



Science Focus 9

Unit E

Space Exploration

Space Link: NASA <http://www.nasa.gov/home/index.html>

Topic 1

For Our Eyes Only

- Frames of Reference
- What Our Ancestors Saw
- Ancient Myths
- Sky Co-ordinates
- The Stars as a Frame of Reference
- The Earth-Centred Model
- The Sun-Centred Model

Topic 2

Stronger Eyes and Better Numbers

- Telescopes
- Galileo's Approach to Inquiry
- Resolving Power
- Copernicus's Sun-centred Revolution Continues
- Universal Gravitation

Topic 3

The Spectroscope: New Meanings In Light

- Spectral Lines
- Spectroscopy: The Science of Colour
- Diffraction Gratings
- Spectroscopy for Astronomers
- The Doppler Effect
- An Amazing Tool

Topic 4

Bigger and Smarter Telescopes

- New Discoveries
- Combining telescopes
- Adaptive Optics
- Distance to the Stars

Topic 5

What Channel Is This?

- Radio Telescopes

Topic 6

Above the Atmosphere and Under Control

- Rockets – Getting Up There
- Computers – Making Adjustments
- Global Positioning System (GPS)

Topic 7

The Solar System Up Close

- The Sun
- Traveling through The Solar System
- Data Cards for the Inner Planets
- Data Cards for the Outer Planets
- Exploring the Outer Planets
- Voyager Today

Topic 8

People In Space

- Breaking Free of Earth's Gravity
- The Apollo Program
- Meeting in Space
- The Space Shuttle
- The International Space Station