#### Y5 Learning Challenge: Earth and Space Key Text: Clockwork

# Prime question: What else is out there?

### Subsidiary questions:

- 1. What makes up our solar system?
- 2. What are the similarities and differences between the planets?
- 3. How do the planets move?
- 4. How have views about space evolved over time?
- 5. What was the 'Space Race'?
- 6. What was the Soviet Union? (Space Race connection)
- 7. How has Eastern Europe changed over time? (Space Race connection)

### Science

- •Describe the movement of the Earth, and other planets, relative to the Sun in the solar system.
- •Describe the movement of the Moon relative to the Earth.
- •Describe the Sun, Earth and Moon as approximately spherical bodies.
- •Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.

### Geography

Pupils should be taught to:

- •Use globes and satellite images of the Earth from Space to locate countries and describe features studies
- I can compare a region in the United Kingdom with a region in another continent, understanding geographical similarities and differences.
- I can use atlases to find out about other places.

### History

•A significant turning point in British history (space travel)

Art

Pupils should be taught:

•About great artists and designers in history (Starry Night, Van Gogh)

**DT** (Design and make a simple model to show the rotation of the Sun, Earth and Moon) Pupils should be taught to:

- •Select from and use a wider range of tools and equipment to perform practical tasks (e.g. cutting, shaping, joining and finishing)
- •Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design
- •Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work

### Music

Pupils should be taught to:

•Appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians (the Planets Suite, Gustav Holst)

# Computing

- •Use sequence, selection, and repetitions in programs; work with variables and various forms of input and output.
- •Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.
- •Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals