Year 6 Curriculum HT6

PSHE
SRE

End of Year Production
Rock Bottom- written by Craig Hawes

Commando Joe
- To be a good friend
- To be determined
- To show self-discipline
- To show patience

Personal Development

Wider Curriculum Clubs Available
sports, yoga, choir, football, netball, music, art, drama, cooking, french, computing, sewing and dodgeball

Trips and Visits
E-Safety Workshop
Wednesday 5th June
YMCA Lakeside Residential
1st July - 5th July

Transition
Children attending WHS have two transition days on 12th and 14th June.
Wilmslow Youth, a local youth centre group, will be visiting the children to do sessions on transition and support available

English

Inspirational Text

Class Readers

Genres for writing:
Diary
Narrative

Within writing, Year 6 will be applying all of their knowledge and skills into writing pieces which demonstrate the national standards, as detailed in the KS2 writing framework, in preparation for final assessments

Poetry

Year 6 will study and learn 'If' by Rudyard Kipling, rehearsing performing is from memory

Maths

Year 6 will be covering maths objectives through their STEM project, applying knowledge and skills to real-life problems as they design and construct guitar toys for children

To understand ratio and proportion
- solve problems involving similar shapes where the scale factor is known
- solve problems involving the relative sizes of two quantities

To understand statistics
- calculate and interpret the mean as an average
- interpret and construct pie charts and bar charts
solve problems involving the calculation of percentages

To use measure
- recognise when it is possible to use formulae for area of shapes
- calculate the area of parallelograms and triangles
-calculate, estimate and compare volume

Science

The Year 6 Science topic this half term is Electricity, and forms part of our STEM project
Children will learn about electrical circuits, including how to accurately draw circuits and their components using the correct symbols.
Children will also learn about voltage and current.

RRSA articles: 24, 29, 31 and 33

DT

Design Brief: To design, make and evaluate an electronic guitar for a younger child to play with.
Children will gather information from their target audience before designing their toy guitars. They will create scaled drawings, explore appropriate materials, and use a variety of saws to safely shape their product.

RRSA articles: 13, 29 and 17

RE

Are Sikh stories important today?

RRSA articles: 2, 29 and 14

Computing

This half term children will be introduced to Micro: Bits. These are small computers which can be programmed and will form an integral part of our final STEM projects. The children will learn how to transfer the knowledge they have on block coding, inputs, outputs and variables, to program the Micro: Bits to perform specific tasks and even create games. For their final project, children will apply the knowledge they have acquired to programming to micro: Bits to produce various sounds from a range of inputs. These will then be mounted on their guitar toys to complete the product, making them an interactive toy.
In addition to their work on Micro:Bits, children will explore the functions and formulas on excel when collecting survey data for guitar designs

RRSA articles: 24, 29, 31 and 33

PE

On Thursdays, we will be learning throwing and jumping techniques in athletics with the Sports Coaches, learning the long jump, triple jump, shot put and javelin
On Tuesdays, with class teachers, we will be learning running techniques for sprinting, hurdles, relays and how to pace for long distance races.

RRSA articles: 24, 29 and 31

Specialist Teacher

Music

Miss Marsden will be working with Year 6 to perfect the songs for the play during their music lessons.

RRSA articles: 13,29 and 31

Specialist Teacher

French

Mrs Sunley will be teaching the Year 6 French lessons this half term. They will be learning:
- how to give detailed information about themselves
- to make mocktails using the French names for all the fruits
- the names of common stationery used in school

RRSA articles: 24, 29, 31 and 33

Specialist Teacher

Art

This half term, children will be exploring pop art with Mrs Cahill. Children will explore the artist Roy Lichtenstein and experiment with composition, line and pattern and colour.

At the end of term, Year 6 will design and paint their guitars made in STEM

Specialist Teacher

Ashdene

Knowledge Jigsaw

Year 6 RE HT6

What we already know

An algorithm is a **precise** set of **ordered steps**, which can be followed by a human or a **computer to do a task**.

A **condition** is a statement that can be either **true** or **false**. Programmers can use conditions to trigger **actions**. Conditions must be phrased as a question with just two options, **yes** or **no**.

A variable can be set and changed throughout the running of a program.

A variable is a placeholder in the memory of a computer. It can hold **one value** at a time.
Each variable in a program is **named**.

A program can use the value of a variable to perform different tasks.

Microsoft Excel is a programme you can use to make a spreadsheet.
To make a spreadsheet in Excel:

- Open a new spreadsheet
- Click in the boxes on the page to add row/column headings
- Enter your data

Each box that makes up a table in a spreadsheet is called a **cell**.
You can find out a cell reference by using the letters along the top of the table and the numbers down the left-hand side e.g. A1.
To format a cell:

- Right click in the cell you want to format.
- Select format cell

Then choose the cell format you would like from the options given.
Then click ok.
We apply formatting to cells in a spreadsheet to show what information each cell contains.

Online Safety – Self-Image and Identity

Online safety protects people from online harms when using devices and networks.
It is important to challenge and reject inappropriate representations online.

You can perform common mathematical operations in a spreadsheet using these symbols:
tells the computer which pieces of data to use within the calculation.
To construct a **formula**:

- type = in the cell where you want the answer to appear
- click to select the cell holding the first number in your calculation (the cell reference of the selected cell will show next to your = sign)
- type the symbol for the mathematical operation
- click to select the cell holding the second number in your calculation (the cell reference of the selected cell will show after your symbol)
- To repeat the formula in other cells:
  - Click on the cell that contains the formula.
  - Hover over the bottom right corner of the cell until the arrow turns to a cross.

Click and drag the cross down to the bottom of the data. This will place the answers into each of the cells.

Online Safety – Self-Image and Identity

Online safety protects people from online harms when using devices and networks.
Issues online can make someone feel sad, worried, uncomfortable or frightened. If something online makes me feel a negative emotion, it is important to report it and tell an adult.

Functions can be used to complete more complex processes such as:

- Calculating average
- Finding the sum of multiple cells
- Counting a number of objects

The functions available in a spreadsheets can be found by clicking on this button.
The symbol is called sigma and it represents the function of adding many numbers together.
Within the sigma button there is a function called **SUM.** This enables you to calculate the sum of a range of cells. This is helpful when you have large amounts of data to add together.
Within the sigma button there is a function called **AVERAGE.** This enables you to work out an average using multiple cells of data.
To find the **SUM** or the **AVERAGE**, select the numbers you want to calculate with then click on the sigma and select **SUM/AVERAGE**.

You can create a graph to display the information in your spreadsheet.

To create a graph:

- Select the information that you want to be displayed.
- Click on 'insert'
- Select which type of graph you want to create from the charts section.

Tables are helpful when you want to:

- Sort data
- Use the data to perform different calculations (using formulas)
- Make changes to the data (for example, adding or taking away items)
- View the individual figures

Charts are helpful when you want to:

- See the data visually
- See the differences in the data (for example, the difference in spending if someone chose water instead of a can of Coca-Cola)
- Compare the data

There are advantages and disadvantages to both ways of presenting data.
You need to choose which option is the most appropriate for your scenario.

Knowledge Jigsaw

Year 6 – Art HT6

What we already know

We know that 'shape' is a flat area surrounded by an edge or an outline.
We know that colours can be harmonious or contrasting.
We know that tone is how light or dark a colour appears.
We know that 'blending' is the technique used to smoothly merge one colour into another.
We know how to blend oil pastels to create new tones.
We know that 'texture' is the way the surface of something feels to the touch.
We know that 'sgraffito' is Italian for 'to scratch' and is a technique used by artists – when they scratch through the surface of something, using an implement, to reveal what's underneath, e.g. in painting or pottery.
We know how to use the 'sgraffito' technique using acrylic paint and oil pastel.

Image and Text

Know that artists sometimes combine pictures and words to tell a story.
Know that artists can also combine pictures and words to express thoughts and feelings.

Artist

https://www.youtube.com/watch?v=gY-TS7x5tHk
https://www.youtube.com/watch?v=DhEyoDCTSDQ

To look at artists who have taken inspiration from comic-strips.
To learn about how the American Pop artist, Roy Lichtenstein, used line, 'Ben-day' dots and bold colours to create his comic-strip inspired artwork.

Composition

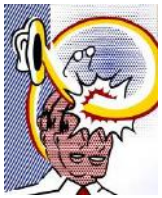
Know that 'composition' in any piece of artwork means the way it has been put together or arranged.
Know to consider the following elements when arranging a piece of artwork; foreground, background and cropping.

Line and Pattern

Know that the weight of a line can vary – feint or bold, narrow or thick.
Know that lines can be repeated to create pattern e.g. hatching and cross-hatching.
Know that dots can be repeated to create pattern and tone.

Colour

Know that Pop art is characterized by vibrant, bright colours.
Know that bright colours are undiluted.
Know that the primary colours, red, yellow and blue, were prominent pigments that appeared in many Pop artworks.
Know that blocks of bold, flat colours are used.
Know that dots and stripes of colour are also used to create tones.



Knowledge Jigsaw

Year 6 – Science HT6

What we already know

Electricity is a form of energy resulting from charged particles.

Electrical conductor – a material that allows electricity to pass through it

Electrical insulator – does not allow electricity to pass

In order for electricity to flow, a circuit needs: a source of electricity, no gaps in the circuit, conductors.

Electricity is a form of energy resulting from charged particles.

Electrical conductor – a material that allows electricity to pass through it e.g. copper, iron, steel, silver gold.

Electrical insulator – does not allow electricity to pass through e.g. rubber, wood, plastic, paper.

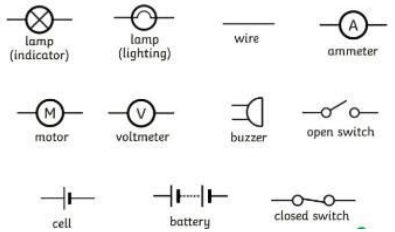
In order for electricity to flow, a circuit needs: a source of electricity, no gaps in the circuit, conductors.

Wires, batteries, bulbs, buzzers and motors are electrical components that make up a circuit.

Outputs are achieved when there is a complete circuit.

Circuit symbols can be used to draw a simple series circuit including:

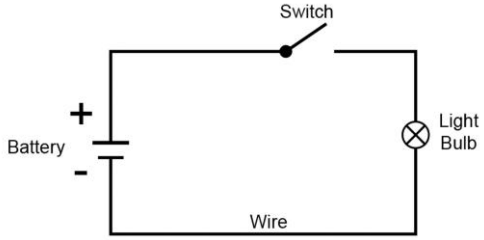
- Battery (cell)
- Wire
- Bulb Buzzer
- Motor
- Switch (on/off)



Circuits can be represented as diagrams using symbols for each component

Know how to draw a circuit diagram:

- Wires are drawn with a straight line using a ruler
- Circuit diagrams are drawn as a birds-eye-view
- Circuit diagrams are drawn rectangular
- Components of the circuit must touch the wire lines to show the circuit has no breaks



A **cell** is a device containing electrodes that is used for generating current.

A **battery** is a collection of cells. It stores energy until it is needed.
Voltage is the force that makes the electric current move through the wires. The greater the voltage, the more current will flow.

Mains electricity has a voltage of 210-240 volts. A typical cell in school has 1.5 volts.

Current is a flow of electricity which results from the ordered, directional movement of electrically charged particles.

The brightness of a bulb is associated with the voltage.

More batteries (or a higher voltage) creates more power to flow through the circuit therefore a bulb would be brighter.

More buzzers/bulbs in a circuit means that power is shared by more components in the circuit. Increasing the number of buzzers/bulbs/motors would therefore decrease the power in each (the bulbs would be dimmer).

Switch – an electrical component that can make/break an electrical circuit. When a switch is open there is a gap in the circuit and electricity cannot flow around the circuit.

Knowledge Jigsaw

Year 6 – Design & Technology HT6

Design brief

To design, make and evaluate an electronic guitar for a Year 2 child to play with.

What I already know

The brief gives a Design Technology project a focus.

When cutting wood, you must always use an appropriate saw and do so under the guidance of a responsible adult.

When cutting wood you should always secure it to a level surface using a clamp.

Products are evaluated in questioning whether they are fit for purpose and if they are successful in meeting the brief.

Key vocabulary, tools and equipment

CAD (noun)	Computer aided Design When a computer is used to design the product.
Scaled design (noun)	A drawing of an object, whereby the object is drawn smaller or larger than the item itself.
Coping saw (noun)	
Junior hacksaw (noun)	
Durable (adjective)	Able to withstand wear, pressure or damage.
G-Clamp and spreader clamp (noun)	 
MDF (noun)	Medium density fibrewood A man-made wood which is free from natural defects.

Design

A guitar is constructed of: body, neck and headstock. It also has a bridge, nut, sound hole, frets and strings

Designs need to be practical to construct and influenced by existing designs, but also appealing for their prospective user.

Tinker CAD is a design program, used by beginner designers/engineers.

Scaled designs, including sketches and CAD, are effective in envisaging the final product and an important part of the design process

Make

Using different materials to create products give different outcomes. E.g. Plastic is lightweight but not always hard-wearing and has environmental implications whereas wood is a strong and durable material for construction.

Coping saws can be used to cut curved shapes in wood

Sanding and filing help achieve the shape and a smooth finish which also ensure the product is safe for use with no sharp edges.

Decorative products and materials should be used based on their aesthetics but also their safety, practicality and durability.

Evaluate

To evaluate a product effectively, it should be trialed with/by the intended user (Reception children) and feedback gathered.

Designs are developed based on the strengths and development points identified by the product's intended user.

Knowledge Jigsaw

Year Group 6 - French

What we already know

Sport and hobbies and accessories
The verbs avoir, jouer
Adjectives
Animals
Numbers up to 60
Toussaint , Poisson d'Avril
Jean de la Fontaine
Weather
Some adjectival agreement
Ask and answer questions about someone's identity
Use adjectives to describe a planet
Ice cream flavours and ordering
Time and Daily routine
Rooms and furniture in the house
Piet Mondiran
Prepositions
Sports and adjectives to describe them
Rides and treats at the funfair
Explaining favourite things
Café culture and foods at the café
Ordering food politely

Information About Myself

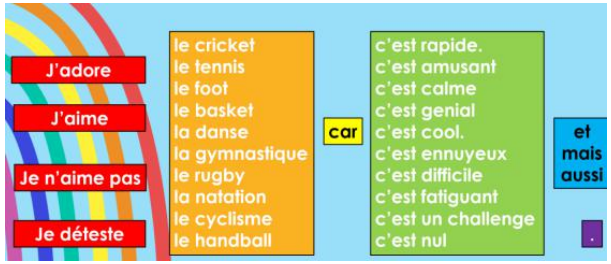
Je m'appelle....
Je suis un garçon / une fille.
J'ai... ans.
J'habite à .... .

MA FAMILLE :
J'ai un frère qui s'appelle.....
J'ai deux frères qui s'appellent...
J'ai un demi-frère...

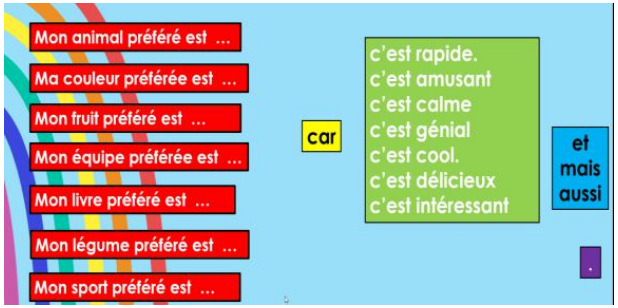
J'ai une soeur qui s'appelle...
J'ai deux soeurs qui s'appellent...
J'ai une demi-soeur...

Je n'ai pas de frères et soeurs.

More Information About Me



More Information About Me



Mocktails

Un cocktail de fruit

Utilisez	Use
Mesurez	Measure
Versez	Pour
Faîtes	Make
Mélangez	Mix
Ajoutez	Add

Café

To be able to serve other children using the target language throughout.

Qu'est ce que tu voudrais?
Je voudrais

Voici

Knowledge Jigsaw

Year 6 –PSHE HT6

What we already know

- A female's reproductive system has five main parts: **ovaries, uterine/fallopian tubes, uterus/ womb, vagina, vulva.**
- If, during sexual intercourse, an egg is fertilised by a sperm a baby will start to develop and grow. The baby is called an **embryo** at this point. If it isn't fertilised, the woman will have her period.
- When a boy reaches puberty, his testicles produce more of a hormone called **testosterone**.
- Conception is the moment when a new life begins.
- The age of consent is 16.

My self- image

- Peer pressure, social media and the internet can be reasons why people spend a lot of time and money on what they look like.
- If we constantly compare and criticise ourselves, especially about how we look, this can damage our self-esteem.
- If you have negative thoughts about yourself you can fight these off and change them into positive thoughts.

. Puberty

- There are many changes that happen during puberty. Some are specific to girls, some specific to boys and some happen to both girls and boys.
- Changes specific to boys: facial hair, your voice breaks, produce semen.
- Changes specific to girls: hips widen, breasts get bigger, start ovulating.
- Changes specific to both: grow taller, grow underarm hair and feel moody.

Babies: conception to birth

- A fertilised egg attaches to the wall of the womb and a **placenta** develops which gives oxygen and food to the baby from the mother's blood.
- After **12 weeks** the baby is fully formed but very small.
- After 9 months, the baby settles with its head down and is ready to be born.
- **Contractions** are strong pushes made by the muscles in the womb. They get stronger throughout labour.
- When the **cervix** is open, the baby is pushed through the vagina and out through the vaginal opening.
- The baby is still attached to the mother with the **umbilical cord.** When the baby cries, the cord is cut.
- The mother then needs to push out the placenta.

Boyfriends and Girlfriends

- There might be pressure from media, peers, society to be in a romantic relationship.
- You should only enter into a romantic relationship when **you** feel ready. It is a personal choice.
- **Respect** for one another is essential in a boyfriend/girlfriend relationship.
- **Nobody** should feel pressured into doing something they don't want to do.

Real self and ideal self

- **Body-talk:** how we look. It is very common amongst friends, family and even with ourselves when we look in the mirror.
- Negative body talk can hurt people's feelings.
- Reduce negative body talk in friendship groups by challenging negative comments with positive ones.
- If there is a big gap between your **real self** and your **ideal self,** it's possible your self-esteem can be low.

Knowledge Jigsaw

Year 6 PE HT6 Athletics

What we already know

To increase running speed you can use your arms and legs while maintaining a strong trunk and straight heck/head. The body also needs to build up momentum for ease of running.

A sprint race is where you race against opponents over a short distance (up to 400m at Olympic/Championships).

A hurdles race can take place over various distances.
It is important to clear the hurdle and to get back into the correct running style quickly.

It is important to be ready in the correct position and to have good communication when running a relay race. It is important to remember to swap the baton from the left hand to the right hand when handing the baton over.

A successful sprint race requires the participant to use a controlled running technique where they utalise their different body parts to increase speed. This includes not only their arms and legs but their trunk and head.

Chin up eyes looking towards intended finish. Children need to push off from each stride and use alternate arm/leg swings. By knowing these features, the child can improve both their own and others running techniques

The hurdles is a race where an athlete needs to clear a set of low barriers

Lead leg action – drive lead knee up, push heal out across barrier, snap foot down – beginning to become straighter

Trail leg action – pull the knee through around the side, turn the trail foot out sideways, high trail knee brought through in front to the middle running line and run off with growing power.

How to maintain the speed of the baton during changeovers:

– Don't stand still to receive the baton
- Start to build speed as the incoming runner approaches so they don't have to slow down to hand over
- Alternating hands: start with the baton in the right hand, pass to left, to right, to left so runners don't run up the back of their team mate

Combining a hop, skip and jump can enable an athlete to clear a greater distance.

Hop technique
- support leg bends on landing then strengthens to push off
- Lands and pushes off on ball of foot
Non-support leg bent and swings with support leg
Head stable, eyes focused forward throughout the hop
- Arms are coordinated with take-off, moving forward and upwards as support leg pushes off
- Hopping action is continuous and rhythmical

Skip technique
- Step-hop pattern is smooth and coordinated
- Arms are used in hopping action and are coordinated throughout the actions
- Land on balls of feet
Head and shoulders remain level

A range of techniques can be used to throw a ball, javelin, shot put and discus. Understand the need to step forward as you throw to create power. The need to transfer weight from the back to front leg.

Depending on the object my grip and body position may change.

- Throwing arm swings back in preparation for throwing
- Opposite arm is sometimes raised for balance / direction
- There is definite turning between the legs, hips and shoulders
- Weight transfers from the back to the front foot