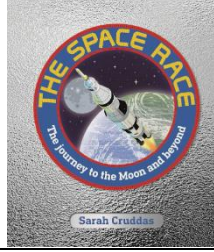
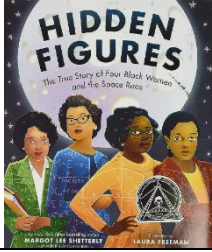


Spring 2: How does our world work?

Driver:

Outcome: How has the Space Race impacted our knowledge of the universe?

Core Text: Hidden Figures, The Space Race: Journey to the Moon and Beyond



Writing Genres:

Hidden Figures: Non-fiction Informal Letter

The Space Race: Non-fiction Formal Letter, Non-Fiction Balanced Report, Non-Fiction Balanced Report

Key vocabulary

Diversity, gravity, orbit, sphere, solar system, galaxy, astronomy, geocentric/heliocentric models, Collage, Yayoi Kusama, database

Subjects:	Learning Objectives:	Activities
History Space race	<ul style="list-style-type: none"> -Use dates to order and place events on a timeline -Provide an account of a historical event based on more than one source -Present findings and communicate knowledge and understanding in different ways -Compare sources of information available for the study of different times in the past -Evaluate the usefulness of a variety of sources with increasing independence 	Timeline of key events of the space race (sequencing thinking frame) Cross-curricular with PSHE- study the space race through the lens of Katherine Johnson, Dorothy, Mary and Christine. Compare this source with other sources available. Evaluate the usefulness of this variety of sources. Recount the space race using all of knowledge gained in different ways- videos, written, pictorial or audio
Science: Space and Forces	I can describe the movement of the Earth and other planets relative to the sun in the solar system. I can describe the movement of the moon relative to the Earth. I can describe the sun, Earth and moon as approximately spherical bodies. I can use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky." I can explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. I can identify the effects of air resistance, water resistance and friction that act between moving surfaces. I can recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect.	<ul style="list-style-type: none"> Know the difference between geo and heliocentric solar system and how views have evolved How does the length of daylight hours change in each season? How does the angle of launch affect how far a paper rocket will go? How could you organise all the objects in the solar system into groups? Can you observe and identify all the phases in the cycle of the moon? Is there a pattern between the size of a planet and the time it takes to travel around the sun? How does my shadow change over the day? What unusual objects did Jocelyn Bell Burnell discover? How do astronomers know what stars are made of?
Art	Add collage to a painted, drawn or printed background using a range of media, different techniques, colours and textures Experiment with using layers and overlays to create new colours/textures	Artist study- Yayoi Kusama Create the solar system using collage to add some more detail on some planets Paint/print background and then add planets using collage
PSHE	Diversity values	Look at the lack of diversity during this period of time; focussing on Katherine Johnson, Dorothy, Mary and Christine and their lack of inclusion into America's space race
Computing	This unit looks at how a flat-file database can be used to organise data in records. Use tools within a database to order and answer questions about data. Create graphs and charts from data to help solve problems. Use a real-life database to answer a question, and present work to others.	Science link: Research, collate & create graphs for data about the planets Create flat-file databases comparing female and male astronauts who have gone to space

Action/Exhibition: Send a letter to NASA to campaign for diversity

Trip ideas: Planetarium, Greenwich space workshop. Visit Tate to see Yayoi Kusama

To be taught in a block and evidenced through floor books



RE: Ethics, Christianity and war- How do Christians respond to war?