

BLACK HORSE HILL JUNIOR SCHOOL - SCIENCE LESSON SEQUENCE

Materials and their properties

Enquiry/ Learning Intention	What the children will know/ Essential knowledge
(Recap of previous learning) How do solids, liquids and gases change state?	Children will know that water (liquid) can change to a solid or gas through application of temperature. They will understand the terms freeze, melt, evaporation and condensation. They will understand the movement/ structure of the molecules in each state. Some will identify that different materials change state.
How can we group materials according to their properties?	Children will identify and understand the terms; hardness,flexibility,solubility,transparency, magnetic, electrical and thermal conductivity- grouping everyday items according to these properties.
Which materials will dissolve in liquid to form a solution?	Scientific Enquiry: Children will predict and carry out a fair test to establish which materials will dissolve to form a solution. They will present their results in a table. Some will try to give scientific conclusions to support their test results
How can some combinations of materials be separated?	Children will understand that some mixtures, suspensions and solutions can be separated by filtering, sieving or evaporation. Some will use their knowledge of solids, liquids and gases to predict which method would be effective.

<p>How can some changes to materials be reversed?</p>	<p>Children will understand that dissolving, mixing and changes of state are reversible changes.</p>
<p>What can cause irreversible changes and produce new materials?</p>	<p>Children will understand that changes to some materials can occur through burning, heating and mixing/rusting.</p>
<p>Why do we use different types of metals in everyday materials?</p>	<p>Scientific Enquiry Children will carry out a rusting investigation to identify that metals have different uses. Some will identify that different types of wood and plastic serve different purposes in everyday life.</p>
<p>What happens when we combine acidic materials with bicarbonate of soda?</p>	<p>Scientific Enquiry Children will plan independent investigations and predict which combined materials might cause the greatest chemical reaction. Some children will give scientific findings from their results .</p>
<p>Which materials would be the most effective for an intrepid explorer to take on their travels?</p>	<p>Scientific Enquiry: DT link Children will use their gained knowledge of the properties of materials to design a bag for an explorer. After designing it, they will give reasons for their choices and some will suggest any suitable possible adaptations to improve their design.</p>
<p>Which famous chemists have made a large impact on our lives?</p>	<p>Children will research famous chemists and examine how the new materials they invented have impacted our lives- looking both at the convenience and its sustainability/ ecological impact on the world. Presentation/debate focus.</p>

BLACK HORSE HILL JUNIOR SCHOOL - ART LESSON SEQUENCE

Drawing



Enquiry/ Learning Intention	What the children will know/ Essential knowledge
Which shading technique would they use to show a cracking egg?	Children will be use a variety of techniques to add interesting effects, (shadows,direction of sunlight, tone and texture)
How can we make a picture of an artefact come alive?	Children will sketch lightly and use shadow, light, tone and texture in their drawing.

BLACK HORSE HILL JUNIOR SCHOOL - ART LESSON SEQUENCE

Gustav Klimt - mixed media artwork



Enquiry/ Learning Intention	What the children will know/ Essential knowledge
To understand the style of Gustav Klimt	Children will understand who Gustav Klimt was and how he presented his designs. They will also sketch some of his designs.
To explore the patterns relating to Art Nouveau/Symbolism by examining the work of Klimt.	Children will understand the style of patterns that Klimt used in his work and be able to produce some of their own.
To explore the patterns relating to Art Nouveau/Symbolism by examining the work of Klimt.	Children will develop their understanding of Klimt and how he used patterns in his work by developing the use of texture. They will explore different ways in which texture could be added whilst keeping to the style of Klimt.
To develop different textures using paint.	Children will look at the colour palette as used by Klimt. They will then apply their understanding of colour to their own self portrait in the style of Klimt.

<p>To complete mixed media artwork in the style of Klimt.</p>	<p>Children will learn to apply their understanding of how Klimt used patterns and texture in their artwork. They will be able to apply their knowledge of this to their own self portrait.</p>
<p>To reflect and evaluate own work</p>	<p>Children will evaluate their work throughout by reflecting on their work during the project, adapting their style and techniques. They will use their understanding of Klimt to evaluate their finished self portrait.</p>

BLACK HORSE HILL JUNIOR SCHOOL - ART LESSON SEQUENCE

William Morris- Textiles

{Prior to unit prepare materials - white cotton 40 cm x 20 cm cut up and ironed in half
Polystyrene squares 16.5 cm - enough for each person

Enquiry/ Learning Intention	What the children will know/ Essential knowledge
To understand the style of William Morris	Children will understand who William Morris was and how he presented his designs. They will also sketch some of his designs.
To design their own print for a William Morris Cushion	Children will understand the style of patterns that William Morris used (flora and fauna). Children will sketch some of their own William Morris designs, they will then choose one and make their own tile print for this. They will then use relief printing technique to print their design on material .
To use a variety of stitches and adornments (buttons, ribbons etc) to enhance my fabric and make a cushion?	Children will understand various stitches that could be used to embroider their cushion keeping to the style of William Morris. They will further enhance their work by adding a button or ribbon.
To use a variety of stitches and adornments (buttons, ribbons etc) to enhance my fabric and make a cushion?	Children will understand how to stitch their cushion together using a back stitch. They will then stuff the cushion (using the correct technique) before completing the sewing using a blanket stitch.
To reflect and evaluate own work	Children will evaluate their work throughout by reflecting on their work during the project, adapting their style and techniques. They will use their understanding of William Morris to evaluate their finished cushion.

BLACK HORSE HILL JUNIOR SCHOOL - COMPUTING LESSON SEQUENCE

Sharing Information



Enquiry/ Learning Intention	What the children will know/ Essential knowledge
What is a system?	Systems are built using a number of parts which feature inputs, processes and outputs. Computer systems communicate with other devices.
What are the roles of computer systems in our lives?	Identify tasks that are managed by computer systems and the human elements of a computer system. Benefits of a given computer system.
How is information transferred?	Data is transferred using agreed methods and networked digital devices have unique addresses. Data is transferred over networks in packets.
How do people work together when they are not in the same location?	Connected digital devices can allow us to access shared files stored online. Information can be sent over the internet in different ways. The internet allows different media to be shared.
How can they work together on an unplugged activity?	Strategies to use to ensure successful group work with thoughtful suggestions. Compare working online with working offline.

BLACK HORSE HILL JUNIOR SCHOOL - COMPUTING LESSON SEQUENCE

Video Production

Enquiry/ Learning Intention	What the children will know/ Essential knowledge
What is a video?	Be able to explain a video is a visual media format. Features can be identified and compared.
What techniques can be used in filming?	To use a digital device to record videos and be able to identify and find features on a digital recording result. Be able to experiment with different camera angles and make use of a microphone.
How can a storyboard be used when planning a video?	Be able to suggest filming techniques to be used for a given purpose and be able to use a range of filming techniques. To be able to review how effective the video was.
How can a video be planned by creating a storyboard?	Outlined scenes for a video can be planned using a storyboard, which includes scenes, a script, camera angles and filming techniques.
How can a video be imported and edited?	To identify that video can be improved through reshooting and editing. Videos can be stored, retrieved and exported to a computer, these can be improved by reshooting and edited using key editing techniques.

BLACK HORSE HILL JUNIOR SCHOOL - GEOGRAPHY/HISTORY LESSON SEQUENCE

Vikings to Victorians



Enquiry/ Learning Intention	What the children will know/ Essential knowledge
When was the Viking era in Britain?	The Viking age was from around 700AD to 1100AD. This means that there were periods when the Vikings and Anglo-Saxons both lived in Britain.
What was the Danelaw?	After years of fighting, the Vikings and Anglo-Saxons agreed a peace treaty. England was divided by an imaginary line, with the Viking section being called the Danelaw.
What was life like in Viking Britain?	Vikings were not all warriors. Many were farmers, blacksmiths or potters for example. Viking homes were called longhouses. They believed in many gods.
Who was Alfred the Great?	Alfred the Great was the Anglo-Saxon king or ruler during the Viking era. He was a Christian and encouraged learning and the keeping of written records. He created the peace treaty with Guthrum which led to the Danelaw.
What is the legacy of Vikings on the Wirral?	Despite it being further west than most of the Danelaw, Vikings did come to the Wirral from Ireland and settle here. Many local place names have

	<p>Viking origins as they come from 'Old Norse'. Artefacts linked to the Vikings have been found locally.</p>
<p>What is a six-figure grid reference?</p>	<p>Ordnance survey maps are divided into squares, known as a grid. The grid helps people locate features on the map. The lines on the map are labelled using two-digit numbers. You can describe the square where two grid-lines meet by giving both two-digit numbers (a four figure grid reference). To pinpoint a feature on the map with more precision you can further divide each grid-square and give a six-figure reference.</p>

BLACK HORSE HILL JUNIOR SCHOOL - GEOGRAPHY/HISTORY LESSON SEQUENCE

Vikings to Victorians



Enquiry/ Learning Intention	What the children will know/ Essential knowledge
When was the Victorian era in Britain?	The Victorian era describes the period when Queen Victoria was on the throne. She reigned for 64 years, from 1837 to 1901. It was a period of great change, during which Britain became very powerful and the British Empire grew significantly.
What was life like in Victorian Britain?	Life differed greatly between the rich and the poor. Rich people, many of whom gained wealth from booming industries, had comfortable lives with large houses and servants. The poor worked hard and had poor living conditions. If you lost your job or home you might be sent to the workhouse.
What were schools like in Victorian Britain?	During the early Victorian period most poor children didn't attend school and instead were sent to work in harsh and dangerous conditions. Rich children were taught at home by a governess until the age of 10. Ideas about schooling changed during the Victorian period and by 1880 all children had to attend school until they were 10 years old. Classes were large and teachers were very strict. Many lessons were taught through repetition, chanting and copying down.
What was the Industrial	The Industrial Revolution spread throughout Britain in the 1800s. At the

<p>Revolution?</p>	<p>start of the Victorian period, Britain was very rural. Most people lived in the countryside and many worked on farms or spun wool or cloth. The steam engine changed this - machines were built that could produce goods more quickly and on a larger scale. Factories were built and more people moved to towns and cities for work.</p>
<p>How did West Kirby change during the Victorian period?</p>	<p>More railways were built during the Victorian period - including the railway in West Kirby (the existing trainline and what is now the Wirral Way). Transport to Liverpool, an important port city, became easier and so more housing was built. You can still see the rows of Victorian houses on the flat in West Kirby today. Marine Lake was also developed.</p>