

Year 4 Autumn 2

Science Crucial Knowledge

Electricity

- Electricity is the flow of an electrical current or charge through a material. It helps to power appliances.
- Electricity needs to flow around a complete circuit in order to work.
- A circuit is a pathway for electricity to flow around.
- A circuit includes a cell, wires, bulb, switch/buzzer.
- A conductor is a material that electricity can pass through.
- Metals make good conductors.
- An insulator is a material that electricity cannot pass through.

History Crucial Knowledge

Life in the pits

- Coal mines in the local area were: Apedale, Holditch, Birch House Colliery and Parkhouse Colliery.
- A lot of people in the Stoke-on-Trent and the surrounding area would have worked in coal mines.
- Miners got along well with each other. They were respected in the areas they lived for the work that they did.
- There were many dangers when working in a coal mine.
- New inventions made working in the mines much easier as history progressed.

Design Technology Crucial Knowledge

Mechanical Systems Levers and linkages

- A fixed pivot is where the lever is fixed to the base it is attached to.
- A loose pivot attaches two levers together, but it is not attached to the base.
- Using fixed and loose pivots in one mechanism makes different types of movement other than just side to side or up and down.

Computing Crucial Knowledge

Creating Media - Photo Editing

- Digital images can be manipulated for different purposes.
- Digital images can be edited.
- Composition in photography is the arrangement of the different elements in a photo.
- Cropping can reframe a photograph by deleting one or more sides of the image.
- Cropping can be used to: focus on a particular part of an image, recentre an image, remove aspects of an image or change the topic of an image.
- The colour and light used in a photo can be altered to change the way people think and feel about the image.
- Cloning is a process of using one area of a photo to change another area.
- Retouching an image means focusing on a small part of the image and removing it to improve how the photo looks.
- A 'composite' image is an image made up of different parts. Two or more images can be combined using the tools: select, copy, paste, move and resize.

Music Crucial Knowledge

Christmas concert Performance

- Recorded music is music that has been recorded by a live artist or band and then played back.
- Live music is music that is performed in front of an audience.
- Singing is performing songs or tunes using your voice.
- Solo is when someone sings or plays an instrument on their own.
- An ensemble is when a group of people perform together.

Physical Education Crucial Knowledge

Dance

- Collaboration is working with others to achieve/create something.
- Technique is a way of carrying out a particular task.
- Evaluate is to judge something.
- Co-ordination is the ability to move two or more body parts under control, smoothly and efficiently.
- Dance is to move the body in a rhythmic way, usually to music and within a given space.
- Collaboration is working with others to achieve/create something.

	<ul style="list-style-type: none"> • A pattern is when a movement or action is repeated. • Flexibility is the range of movement through body joints. • Movement is when changing position, posture or place. • Agility is how quickly you can change direction whilst maintaining speed, balance and power.
Ball Games - Netball	<ul style="list-style-type: none"> • Attack is to try to move past and score against the opposing team. • Defend is to block the other team and stop them from scoring. • Co-operation is when you work together with others to achieve a result. • Catching is the use the hands to stop and hold a moving object. Eyes on the object, fingertips together (two handed catch). Catch the object, then grip it. • Communicating with others giving and receiving information. • Throw is to push an object by hand with a sudden forward motion ending with straightening the arm and wrist. • Eyes on the object, Fingertips together (two handed catch). • Collaboration is working with others to achieve/create something
Religious Education Crucial Knowledge	
Landmarks in Life	<ul style="list-style-type: none"> • Rites of passage are special rituals that mark the different stages in life (e.g. birth ceremony, wedding, funeral) • A Sacred Thread ceremony (upanayana) is a ceremony for boys in Hindu communities to confirm they are of an age to take on religious responsibility. • A Christian confirmation is when young Christians take on religious responsibility.
Personal, Social Health & Economic Education Crucial Knowledge	
How do we treat each other with respect?	<ul style="list-style-type: none"> • Respect is listening, caring, taking turns, using manners, forgiving, being kind. • All children have the right to be treated with dignity and fairness, to be protected, to develop to their full potential and to an education. • Secrets are ok if it is something like a surprise party – not if it means you are uncomfortable or upset by what is said or done. Tell an adult you trust if this happens.
French Crucial Knowledge	
Crucial knowledge question	Crucial knowledge answer
<ul style="list-style-type: none"> • Animals and pets – bird, cat, rabbit, dog • Giving someone's name – His name is _____. Her name is _____. • Describing someone – He is _____. She is _____." 	<ul style="list-style-type: none"> • Un oiseau, un chat, un lapin, un chien • Il s'appelle (name), Elle s'appelle (name). • Il est _____, Elle est _____.