**Design Technology – Resistant Materials**

**Wooden cam toy**

* Isometric drawing.
* Woodworking using workshop tools and a variety of timber stock forms.
* Making a working cam toy.
* Adding decorative detail and finishes to wood.

**Citizenship Local community**

* What is a community?
* Local community project

**Year 8 Spring 2**

**Science Forces & Electromagnets:**

* Use Hooke’s Law to identify proportional stretching
* State how you know that a relationship is linear, line graphs,identify patterns.
* State the law of moments, equation to calculate a turning force
* Describe the motion of particles in a fluid
* Calculate fluid pressure with support
* State simply what happens to pressure with depth
* Describe characteristics of objects that float and sink
* Write down the equation for calculating fluid pressure
* State the equation of stress
* Use ideas of stress to describe familiar situations
* Predict qualitatively the effect of changing area and/or force on stress
* Test the effect of changing an electromagnet.
* State some uses of electromagnets.

**Art Pop Art -Andy Warhol**

* Creation of pop art and relation to popular culture today
* Development of ideas and illustrating them
* Verbalising intention and following through
* Further development of painting skills and knowledge of equipment use
* Completed canvas showing connection from sketchbook development of idea and intention
* Understanding of cultural and historical relevance of pop art

**PSHE Safety**

* Gangs & knives
* Addiction, substance abuse
* Abusive behaviours
* Social media

**History**  **The Industrial revolution**

* What is the meaning of Industrial Revolution?
* Why did Britain industrialise first?
* How did Britain’s factories industrialise?
* What was life like for 19th Century children?
* How much of an impact did trains have on industrial Britain?
* How does a town turn into a city?
* What was the Victorian class system?
* What was the impact of Victorian inventions?

**Computing Web design**

* Design and create own Webpage.
* Understand several key algorithms that reflect computational thinking.
* Use logical reasoning to compare algorithms.

**PE**

Theory

* Health and Fitness
* Physical Social and mental aspects of sport
* Investigate the effects on the Human body from exercise
* Developing an understanding of the rules of 8 Sports.

OAA

* Development of teamwork through problem solving
* Orienteering –bearings, maps skills.

**French Temps libre**

* Talking about where you went
* Perfect tense with être
* Talking about events in the past
* Linking and extending sentences
* Comparisons with other tenses

**Maths Developing Number**

* Convert fluently between key fractions decimals and percentages
* Calculate key fractions, decimals and percentages of an amount with and without a calculator
* Calculate percentage increase and decrease using a multiplier
* Express one number as a fraction or a percentage of another with and without a calculator
* Work with percentage change
* Choose appropriate methods to solve percentage problems
* Find the original amount given the percentage less than OR greater than 100% (H)
* Investigate positive and negative powers of 10
* Work with numbers more than 1 between 0 and 1 in standard form
* Compare, order and mentally calculate numbers in standard form
* Add, subtract, multiply and divide numbers in standard form
* Use calculator to work with numbers in standard form
* Use negative and fractional indices (H)
* Round numbers to powers of 10 and 1 significant figure
* Round numbers to a given number of decimal places
* Understand and use error interval notation (H)
* Calculate using the order of operations
* Convert metric measures of lengths, weights and capacity
* Solve problems involving time and the calendar

**R.E The Son of God**

* The truth about Jesus
* The Easter Story
* Son of God Movie

**English Writing Unit: Narrative and Descriptive**

* Explore texts’ purpose, audience and format.
* Create texts which are suitable for purpose, audience and format.
* Revise descriptive writing to be able to apply descriptive devices in writing. Use images as stimuli.

**Geography Kenya**

* Tourism: Decide whether you are **for or against** a new hotel complex.
* Design an advertisement for a job in Kenya.
* Points – Evidence – Explanations for drought in Kenya.

**Music**

* Appraise music by Scott Joplin
* Learn the structure of a 12 bar blues
* Play ‘Green Onions’ on the keyboard
* Compose a 12 bar blues