



These notes are designed so that you can use them as a guide for teaching or alternatively you can give them to a group of students who will then complete the reading and activities independently or with a partner.

Each set of notes has:

- An activity grid
- The science content and knowledge
- The science vocabulary in the glossary
- The answers to the quiz
- Questions for each chapter to guide reading

There is more than one way to read this book. Here are four examples. No one way is better than the another. You may also like to use the graphic organizers to help guide your reading.

- You can skim through the pages of the entire book, stopping at and studying the diagrams. Then check the glossary to clarify your understanding of any unknown science-related words. This will give you the background science information before you read the story. Then go back and read the story.
- You can read the blurb on the back cover, then jump straight into reading Chapter 1. Read the story as if there were no diagrams or bolded words at all. When you have finished, go back and study the diagrams and glossary words to add to your knowledge.

- You can do a combination of both the above. Read the back cover blurb to find out the storyline. Study the initial diagrams. Then read the book, stopping to consolidate your understanding of the science concepts. Check out the bolded words in the glossary if you are unsure of their meaning.
- You can read the book chapter by chapter, stopping and discussing the story and the science as you go.

When you have finished reading, take the test. You should get six out of six. If you aren't sure of an answer, follow the quiz clues at the end of the book.

Now do one or both of the activities. When you have finished these, complete the black line master activities.

Book Title	Book Activity 1	Book Activity 2	Graphic Organiser 1	Graphic Organiser 2	Black Line Master 1	Black Line Master 2	Black Line Master 3
Crash Landing	Comprehension Literal	Science Experiment	Comprehension Inferential	Science Inquiry	Literacy Vocabulary	Multiple Intelligence Visual Spatial	Values Responsibility
Futuristic Park	Comprehension Inferential	Science Experiment	Comprehension Literal	Science Inquiry	Literacy Vocabulary	Multiple Intelligence Visual Spatial	Values Leadership
Incredible Amazon Adventure	Comprehension Inferential	Science Inquiry	Comprehension Literal	Science Inquiry	Comprehension Inferential	Multiple Intelligence Musical	Values Responsibility
The Spooky Man Upstairs	Comprehension Inferential	Science Experiment	Comprehension Literal	Science Inquiry	Literacy Vocabulary	Multiple Intelligence Bodily Kinaesthetic	Values Respect
The Miners and the Morkorth	Comprehension Inferential	Science Inquiry	Comprehension Literal	Science Inquiry	Literacy Vocabulary	Multiple Intelligence Linguistic	Values Responsibility
The Final Wave Goodbye	Multiple Intelligence Interpersonal	Science Experiment	Comprehension Inferential	Science Inquiry	Comprehension Inferential	Comprehension Literal	Values Respect for Others
Secrets of the Sky	Comprehension Inferential	Science Inquiry	Comprehension Literal	Science Inquiry	Literacy Vocabulary	Multiple Intelligence Logical	Values Rights of Others
Fight or Flight	Comprehension Inferential	Science Inquiry	Literacy Vocabulary	Science Inquiry	Comprehension Literal	Multiple Intelligence Visual Spatial	Values Doing Your Best
Dramatic Discovery	Comprehension Inferential	Science History	Comprehension Literal	Science Inquiry	Literacy Vocabulary	Multiple Intelligence Linguistic	Values Tolerance
Beat the Buzzer	Comprehension Inferential	Science Inquiry	Comprehension Literal	Science Inquiry	Science Vocabulary	Multiple Intelligence Interpersonal	Values Honesty
Deadly Space Race	Comprehension Literal	Science Inquiry	Literacy Vocabulary	Science Inquiry	Comprehension Inferential	Multiple Intelligence Visual Spatial	Values Doing Your Best
Saving the Sun	Values Integrity & Trustworthiness	Science Experiment	Comprehension Inferential	Science Inquiry	Comprehension Literal	Multiple Intelligence Logical	Comprehension Inferential

Secrets of the Sky

Science Content and Knowledge:
Earth Science: Telescope and Light
Level: Upper
Genre: Historical Fiction
Reading age: 11.1 years

Science Vocabulary

asteroids	magnification
astronomers	meteorites
axis	Milky Way
black hole	navigation
concave	nova
convex	orbit
eclipse	phases
ellipse	planetoids
focal distances	refract
focal point	solar system
lenses	supernova

Quiz Answers

Question 1:

Astronomer

Question 2:

Concave – bends light inwards, is thinner at the centre than the edges

Convex – bends light outwards, is thicker at the centre than the edges

Question 3:

Point at which rays of light meet

Question 4:

Ellipse – a squashed circle/oval shape

Question 5:

Eliipse – an oval shape

Eclipse – the passing from sight of one object through the shadow of another

Question 6:

When light hits new matter at an angle, there is a change in speed, causing the light to bend or refract.

Study Guide

Prologue

What is a prologue? What does it tell the reader? Read the prologue and jot down any important notes you find about the story.

Chapter 1 – The Beginning

Chapter 1 sets the scene and introduces the main character. Read the chapter to find out the time, place and setting of the story.

Chapter 2 – An Idea Forms

Given what you have read in chapter 1 and what background knowledge you may have about Galileo, what do you think Galileo's "idea" might be? Jot the "idea" down and read the chapter to see if you are correct.

Chapter 3 – The Looker

What do you think Galileo has invented? What do you think Galileo could discover with his invention? Read the chapter to find out.

Chapter 4 – A Dangerous Discovery

Given the era the story is set in and what you have read so far, why do you think Galileo's discovery could be dangerous. Read Chapter 4 to find out how Galileo could make his own situation worse.

Chapter 5 – The Final Years

How do you think the story will end? Think back to the prologue. Relate the information of the story and the prologue.

Epilogue

An epilogue is a concluding part of the story. It can be fiction or non fiction. Why do you think the author included an epilogue in the story?

Secrets of the Sky

Name _____

- Comprehension – Literal

As you read, jot down what you learn about Galileo Galilei.

His younger years	
His interests	
His family	
Things he discovers	



Graphic Organizer 2 – Science

Secrets of the Sky

Name _____

- Science Inquiry

Fill out Column 1 before you start reading.

Fill out Column 2 as you read.

Fill out Column 3 after you have taken the test.

Fill out Column 4 when you have completed all the activities.

What I already know about light and telescopes	What I think I will learn as I read this book	What I found out from reading the book	Questions about light and telescopes that I still have unanswered



Secrets of the Sky

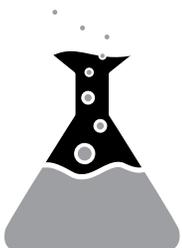
Name _____

- Vocabulary

Write down any words you did not know about in the story. Research the meaning of the words and write a paragraph containing all the words.

List words

Write your paragraph here:



Secrets of the Sky

Name _____

- Logical Intelligence

Galileo Galilei was a famous astronomer. Find out about another famous astronomer and produce a timeline of their life and achievements like the one on page 62 and 63.

Choose from the following astronomers:

Edmund Halley, Maria Mitchell, Johannes Kepler, Tycho Brake

Timeline of _____



Secrets of the Sky

Name _____

- Rights Of Others

Should Galileo have been imprisoned? Argue for and against Galileo being imprisoned. Explain your reasoning.

Reasons...



Galileo should be sent to prison.



Reasons...

