Learning Overview – Key Stage 2 -Years 5 & 6 -Owls
Spring Term 2019 Rockets and Robots

History
- Exploring the theories of ancient astronomers like Claudius Ptolemy, Nicolaus Copernicus and Galileo Galilei and understanding the controversy that surrounded these.
- Learning about the Space Race between Russia and America in the 20th Century.

Geography
- Understanding the position and significance of longitude to explain time zones around the world.
- Using atlases to identify countries within time zones and calculating the time within time zones according to Greenwich meridian

Religious Education
- Exploring what different people believe about the origin and meaning of life
- Looking at how Christians believe the world was created. Comparing this to other religious views and the views of people who are humanists.

Maths
- Using standard written method for multiplication and division.
- Solving words problems that involve all four calculations.
- Using BODMAS to order operations
- Interpreting information in a range of graphs and charts
- Ordering negative numbers and finding the difference between positive and negative numbers.
- Reading and completing missing numbers on scales
- Calculating with fractions

Literacy
- Writing an explanation text using the book 'Wallace and Gromit: The Complete Cracking Contraptions Manual'
- Reading myths about how the waterlily began and how the stars became and writing our own versions to explain phenomena.
- Exploring a range of punctuation including semicolons and colons.
- There will be a high expectation of handwriting and spelling this term.
- Reading 'The Iron Man' by Ted Hughes and 'Moondial' by Helen Cresswell as our whole class books.

Community & Citizenship
- Acting as role models in our school environment
- Road safety – crossing the roads
- Climate change – finding out about the way the world's climate is changing and ways we can take responsibility for our world

Creative & Critical Thinking
- How do we feel about the theories of ancient astronomers? Was the reaction fair or unfair?
- Are robots the future? What could be the drawbacks?

Personal Development
- Exploring tolerance and open mindedness through reading books that promote equality
- Setting goals for the new year
- Taking responsibility for our belongings and developing independence

Digital Application
- Using Excel to create formulas
- Making charts and graphs in Excel
- Publishing outcomes using formatting in Microsoft Word.

Science
- Describing the movement of the Earth, and other planets, relative to the Sun in the solar system
- Using scale to compare the size of and distance between the Sun, Earth and Moon.
- Using the idea of the Earth's rotation to explain day and night
- Investigating the bones in a human hand to replicate a realistic robot hand

Computing
- Creating an animation of a range of still shots of a robot.
- Amalgamating the still shots of a robot in iMovie and recording our French instructions with music over the animation.
- Using Excel to create a formula in order to compare time zones around the world.

Language
- Using imperative verbs in order to make commands in French
- Giving a robot instructions for how to dance to a piece of music.
- Learning numbers and body parts in French.

Final Outcomes
- A robot dance inspired by the Robot Boys
- A class composition using handmade instruments
- An animation of dancing robot with French instructions
- A piece of art representing space with a descriptive extract explaining the atmosphere behind the painting
- The children will discuss and take ownership over how to present other final outcomes as their learning progresses through the term.

Design & Technology
- Creating our own musical instruments to play
- Investigating and analysing a range of existing musical instruments to inform our own designs
- Selecting from and using a wider range of materials and components according to their functional properties and aesthetic qualities

Art & Design
- Looking at the artist Tracie Andrews and her representations of space.
- Creating artwork in the style of Tracie Andrews using ink and water techniques and paint textures.

Physical Education
- Gymnastics and fitness.

Drama & Dance
- Creating a robot dance using a dance by the 'Robot Boys' as inspiration.

Music
- Listening to 'The Planet Suite'
- Understanding how to interpret and write notation in terms of note length.
- Creating a group composition using the instruments made in Design and Technology.