Knowledge Organiser Year 3

St Augustine’s School, Weymouth

Autumn Term

Year 3 Autumn Term - Art

Prior Learning

Drawing and Painting (Y1)
Portraits

Unit

Drawing and Painting
Cave Painting

How Knowledge will be built on

Drawing and Painting (Y5)

Key Knowledge

- Explore and discuss key features of cave art and how & why they were created
- Select from different methods to apply colour using a variety of tools and techniques, including painting with natural materials e.g. mud, ink, cochineal, charcoal and with a range of natural materials e.g. sticks, feathers, hands
- Paint symbols, form and compositions when exploring the work of other artists and cultures
- Experiment with painting onto wet and dry surfaces
- Explore the effect of adding glue, sawdust and use this in painting
- Colour: Experiment with a range of types of paint, adjusting the strength of colours used. Replicate a colour palette appropriate for cave paintings
- Line: Understand how line can be affected by the nature of the range of tools used, and make decisions about which tools to select for the type of line required
- Shape: consider shapes drawn and the surrounding spaces – how will colour be used in both these areas?

Vocabulary

silhouette, wax resist, language of direction, zig zag, continuous line, broken line, dotted line, dashes, curved line, wiggly line, abstract, natural, bold, delicate, detailed, opaque, translucent, wash, tint, shade, background, foreground, middle ground, colours descriptors e.g. scarlet, crimson, emerald

Year 3 Autumn Term - Computing

Prior Learning: Networks (Y2)

Unit: Networks and the Internet

How Knowledge will be built on: Web design (Y4), Search Engines (Y4)

Key Knowledge

- To understand what a network is and how a school network might be organised.
- To know that a server is central to a network and responds to requests made.
- To know how the internet uses networks to share files.
- To know that a router connects us to the internet.
- To know what a packet is and why it is important for website data transfer.

Vocabulary

cables, corrupted, device, file, network, packets, server, text map, component, data, DSL, internet, network map, radio waves, submarine cables, the cloud, website trackers, connection, desktop, fibre, laptop, network switch, router, tablet, web server, WiFi, wireless access points, wireless, world wide web

Year 3 Autumn Term - Computing 2

Prior Learning

Scratch Junior (Y2)

Unit

Programming
Scratch

How Knowledge will be built on

Coding using Scratch(Y4)

Key Knowledge

- To know that Scratch is a programming language and some of its basic functions.
- To understand how to use loops to improve programming.
- To understand how decomposition is used in programming
- To understand that you can remix and adapt existing code

Vocabulary

algorithm, application, code block, debug, interface, loop, program, repetition code, Scratch, animation, code, coding application, decompose, game, predict, remixing code, review, sprite, tinker

Year 3 Autumn Term - DT

Prior Learning
Mechanical Systems (Y2)
Making Moving Monsters

Unit
Mechanical Systems
Pneumatic Toys

How Knowledge will be built on
Mechanical Systems (Y4)
Making Slingshot Cars

Key Knowledge

- Designing a toy that uses a pneumatic system.
- Developing design criteria from a design brief.
- Generating ideas using thumbnail sketches and exploded diagrams.
- Learning that different types of drawings are used in design to explain ideas clearly.
- Creating a pneumatic system to create a desired motion.
- Building secure housing for a pneumatic system.
- Using syringes and balloons to create different types of pneumatic systems to make a functional and appealing pneumatic toy.
- Selecting materials due to their functional and aesthetic characteristics.
- Manipulating materials to create different effects by cutting, creasing, folding and weaving.
- Using the views of others to improve designs.
- Testing and modifying the outcome, suggesting improvements.
- Understanding the purpose of exploded-diagrams through the eyes of a designer and their client.

Vocabulary

mechanism, pivot, pneumatic system, output, thumbnail sketch, adapt, reinforce, lever, linkage system, input, component, research, properties, motion.

Year 3 Autumn Term - Geography

Prior Learning: Rivers and Oceans in the UK (Y2)

Unit: United Kingdom

How Knowledge will be built on: Investigating Climate (Y5)

Key Knowledge

- The UK is made of four countries: England, Scotland, Wales and N Ireland; Great Britain is made up of England, Scotland and Wales; British Isles is made up of England, Scotland, Wales, Northern Ireland and Ireland
- England and the UK are split into regions
- Regions in England and the UK are split into counties
- Physical features of the North West include mountains, hills, forests, cliff, beach, river, and valley (Lake District)
- There are several mountain ranges in the UK, including Grampian Mountains (Scotland) and Pennines (England)
- The three longest rivers in the UK are the Severn, Thames and Trent
- Settlements can be hamlets, villages, towns and cities, depending on their size
- Human features of the North West include national parks, hamlets, villages, towns and cities, factories, offices (Lake District)
- Land use in the North West has changed over time (green space is filled; towns have become larger)

Vocabulary

UK, Great Britain, British isles, regions, counties, mountain ranges, hamlets, villages, towns, cities, moutains, hills, forests, cliffs, beach, river, valley, national park, land use, factories, offices

Year 3 Autumn Term - History

Prior Learning: Historical Changes

Unit: Stone Age to Iron Age

How Knowledge will be built on: Anglo Saxons and Scots and Vikings (Y4)

Key Knowledge

- Prehistory refers to the vast period of time before written records.
- Hunter-gatherers are people who travel looking for animals to hunt and plants and berries to gather.
- The hunter-gatherer lifestyle gradually gave way to agriculture and farming in the Neolithic period
- Evidence from the settlement at Skara Brae shows that some Neolithic communities lived in fairly sophisticated homes and owned furniture, pottery, jewellery and played games.
- People discovered how to mine tin and copper and use these to make bronze. Bronze tools had a big impact on farming, making it easier for people to clear forest and grow more crops.
- The development of iron tools and weapons led to larger communities, tribal disagreements and the move to hillforts among other developments.
- Maiden Castle is one of the largest and most complex hill forts in Europe.

Vocabulary

prehistory, Stone Age, Paleolithic, Mesolithic, Neolithic, Bronze Age, Iron Age, hunter-gatherer, farmer, agriculture, community, hillfort, culture, timeline, duration, interval, tribe, kingdom, cause, effect, evidence

Year 3 Autumn Term - Maths

Termly Overview			
1	Place Value within 1,000	Number - Number and place value	• recognise the place value of each digit in a two-digit number (tens, ones) • Number - number and place valuecount from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number • Number - number and place valuerecognise the place value of each digit in a three-digit number (hundreds, tens, ones) • Number - number and place valuecompare and order numbers up to 1000 • Number - number and place valueidentify, represent and estimate numbers using different representations
2	Addition and Subtraction	Number - Addition and Subtraction	• Recognise the place value of each digit in a two-digit number (tens, ones) • Add and subtract numbers mentally, including • Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction • Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction • Add and subtract a three-digit number and ones • Add and subtract a three-digit number and tens • Add and subtract a three-digit number and hundreds

Year 3 Autumn Term - Maths

Termly Overview			
3	Addition and Subtraction 2	Number - Addition and Subtraction	• Add and subtract numbers mentally, including • Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction • Estimate the answer to a calculation and use inverse operations to check answers • Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction • Add and subtract a three-digit number and ones • Add and subtract a three-digit number and tens • Add and subtract a three-digit number and hundreds
4	Multiplication and division	Number - Multiplication and division	• Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables • Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods
5	Multiplication and division 2	Number - Multiplication and division	• Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables • Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods • Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects

Year 3 Autumn Term - MFL

Prior Learning
N/A

Unit
Phonétique Lessons 1 & 2 (C)
J'Apprends Le Français (E)

How Knowledge will be built on
La Phonétique (Y4)
Je Me Présente

Key Knowledge

- To introduce the first set of phonics sounds/phonemes in French: ch, ou, on, oi
- To introduce the second set of phonics sounds/phonemes in French: I, in, ique, ille
- To introduce the third set of phonics sounds/phonemes in French: eau eux é è e
- To introduce the fourth and final set of phonics sounds/phonemes in French: qu gne ç en an
- find France on a map and be able to recall at least 1 Francophone country
- use key greetings, ask and answer the question 'How are you?' in French, ask and answer the question 'What is your name?' in French, count to 10 in French, read, write, say and recognise 10 colours in French

Vocabulary

salut, bonjour, au revoir, a plus tard, Je m'appelle, comment t'appelles-tu, ca va, ca va bien, ca va mal, comme ci comme ca

Year 3 Autumn Term - MFL 2

Prior Learning

(Y3 Term 1)
Phonétique Lessons 1 & 2 (C)
J'Apprends Le Français (E)

Unit

Les Couleurs et Les Nombres (E)

How Knowledge will be built on

Les Saisons (Y4)

Key Knowledge

- I can recognise some numbers from 1-10 in French
- I can recognise some of the key 10 colours in French

Vocabulary

un, deux, trois, quatre, cinq, six, sept, huit, neuf, dix,
bleu, noir, marron, jaune, rouge, gris, blanc, vert, voilet, orange

Year 3 Autumn Term - Music

Prior Learning	Unit	How Knowledge will be built on
Musical me (Y2)	Creating Compositions Developing Singing Technique	Composition (Y5)

Key Knowledge

- To understand that the timbre of instruments played affect the mood and style of a piece of music.
- To know that an ensemble is a group of musicians who perform together.
- To know that to perform well, it is important to listen to the other members of your ensemble.
- To know that the group of pitches in a song is called its ‘key’ and that a key decides whether a song sounds happy or sad.
- To know that different notes have different durations, and that crotchets are worth one whole beat.
- To know that written music tells you how long to play a note for.

Vocabulary

influence, listen, dynamics, timbre, pitch, repeated rhythm, pattern, notation, ensemble, compose, composition, melody, notation, tempo, minim, crotchet, quaver, coordinated, disciplined

Year 3 Autumn Term - PE

Prior Learning: Invasion Games (Y2)

Unit: Netball

How Knowledge will be built on: Netball (Y5)

Key Knowledge

- To understand the role of an attacker when in possession.
- To develop movement skills to lose a defender.
- To understand that scoring goals is an attacking skill and learn how to do this.
- To understand the role of defender.
- To remember that intercepting is a defending skill and explore ways to do this.
- To apply skills and knowledge to play games using netball rules.

Vocabulary

attacker, possession, defender, movement, goal, intercept, rules

Year 3 Autumn Term - PE

Prior Learning	Unit	How Knowledge will be built on
Gymnastics (Y2)	Gymnastics	Gymnastics (Y4)

Key Knowledge

- To be able to create interesting point and patch balances.
- To develop stepping into shape jumps with control.
- To develop the straight, barrel, and forward roll.
- To be able to transition smoothly into and out of balances.
- To create a sequence with matching and contrasting actions and shapes.
- To create a partner sequence using the skills I have learnt and including a hoop.

Vocabulary

point, patch, balance, shape, jump, control, straight, barrel, forward roll, transition, sequence

Year 3 Autumn Term - Science

Prior Learning	Unit	How Knowledge will be built on
Daytime and Nighttime	Light	Light (Y5)

Key Knowledge

- Light travels in straight lines
- We see when light enters our eyes
- Darkness is the absence of light
- Light from the sun can be dangerous and there are ways to protect our eyes. Sources of light emit their own light, and others reflect light; both occur in nature as well as man-made objects
- Some objects are more reflective than others
- **Opaque**, **translucent** and **transparent** materials allow no, some or all light to pass through them (practical)
- **Shadows** form behind an opaque object when light from a source is blocked (modelled investigation practical)
- The shape of shadows changes with the angle and the distance of the light source (independent investigation practical)

Vocabulary

light, light source, darkness, reflect, reflective, mirror, shadow, block, direction, transparent, opaque, translucent

Year 3 Autumn Term - Science 2

Prior Learning: Materials (Y2)

Unit: Rocks

How Knowledge will be built on: Volcanoes (Y3) Materials and their Properties (Y5)

Key Knowledge

- The Earth's crust is it's the outermost layer of our planet. It is made of rocks and minerals.
- Igneous rock is formed when magma cools down.
- Sedimentary rock is formed when layers of small sediments are compressed over a long period of time. Igneous rock can become sedimentary rock if it breaks down into small pieces and forms layers
- Metamorphic rock is formed when igneous or sedimentary rock is put under lots of pressure
- A fossil is physical evidence of an ancient plant or animal , this could be their preserved remains or other traces that they made when they were alive.
- Trace fossils are not physical remains of living things they are indirect evidence of life, examples include imprints of, or a mark left by an organism such as a footprint, imprint of a feather or poo.
- That layers within sedimentary rock formations can be observed and inform geologists of historical dating

Vocabulary

rock, stone, pebble, boulder, soil, fossils, grains, crystals, texture, absorb water, let water through, marble, chalk, granite, sandstone, slate, sandy soil, clay soil, chalky soil, peat. Sedimentary, metamorphic, igneous, permeable, impermeable