|  |  |  |  |
| --- | --- | --- | --- |
| **Topic**  **Machines – Friend or Foe?**  **Essential Question** | **Launch**  Visit to Helston Railway | **Class Book**  ‘Clockwork’ by Philip Pullman  ‘iRobot’ (Robbie) Isaac Asimov  ‘Until I Met Dudley’ McGough | **End Authentic Outcome**  **Science fair** |
| **What will the classroom look like?**  Corner forest with the scene from Clockwork where the prince is taken to Dr. Kalmenius  Story map  Story prompts, sentence types and vocabulary / spellings  ‘Tinkering’ area  Science wall – Forces  Objects linked to forces – pulley, hydraulic, levers  Industrial Revolution timeline and key events – including women and black inventors | **Developing the topic**  Innovate and invent using the story  Explore real and alternative explanations for the way things work with everyday technology  Make cam toys and catapults  Explore forces in science using scientific processes  Discuss philosophical questions brought up in science fiction story ‘Robbie’ and Artificial Intelligence | **Trips/visits to support project**  Writing in Crenver Grove around the theme of mysterious characters  Hayle Heritage Centre – link with a walk around Hayle’s historic past and industries  Heartlands – draw large machinery from life | **Literacy genres**  Narrative  Suspense  Poetry  Explanation  Chronological recount |
| **Use of outdoor class**  Table tennis ball run – using tubes and a ball, making the furthest trip  Poetry – the sound of machines | **Innovative use of ICT**  Green screen in front of Heartlands machinery imagery  <https://www.slstc.southwarklea.org.uk/how_to_make3.htm?fbclid=IwAR3FCxctU8tN32aKcY4q7JOtzPL9ES5sn_2qMX> tTRPWjKnG6CbZUr70dGhs |

Class Rinsey Medium term Plan Autumn 2022

MINI OUTCOME

Draw machinery from life

MINI OUTCOME

Discuss the advantages and disadvantages of Artificial Intelligence

MINI OUTCOME

Make a cam toy

MINI OUTCOME

Learn the story map and actions

END OUTCOME

Science Fair

LAUNCH

Machines – Friend Or Foe?

MINI OUTCOME

Explain the advantages and disadvantages of the Industrial Revolution and know how it has influenced our world today

MINI OUTCOME

Know what was invented in the Industrial Revolution by Cornishman Richard Trevithick and women and black inventors

MINI OUTCOME

Green screen

MINI OUTCOME

Write an explanation of how something works

Machines – Friend or Foe?

MAIN TOPIC

Information Technology

Research using reliable sources

Research using different search engines

Desk Top Publishing – using Publisher to make a presentation based on an area of choice

Pic Collage of simple machines in the environment

Internet safety

Green Screen to present findings about machines using photographs from Heartlands machinery room

History – The Industrial Revolution

Industrial Revolution

Know when IR first started in Britain and understand significance

Know chronology of key inventions through IR

Understand how IR changed lives

Positive and negative results of IR

Working conditions of different industries

Class divide of the times

Child labour and reform

Science – Forces

**Forces**

 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.

Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object

Art

Observe and use a variety of techniques to show the effect of light on objects and people e.g. use rubbers to lighten, use pencil to show tone, use tones of the same colour.

Look at the effect of light on an object from different directions.

Use a variety of techniques to interpret the texture of a surface e.g. mark making, different textured paint.

**PSHE/SMSC**

**Going for Goals Be the Best You**

|  |  |
| --- | --- |
| Believing its possible | Knowing yourself |
| Setting a realistic goal | Managing my feelings |
| Planning to reach a goal | Looking after myself |
| Overcoming barriers | Working with others |
| Persistence | Making healthy choices |
| Celebrating | Being responsible |

Design Technology

Moving toys – levers, pulleys, cam toys,

Bridges, catapults

