

## Year 4 Crucial Knowledge Autumn 2

### Science

#### 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

#### Life in the pits

- Local mines that produced coal 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.

### DT

#### 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

#### Creating Media - Photo Editing

- Technology can be used to create and change digital content.
- Digital images can be manipulated for different purposes.
- Digital images can be edited using software by;
  - Cropping
  - Cloning
  - Retouching
  - Combining images
  - Adjusting colour and light
- Online safety is important so we can stay safe when learning and using the internet.

**Vocabulary:** image, edit, digital, crop, rotate, undo, save, adjustments, effects, colours, hue, saturation, sepia, vignette, image, retouch, clone, select, combine, made up, real, composite, cut, copy, paste, alter, background, foreground, zoom, undo, font.

### Music

#### Christmas concert Performance

- 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.

### PE

#### 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.
- 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.

<b>Ball Games - Netball</b>	<ul style="list-style-type: none"> <li>• Attack is to try to move past and score against the opposing team.</li> <li>• Defend is to block the other team and stop them from scoring.</li> <li>• Co-operation is when you work together with others to achieve a result.</li> <li>• 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.</li> <li>• Communicating with others giving and receiving information.</li> <li>• Throw is to push an object by hand with a sudden forward motion ending with straightening the arm and wrist.</li> <li>• Collaboration is working with others to achieve/create something</li> </ul>
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**RE**

<b>Landmarks in Life</b>	<ul style="list-style-type: none"> <li>• Rites of passage are special rituals that mark the different stages in life (e.g. birth ceremony, wedding, funeral)</li> <li>• A Sacred Thread ceremony (upanayana) is a ceremony for boys in Hindu communities to confirm they can take on religious responsibility.</li> <li>• A Christian confirmation is when young Christians take on religious responsibility.</li> </ul>
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**PSHE**

<b>How can we manage risk in different places?</b> Police Cadets	<ul style="list-style-type: none"> <li>• Risk is something which may harm you or others.</li> <li>• There are risks in our daily lives e.g. roads, rail tracks, water.</li> <li>• To be safe online we should not share personal information.</li> <li>• To be safe online we should only play games that are age appropriate.</li> <li>• You should report anything which makes you feel uncomfortable, unhappy or scared to a trusted adult.</li> </ul>
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**Spanish Crucial Knowledge**

English	Spanish	English	Spanish
How are you?	¿Qué tal? ¿Cómo estás?	a dog	<b>un perro</b>
I am...	Estoy...	a guinea-pig	<b>una cobaya</b>
Good	Bien	a cat	<b>un gato</b>
Great	fenomenal	a tortoise	<b>una tortuga</b>
Happy	contento (m) contenta (f)	a fish	<b>un pez</b>
ill	enfermo (m) enferma (f)	a bird	<b>un pájaro</b>
bad	Mal	a rabbit	<b>un conejo</b>
Sad	triste	a mouse	<b>un ratón</b>
Have you got any pets?	¿Tienes animales?	a hamster	<b>un hámster</b>
I have a...	Tengo un / una		
Numbers 1-10	uno, dos, tres, cuatro, cinco, seis, siete, ocho, nueve, diez		
Numbers 11-20	once, doce, trece, catorce, quince, dieciséis, diecisiete, dieciocho, diecinueve, veinte		