



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 |

Futuristic Park

Science Content and Knowledge:
 Physical Science: Force and Motion
Level: Upper
Genre: Fantasy
Reading age: 10.6 years

Science Vocabulary

| | |
|--------------------------|------------------|
| acceleration | mass |
| action force | momentum |
| axis | motion |
| conservation of momentum | physics |
| external force | potential energy |
| force | reaction force |
| gravity | simulation |
| inertia | speed |
| kinetic energy | velocity |
| | weight |

Quiz Answers

Question 1:

A body resting remains at rest until a force changes it. A body in move in the same direction at the same speed until a force changes it.

When in a roller-coaster, a body will remain at rest until the roller-coaster accelerates. The back of the seat forces the body to go with the roller-coaster. When the roller-coaster stops the seat belt forces the body to stop.

Question 2:

Two bumper cars colliding will push them off in the opposite direction. The bigger bumper car will bump the smaller bumper car further.

Question 3:

A roller-coaster gains kinetic energy as it accelerates and moves down towards the bottom of a track. The roller-coaster uses the speed gained (kinetic energy) to zoom up the hill of the roller coaster track. As the roller-coaster slows down, kinetic energy is lost. When the roller coaster stops, it has lost its kinetic energy.

Question 4:

Bodies in motion keep moving as long as they are not affected by an external force.

Question 5:

The greater the mass of an object, the greater the amount of force needed.

Question 6:

Momentum of an object = mass x velocity

Study Guide

Chapter 1 – Cool School

What do you think would make a cool school? What special activities or things would make it cool? Write of list of these. Read chapter 1 and find out why the characters think theirs is a cool school. See if you have the same idea.

Chapter 2 – Space Fleet Captain

Given the information Mr Harrison has given his students about the topic they are studying, where do you think the class is going for their trip? Use the title of the chapter, the cover illustration and the back cover blurb to help you with your prediction.

Chapter 3 – Aliens On Board

Given what has happened to the ship in Chapter 2, jot down all the things you can think of that might happen if the aliens enter the warship. What problems could it cause for the Captain? How will he deal with the problems?

Chapter 4 – Attack of the Paint Bombs

Read Chapter 4 to find out what sort of solutions the Captain and his fleet come up with to sort out the aliens. If the title suggests a solution to you jot it down. If you know of a solution already, jot that down, too.

Chapter 5 – Surrender

How do you think the story will end? Who do you think will surrender? Why will one team have to surrender? Read the chapter to find out.

Graphic Organizer 1– Literacy

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Name _____

- Comprehension – Literal

As you read the story, complete the story map.

Characters

Setting

Problem

Important events

Solution



Graphic Organizer 2 – Science

Futuristic Park

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 force and motion | What I think I will learn as I read this book | What I found out from reading the book | Questions about force and motion that I still have unanswered |
|--|---|--|---|
| | | | |



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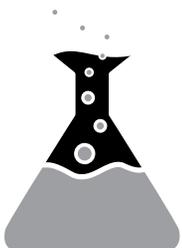
Name _____

- Vocabulary

Imagine you are a space fleet commander. Write a story about a battle scene with aliens. The story must include the following words:

frantically, saboteurs, vanquished, annihilated, frightening

Write your story here.



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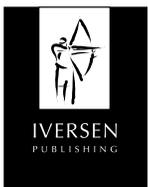
Name _____

- Visual Spatial Intelligence

Look at pages 4–7. Refer also the explanations about Newton’s laws of motion. Design a test, different to that in the book, to explain one of Newton’s laws. Ask your teacher for help in gathering equipment to demonstrate your design to the class.

Newton’s Law:

Draw your design here.



Futuristic Park

Name _____

- Leadership

In the story Aiden is given the job of commander of the ship. Do you think Aiden was a good leader? List five reasons why he was or wasn't a good leader.

Reason 1:

Reason 2:

Reason 3:

Reason 4:

Reason 5:

What qualities make a good leader?

