Stargazers!

Yr 5/6

Links to Prior Learning

Lights Camera Action – Light and shadow
Moon Zoom (KS1)
Burps Bottom and Bile, Flow, Potions, Big blue, Lights Camera Action – Science investigations

Substantive Knowledge

Movement of Earth, planets, sun. Movement of moon and Earth
Sun, Earth and moon are spherical. Explain night and day
Gravity and air resistance
Light travels in straight lines
We see because objects emit/reflect light into our eyes
Shadows have the same shape as the object that casts them (Science)
locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities
identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night) (Geography)
Trends through time/Chronology (History)

Cultural Capital

Book: Cosmic, Hidden Figures
Art: Van Gogh – Starry Night
Music: The Planets (Holst)
History: Armstrong's picture of Aldrin on the moon
Specific space missions
Space exploration and views/understanding of space through time

Key Questions

How do we know the Earth is spherical?
How did people land on the moon?
What next for space travel?
In chronological order, what are the most important events in the history of space travel?
Wjat were the key events of the moon landing, and what was the reaction around the world?
What is the lasting significane of the Apollo moon landings?
How have spacecrafts changed over time?

Disciplinary Knowledge

Asking and Answering Questions - Observing (Science)
Historical Enquiry and Questioning – Chronology (History)
Positioning – Map Skills (Geography)
Developing Ideas – Techniques – Evaluating (Art, painting)
Listening and Understanding – Composing – Notating (Music)

Key Vocabulary

Spherical
Latitude, longitude
Equator, northern and southern hemisphere
Tropics of Cancer and Capricorn
Arctic and Antarctic circle
Greenwich meridian
Time zones
Light source
Supernova
Nebula
Orbit
propulsion

Throughout

Discrete

French – Y5 unit 10, Y6 unit 15
Computing – understanding networks, E-Safety
PSHE – diversity, dreams and goals. What is marriage? RE – Y5 What does it mean if God is Holy and loving? RE – Y6 Why are the Saints encouraging role models?

Maths Links

Distances
6-digit numbers

English Links

Descriptive writing, stories/legends – planets
Newspaper articles – space race and Hidden Figures

DT tools and techniques

Art tools and techniques

Painting – Mythical gods/planets working from ideas in English design and create their own painting of a mythical god or planet. 'The planet Gods' Book for resources.

History knowledge to be remembered

- The 'Space Race' between USA and USSR led to the Apollo 11 mission, in which Neil Armstrong and Buzz Aldrin landed on the moon on 20th July 1969.

Stars change over billions of years, forming in nebulae, igniting and becoming stable, before its 'death': occasionally as a black hole or supernova.

Evaluation 2019/20

Cosmic was a great class book for Y5 but took 2 terms to read!
Hook day included introducing the scale of the solar system, astronaut training (writing upside down, memorising digits, co-ordination, Russian 1-10) and space art.
Important to give sufficient coverage to:
Space understanding

- Orbit of planets around sun, moon around planet
- Life cycle of stars inc black holes
- Phases of moon
- Proving Earth is spherical
- Earth's rotation day/night

Moon landings

- Geo-politcal situation surrounding space race
- Details and technical words describing Apollo 11 mission
- Life as an astronaut
- Timeline chronology re space travel