**Signs of Life**

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| Level | M |
| Content Area | Science |
| Reading Focus | Students will learn use a variety of comprehension strategies to Monitor Comprehension and Repair Understanding as they read, think, talk and write in response to the text. |
| Text Type | Informational |
| Academic Vocabulary | direction, distance, energy, gas, hill, light, moon, mountain, night, ocean, past, radio, rock, scientist, sky, soil, star, technology, temperature, travel, universe, water, year |

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| **Topic Talk** | * Ask: “Do you think there are aliens out in space? Why or why not?” Have students think, pair, share, and then choose some students to share their ideas. * Read the title and the blurb aloud, and look closely at the cover image. * Have students make a prediction from the cover and title about what the book will be about. Then, ask: “What clues on the cover helped you make your prediction?” Ask some students to share their ideas. * Ask: “What type of book do you think this is? Science, Social Studies, Math, or English Language Arts?” Have some students share their ideas, and ask why they thought that. * Explain that this book is most likely to be a Science book, and discuss what reading challenges there might be (e.g. diagrams, technical vocabulary, scientific concepts). |
| **Contents** | * Turn to the contents page, and read the titles of the chapters aloud. * Have students think, pair, share what new things they have discovered about the book from the chapter titles. * Ask: “What questions have you thought of from reading the chapter titles?” * Introduce students to “Nat the Ant” at the bottom of the page and read the speech bubble aloud. |
| **Opening Chapters** | * Read the chapter 1 title and page 2 aloud. * Have students think about the questions in the first paragraph. Explain that these are questions that people have been asking for many years to understand space better, and they have been trying to find the answers. * Discuss with students that Asking Questions is a useful skill when they don’t understand something, and that if they get stuck with their reading, then just like scientists, they can use the strategy of Asking Questions to try and figure out what they don’t understand yet. * Ask students to think, pair, share the questions *they* would ask about whether there is life in space. Encourage them to use when, where, who, what, why and how. * Read the chapter 2 title and page 3 together, pausing before the ant question. * Point out that the author hints that modern telescopes are better than the early telescopes, but doesn’t say why. Encourage students to use the strategy of Drawing Inferences to figure out from the text clues and their own knowledge the reasons why modern telescopes might be better now. * Discuss the students’ inferences as a group, and how they have increased their understanding by drawing inferences. * Have students think, pair, share about their answer to the ant question. * Read page 4 and 5 together. * Point out to students that the text on page 4 is a breakout – linked but separate to the main text. Explain that there is an icon and a sub-heading, in bold, that show this text is a breakout. * Ask students to look closely at the diagram and “read” the diagram and match it up to what the text is saying. * Discuss that using the strategy of Visualising to picture in your head what is happening in the diagram can help to understand the text better. * Have students close their eyes and visualise the way light moves through the telescope. * Read the chapter 3 title and pages 6 and 7 together. * Have students think, pair, share about connections they can make to “radio”. Have some students share their ideas with the class. * Ask: “How did Making Connections help you to understand the text better?” * Read page 8 together. * Have students think, pair, share to check their understanding by Determining the Important Idea on this page. * Next, ask students to work together to identify the supporting details to the important idea. * Discuss the important idea together, and ask: “How did finding the important idea help you to check your understanding of the text?” * Set a purpose for reading from chapter 4 to the end of the book:   + Try to notice when you are having trouble understanding what you are reading.   + If you don’t understand, think about which comprehension strategy might help you the most. Then, try to use the comprehension strategy to help “fix-up” your understanding.   + Pause at the ant questions to answer them, and read the Ant Tunnel carefully. |

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| As students read on independently, you can check in with them to discuss the ant questions, or personalise learning more by using the *Mini Lessons* and *Fluency, Language and Text Features* to scaffold parts of the book that might be unfamiliar or challenging.  Bring students together again for reflection using the “After Reading” prompts. |

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| **After Reading** | 1. Ask students to share any part of the text where they had difficulty with understanding. Discuss the problems and solutions together – perhaps re-reading, which comprehension strategies might be useful to try, or asking research questions to support understanding. 2. Have students think, pair, share about which comprehension strategy they found most useful as they were reading, and why. 3. As a group, discuss that being able to monitor reading (*how* you are reading, and recognising when you aren’t understanding as well) is really useful and it helps to know when you might need to use a strategy to help you better understand the text. | |
| **Writing Prompts** | *Fiction* | Imagine that you’re a scientist at NASA, and you are the first person to hear a message from aliens. What do they say? What do you do? |
| *Informational* | If you were going to send a message into space to try to contact other life forms, what would you say, and why? |
| *Letter writing* | Imagine that an alien spaceship has appeared! Write a letter to the aliens, telling them three important things they need to understand about life on Earth. |
| *Opinion* | Do you think it would be a good thing or a bad thing if people discovered aliens in our universe? Would we learn useful things? Would it be scary, or dangerous? |
| *Research* | Research what life needs to survive. Write an article on this, including the most important things life needs, and where scientists think we might find these things in space. |