



wild dog

**Wild Dog Books
Teachers' Notes**

Going Supernova — Space
Exploration

Synopsis

Humans have always been fascinated by space, from early astronomers to the scientists of today. Over the last six decades our understanding of Earth, space and the Universe has greatly increased and resulted in some amazing feats, from launching a satellite into orbit and landing a person on the moon, to landing a rover on Mars and sending a probe out of our Solar System. Space exploration has led to some of humankind's greatest achievements, as well as technological breakthroughs that we use in our everyday lives. Learn all about space exploration, and the many ways it has benefitted life on Earth.

Writing style

Going Supernova–Space Exploration has been designed with the needs of early readers and reluctant readers in mind. Text is succinct and simple, with no more than a few sentences on each page. The large format images relate directly to the text, so young readers have multiple entry points to engaging with the information. There are also additional, bite-sized fact boxes that highlight information that a young reader would find fascinating. There is a glossary and index in the back of the book, which will aid young readers in developing the tools of research and analysis.

Photographic style

The *Going Supernova* series uses images that bring the viewer close to the subject that is being discussed. These images also have the advantage of being static, giving the reader the opportunity to explore the image and look at the subject matter and its features in detail. The images are also strongly composed and clearly printed with bright strong colours to increase the appeal to visual readers. Selected images have been taken from the GRiN (Great Images in NASA) database, which includes some of the most iconic pictures of space exploration available.

Study notes

Themes:

- The power and capability of human endeavour
- Humans as explorers
- The importance of science and technology
- How technology has advanced over time
- The vastness of space
- The Solar System
- The Universe
- What it would be like to live on other planets

Curriculum link: Literacy

Before reading *Going Supernova–Space Exploration*:

- Brainstorm what students know about space and space exploration. Can they name the objects that make up our Solar System? Can they name all the planets? Which objects/planets have humans travelled to? Have humans walked on these objects/planets? Can they name any significant moments in space exploration?

While reading *Going Supernova–Space Exploration*:

- Ask the students to take turns reading a paragraph aloud to the rest of the class. Where appropriate, ask the students what they think certain words may mean.

Curriculum Theme: Critical and Creative Thinking

After reading *Going Supernova–Space Exploration* ask the students the following questions:

- Why is it important that humans explore space?
- What objects are close to Earth i.e. who are our neighbours in space?
- What is the Solar System? What does it contain?
- Have there been any benefits from exploring space? If yes, what are they?
- Is it possible for humans to live in outer space?
- Is it possible for humans to live on other planets/objects aside from Earth? If not, why not?
- What is the future of space exploration?

Curriculum link: ICT Capability

After reading *Going Supernova–Space Exploration*:

- Organise the class into small groups, and ask them to access the following website: <http://www.nasa.gov/externalflash/nasacity/index2.htm>
- Making use of both Home and City, assign each group a different category e.g. *living room, kitchen, air travel* or *sports*.
- Each group should then explore their specific category and answer the following questions: What inventions/technologies were the results of space exploration? What led to their discovery? How are they used on Earth? Do the students make use of them? Do the students find them very useful?
- Ask each group to look for and print different images relating to each of the objects/technologies from their category i.e. for *kitchen* they would look for enriched baby food, a cordless vacuum, water purifiers, etc.
- Ask each group to create a poster collage. Ask them to attach the images they found and to write a short sentence explaining the relationship between the image and space exploration. All members of the group then take turns presenting their findings to the rest of the class.

Curriculum Theme: Personal and Social Capability

After reading *Going Supernova–Space Exploration*:

- Organise the class into two groups. In one group, ask the students to work as a team to construct a word finder puzzle. Ask each student to suggest an appropriate word about space exploration using words they have learnt from the book e.g. astronomer, satellite, rover etc. Once completed, print copies for the other group to complete.
- In the second group, students should work as a team to create a trivia bingo game. Ask each student to suggest a fact they found surprising or interesting. Combine these facts into a game for the whole class.

Find out more

- <http://www.nasa.gov/audience/forkids/kidsclub/flash/>
- <http://www.kidsastronomy.com/index.htm>

Marketing and promotion

Going Supernova–Space Exploration is the second title in the *Going Supernova* series. Past titles include *Going Supernova–The Solar System*, and upcoming titles will include *Going Supernova–Constellations* and *Going Supernova–Moons*.