



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

The Miners and the Morkoths

Science Content and Knowledge:

Physical Science: Fossil Fuels

Level: Upper

Genre: Fantasy

Reading age: 10.9 years

Science Vocabulary

atoms	molecules
biomass	natural gas
carbon dioxide	non-renewable resource
coal	ocean thermal energy conversion
environment	petroleum
fossil fuels	renewable resources
geothermal energy	solar energy
global warming	tidal energy
hydroelectric energy	
hydrogen	

Quiz Answers

Question 1:

Fuels formed in the earth from the remains of organisms

Question 2:

Manufacturing of steel, producing chemicals by producing heat to make medicines, paints and plastics

Question 3:

Hydroelectric energy, tidal energy, geothermal energy, Wind energy, Solar energy

Question 4:

Heated water rises to Earth's surface, turning to steam that turns turbines.

Question 5:

Create pollution

Question 6:

Burning fossil fuels produces carbon dioxide in the atmosphere. Carbon dioxide traps heat in the atmosphere, heating up the planet, causing global warming.

Study Guide

Chapter 1 – Under the Sea

Read Chapter 1 to find out who the main characters are, their relationship with each other and where the story is set.

Chapter 2 – Shaking Ground

Chapter 2 provides the problem in the story. Given what you know about the setting of the story, what kinds of things could go wrong in an aquatic mine? Predict what the problem could be for the characters. Use the front cover illustration and the back cover blurb for additional clues. Read the chapter to see if your predictions were right.

Chapter 3 – Meeting the Morkoths

From what you have read about the Morkoths in Chapter 2, who do you think they are and what do you think they are like? Use the setting of the story as a clue to finding out about them. Jot down some ideas. After you have read the chapter think back to your predictions and tick the ones that were right.

Chapter 4 – Underground Adventures

How do you think the family will escape? Think about the setting of the story, and other problems they could run into. Jot down a few ideas. Read the chapter to see if you were right.

Chapter 5 – No Easy Way Out

How do you think the story will end? Will the family be able to get out? Will they be saved?

Graphic Organizer 1– Literacy

The Miners and the Morkoths

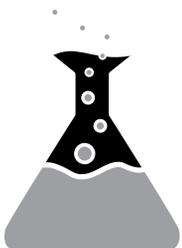
Name _____

- Comprehension – Literal

As you read, find out who the characters in the story are.

List their names below and a little bit of information about them.

Character's name	Information about them



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Graphic Organizer 2 – Science

The Miners and the Morkoths

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 energy	What I think I will learn as I read this book	What I found out from reading the book	Questions about energy that I still have unanswered



The Miners and the Morkoths **Name** _____

- Vocabulary

Read the following sentence and answer the questions below.

Chapter 3:

When the Morkoth spoke, we just stood there like galahs, with mouths open as if we were trying to catch flies.

1. Explain what a simile is using the example in this sentence.

2. What is a galah? What does it mean in this sentence?

3. Do you think someone not from Australia would know what this means? Why?

4 Re-write this sentence to explain simply what it means.



BLM 2 – Multiple Intelligences

The Miners and the Morkoths

Name _____

- Linguistic Intelligence

Write a story about meeting a group of creatures in the middle of Earth. Use the story plan below to help organise your story. Once you have finished the story plan start writing the story on the back of this BLM.

Characters	Setting
Problem	
Main events in the story	
Solution	



The Miners and the Morkoths **Name** _____

- Responsibility

The Morkoths believe that humans are destroying Earth by burning fossil fuels and other non-renewable resources. Decide whether you believe renewable energy is much more effective and better for the environment than non renewable energy. Write 3 reasons why you believe this. Use evidence from the book to support your argument.

Renewable energy is much more effective and better for the environment than non renewable energy

Circle one. AGREE DISAGREE

Reason 1:

Reason 2:

Reason 3:

