

Holland Haven Primary School's Creative Curriculum Planning: Spring 1
See our new 'HH Skills and National Curriculum coverage' booklets for specific objectives per Phase and Subject
Additional cross-curricular and SMSC links

Phase:	UPPER SCHOOL Yr 5/6
Theme:	<u>Robots and Aliens</u>
Subject Foci:	'Out of this World' - Science focus 'Artificial Intelligence' - Science, Computing and Philosophy Focus
Expected outcomes:	To understand how movements of the Earth create day, night and seasons. To understand the phases of the Moon and the names of the planets in our galaxy. To understand the uses of technology in everyday life. To deepen thinking skills and opinions through philosophy.
Educational Visit/Visitor	Nicola Burrell - Cardboard Sculptures of Spaceships/Robots
Extended Classroom opportunities	<ul style="list-style-type: none"> ● Science - Measures and scale - mapping out the solar system on the playground ● Science - Circulatory System - acting out the journey in the hall. ● Science - Human Circuits - playground or hall ● Science/PE - Healthy Astronaut Fitness - testing heart rate - exercises in the hall or playground
Parent-Pupil Project	Design and make a Rocket!
Themed 'visual token' team system	Earn 'stars' for your team! Planets in the Solar System:
Learning Environment	- Saturn, Mercury, Jupiter, Mars and Venus Space and Robotics-themed reading areas including key words, photos and information posters, diagrams etc.
Project 1	<p style="text-align: center;"><u>'Out of this World'</u></p> <p>Our first Spring Term project is called 'Out of this World'. We will be developing our key skills and knowledge in various subjects through the context of Space.</p> <p>Theme - We will learn about important features of planet Earth, including the Equator, the Tropics of Capricorn and Cancer and the different climate zones. We will discover how the movements of the Earth cause day and night, seasons and years, as well as learning about the different moon phases and how they occur Science Link.</p> <p>Literacy - During our Literacy lessons, we revise the features of journalistic writing and write our own newspaper articles about various space missions: Apollo 11, Apollo 13 and Challenger. We will also continue to develop our narrative skills by writing space-themed stories!</p>

Science - In Science, we will be learning about how to keep our bodies and our hearts healthy. We will explore why healthy eating, exercise and oxygen are important for our hearts, and why drugs can be either beneficial or harmful. We will be investigating how astronauts get their nutrients, exercise and oxygen while on the International Space Station. **Maths Links - Statistics.**

PSHE - As part of our Personal, Social and Health education, we will also explore some of our emotional needs that enable us to stay healthy and consider how astronauts' emotions may be affected while they are away from their families.

Design and Technology - We will be developing our design and construction skills by designing and creating aliens, thinking carefully about colours and features! We will use pattern pieces to cut felt to the correct shape and size and then use wool and a needle to sew them together. Finally, we will fill them with hollow-fibre filling so that they are cuddly!

Computing - In our Computing lessons, we will be learning to use programming software and algorithms to design, write and debug our own space-themed computer games.

Music - To improve our musical skills, we will be listening to the Planet Suite of music by the composer, Gustav Holst and thinking about how the composition has been carefully chosen to match each planet. We will also be listening to sounds that have been recorded in space and on different planets, and use this to inspire our own space compositions.

PE - During indoor PE lessons, we will be continuing with our REAL PE lessons. We will also be learning about how and why astronauts must stay fit and healthy to do their job well. We will take part in various exercises, just like astronauts do, in order to improve our fitness. **Science Link - Heart and Circulation**

Project 2 **'Artificial Intelligence'**


Our second Spring Term project is called 'Artificial Intelligence'. We will be developing our key skills and knowledge in various subjects through the context of Robots.

Science - In our Science lessons this half-term, we will be investigating how robots work by creating series and parallel circuits, exploring the difference between them and experimenting with ways to make motors faster, bulbs brighter and buzzers louder! We will also learn how to represent circuits using conventional circuit symbols.

Literacy - In Literacy, we will be writing Film Reviews for various robot-themed films, including 'Robots', 'Wall-E' and 'Bibo'. We will then revisit our poetic skills by writing poems about robots using thought-provoking images as stimulus. **SMSC Link**

Theme - These kinds of images evoke lots of philosophical questions about artificial intelligence which we can also explore this half-term, including whether robots have feelings and the way in which they are portrayed in the media. **SMSC Link.** We will be learning about the history of robotics and how technology has changed lives over time.

Reading and Spelling 2 x 85 minute reading lessons a week - Using themed texts.
Daily Spelling, Punctuation and Grammar sessions.
Weekly, personalised spelling practice.

Discrete Maths	Progression Ladder System Creative Coverage Problem Solving opportunities for Fluency and Reasoning Weekly Number focused test/lesson Morning Maths Meetings
Theme and real-life maths links including outdoor	Planning for each maths topic includes a variety of opportunities to explore, apply and consolidate maths skills and knowledge outside of the classroom. For example, maths trails and orienteering-style problem solving. Statistics - plotting times of sunrise and sunset across the year, comparing and representing data for different planets. Temperature and negative numbers - comparing temperatures on different planets Shape and Space - Direction and Position - programming robots
Discrete Religious Education (Essex)	Humanism - Children will explore the Humanism belief system and the way in which we make decisions about our own actions and morals. This will be taught through our 'Robots' project and we will explore whether robots are able to make their own decisions. SMSC Link
Discrete Languages - French	Through the topics listed below, children will continue to speak and write in accurate sentences, exploring the French grammar and language structures. They will also be focusing on their pronunciation and intonation. Actions, Instructions and Directions - children will be learning to give and receive instructions and directions, as well as learning the names of common buildings and locations within a town. They will also learn about daily actions e.g. open the window, close the door.
Philosophy for Children SMSC	Philosophical questions about artificial intelligence. <ul style="list-style-type: none"> ● Is the human brain just a computer? ● Is human intelligence and robot intelligence the same? ● Can ROBOTS SOLVE any PROBLEM? ● Can we be sure that robots don't have feelings? ● DO ROBOTS HAVE THOUGHTS? 
School Council Meetings	Whole School 'School Council' (2 representatives from each class Years 2-6) and class council response/action and feedback. Pupil Perception School Project Fundraiser
Weekly Assemblies with an SMSC focus	KS2 singing assembly, class PSHE assemblies including pupil-led Singing assembly Beach Hut House assembly - sharing learning (cross-phase). Whole School Achievement Celebration Assembly Whole School Assemblies exploring Social, Moral, Spiritual and Cultural content.