li> <li>complete, read and interpret information in tables, including timetables</li> </ul>  |



# Year 5 Spring Term - MFL

Y3

Colours and numbers

Prior Learning

La Date

Unit

Sum  
L'Ecole.

How Knowledge will be built on

- To know the days of the week in French to say, read and write.
- To know the months of the year to say, read and write.
- To know the numbers 1-31 to say, read and write.

## Vocabulary

Lundi, mardi, mercredi, jeudi, vendredi, samedi, dimanche, janvier, fevrier, mars, avril, mai, juin, juillet, aout, septembre, octobre, novembre, decembre, un, deux, tois, quatre, cinq, six, sept, huit, neuf, dix, onze, douze, treize, quatorze, quinze, seize, dix-sept, dix-huit, dix-neuf, vingt, trente.

# Year 5 Spring Term - MFL

Je Me Presente (Y5 Aut)

Prior Learning

Qu

Unit

Chez Moi (Y6)

How Knowledge will be built on

- how to move from using the determiner 'a' with a family member noun to using a possessive adjective 'my' in French.
- to answer the question 'As tu des freres et soeurs?'
- How to introduce family members, learning to use elle and il.
- to use my knowledge of larger numbers to be able to describe the age of family members.

## Vocabulary

Pere, frere, oncle, grand-pere, beau-pere, demi-pere, mere, soeur, tante, grand-mere, belle-mere, demi-mere, parents, mon, ma, mes

Y4 – Sum  
Composition – Rivers

Prior Learning

Composition

Unit

Y6 Spr  
Film Music  
Composition

How Knowledge will be built on

## Key Knowledge

- To know that the duration of a note or phrase in music can be shown using a repeated symbol or the size of a symbol on a graphic score.
- To know that a vocal composition is a piece of music created only using voices.
- To understand that varying effects can be created using only your voice, for example by changing the pitch, dynamic or tempo of the sound made.
- To understand that human voices have their own individual timbre, and that this can be adapted by using the voice in different ways

## Vocabulary

Synesthesia, dynamics, Holi, graphic score, vocal composition, performance



# Year 5 Spring Term - Music

Transposing and adapting motifs (Y4 Sum)

Prior Learning

Looping and remixing

Unit

Theme and Variation (Y6 Spr)

How Knowledge will be built on

## Key Knowledge

- To know that a loop is a repeated rhythm or melody, and is another word for ostinato.
- To know that dance music is usually produced using electronic percussion sounds, and recordings of the music are played by DJs in clubs or at festivals.
- To know that remix is music that has been changed, usually so it is suitable for dancing to.
- Combining rhythmic patterns (ostinato) into a multi-layered composition using all the inter-related dimensions of music to add musical interest.

## Vocabulary

accuracy, backbeat, body percussion, fragment, layers, loop, looped rhythm, melody, melody line, notation, ostinato, remix, rhythm, riff, structure.

Prior Learning

Created to Love others

Unit

How Knowledge will be built on

## Key Knowledge

- All children will learn that God calls us to love others.
- Most children will appreciate that we all have something we can offer in terms of loving others.
- Some children will demonstrate a deeper understanding and passion for participating in God's call for us to love others.
- Personal Relationships
- To know about spoken and unspoken pressure that children might experience, particularly from their peers.
- To understand the meaning of consent and bodily autonomy.
- To understand that pressure put upon them by themselves can have an effect on how they relate to others and the world around them.
- To develop an understanding of bullying, prejudice and discrimination.

## Vocabulary

fairness, bullying, prejudice and discrimination, Equality Act 2010, automony, pressure,

# Year 5 Spring Term - PE

Y3 Spring  
Dance

Prior Learning

Dance

Unit

Y6 Spr Dance

How Knowledge will be built on

## Key Knowledge

- To know how changing dynamics change the appearance of the performance.
- To know how relationship and space can change how a performance looks.
- To understand the concept of beat to move in time to the music.
- To know what choreography is and how to work collaboratively.
- To know what a motif is.
- To know what canon and unison are and how they relate to dance

## Vocabulary

Dynamics, space, relationships, collaboration, respect, leadership, tempo, beat, choreography, motif, dynamics, canon, unison



# Year 5 Spring Term - PE

Netball (Y4 Sum)

Prior Learning

Ba

Unit

Netball (KS 3)

How Knowledge will be built on

## Key Knowledge

- I can communicate with my team and move into a space to keep possession and score.
- I can identify when I was successful and what I need to do to improve.
- I can pass, receive and shoot the ball with some control under pressure.
- I can stay with an opponent and I am confident to intercept.
- I know what position I am playing in and how to contribute when attacking and defending.
- I understand the need for tactics and can identify when to use them in different situations.
- I understand the rules of the game and I can apply them honestly most of the time.
- I understand there are different skills for different situations and I am beginning to apply this.

## Vocabulary

Throw, catch, change direction, pass, change speed, shoot, attack, defend.

Y4

Classification of species

Prior Learning

Biology – Life cycles of  
plants, mammals  
and amphibians

Unit

Y6 Autumn  
Variation of Species.

How Knowledge will be built on

## Key Knowledge

- To know how flowering plants reproduce.
- To know that plants have female and male parts and be able to explain their role in reproduction.
- To know that some plants can reproduce asexually.
- To know how amphibians reproduce and their life cycle.
- To know the life cycles of some mammals and understand that almost all mammals are viviparous.
- To know that oviparous animals hatch from eggs.

## Vocabulary

Oviparous, viviparous, mammals, amphibians, stamen, anther, filament, stigma, organism, genome, fertilisation, germinate, hatch, larva, metamorphosis,

Living things and their habitats - Lifecycles (Y5 Spr)

Prior Learning

Human Development

Unit

Living things and their habitats - Further Classification (Y6 Spr)

How Knowledge will be built on

## Key Knowledge

- The **gestation** period for humans is 40 weeks; The bigger the animal, the longer the gestation period
- A human embryo is considered a foetus at the end of the 10th week of pregnancy; A foetus is considered a baby when it is born; Human are **viviparous** and a **foetus** develops inside the mother (or **surrogate** mother)
- During **puberty**, adolescents' bodies change, e.g. pubic hair, voice deepen, hips widen.
- The human life cycle goes through the same stages as those for other animals: **fertilisation, gestation, growth**; Fertilisation in most humans is internal, but it can happen externally (**in vitro fertilisation** - IVF - which means 'in glass' fertilisation); The human life cycle: **embryo, foetus, infant, child, adolescent, adult, senior**.
- **Cognitive, physical** and **social** and **emotional** development takes place at the greatest rate during infancy; **Primary ageing** of adults occurs naturally as our bodies get older (e.g. slower reaction time, reduced hearing); **Secondary ageing** relates to environmental factors, like poor diet, not enough exercise, smoking etc; There are ages where humans at their peak for different things (e.g. reproduction, running etc.)
- Different cultures around the world have different perceptions around the life cycle and ageing

## Vocabulary

gestation, viviparous, foetus, surrogate, puberty, fertilisation, growth, embryo, infant, child, adolescent, adult, senior, cognitive, physical, social, emotional development