

ENTRY POINT: Step with Victorian Pioneers on the Rail Track Walk.

EXIT POINT:

HISTORY

Significant turning points in British history (railways) industrialisation.

RE

1. Justice and freedom
2. Hope

PSHE

- Achieving goals ,
- Rights and responsibilities,
- E-safety, Personal qualities,
- understanding about mental health,
- What to do in emergencies.

DT

- Use research & criteria to develop products which are fit for purpose and aimed at specific groups
- Use annotated sketches, cross-section diagrams & computer-aided design
- Analyse & evaluate existing products and improve own work
- Use mechanical & electrical systems in own products, including programming CCS

ART

Learn about great artists, architects & designers

MUSIC—Rounds

Play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression

Cycle A — Spring : Buildings, Bridges and Railways (Objectives)

SCIENCE

Forces

- Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object
- Identify the effects of air resistance, water resistance and friction, that act between moving surfaces
- Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.

Materials

- Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets
- Understand that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution
- Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating
- Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic
- Demonstrate that dissolving, mixing and changes of state are reversible changes
- Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.

GEOGRAPHY

- Use the 8 points of a compass, 4- and 6-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world
- Use 4-figure grid references on OS maps
- Use fieldwork to record & explain areas
- Locate countries, cities regions and features of the UK. Name and locate counties and cities of the UK., geographical regions and their human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers).

COMPUTING

- To use hyperlinks , audio, digital images and video to develop an interactive Powerpoint for adults to use
- To use augmented reality app Aurasma to generate auras for different areas in the school
- To make recognisable trigger points around school so that people know when to use an Aurasma to get help
- To determine a use for augmented reality that could be used in school by younger children
- Computer aided design—3D modelling

ENTRY POINT: Step with Victorian Pioneers on the Rail Track Walk.

EXIT POINT:

HISTORY

- Find out about the history of the Railway—Victorians Pioneers Rail Track walk.
- Watch the Olympic Opening ceremony
- Impact of Industrialisation on the population.
- CCE—History of the railway
- CCE—Bridge report

RE

- Apartheid regime in South Africa and play the song- Give me hope Joanna by Eddie Grant.
- Martin Luther King and discuss the content of the famous 'I have a dream' speech.
- Do rules and beliefs bring justice and freedom?
- Ten commandments
- Karma
- The noble eightfold path

PSHE

- Setting personal goals, children's rights and responsibilities, peer pressure, positive outlook, role play emergency scenarios.

DT

- Design and build a bridge using Cad Sketch up
- Inventors and Inventions— Look at Brunel and his designs and York bridge designers ; Thomas Page, Whitby Bird and partners.
- CCM— Measuring accurately

ART

- Gaudi buildings—Learn about the architect and his famous works.
- Create Gaudi inspired garden art for the allotment.
- Lowry
- Work co-operatively to create a class canvas using Lowry inspired figures and buildings.

Cycle A— Spring : Buildings, Bridges and Railways (Activities)

SCIENCE

- Making parachutes.
- Investigating friction and its implications for trainer soles.
- Investigating forces using elastic bands.
- Building Rockets.
- Travel through water
- Pulleys
- Levers
- Insulation
- Coats
- Conductivity
- Dissolving
- Separating mixtures
- Filtration
- Evaporation
- CCE—Explanation text

MUSIC

- Exploring Rounds
- I can see clearly now
- Harry Potter round to Frere Jacques
- Senwar dedende
- Shalom
- Mr Miller

GEOGRAPHY

- Use local OS maps and compasses to navigate local area.
- Fieldwork visit—Step with Victorian Pioneers on the Rail Track Walk.
- Use the living map
- CCM—Use 4-figure grid references on OS maps - Find the location of York bridges on the maps.

COMPUTING

- Develop interactive maps of the local area or the school using Powerpoint and hyper links
- Challenge the children to come up with ways of developing a map of the school like Street View on Google maps
- Set up Aurasma points around school for displays, interview children in other classes for 'additional content'.
- Use sketch up to create bridge designs.