

# **Comprehension Strategies**

# Non-Fiction Text - 'Night Light' (School Journal Level 2, May 2016)

Explain that sometimes the students might have chosen a non-fiction (factual) book to read over summer. When we read non-fiction books, we can still use the same strategies that we use to help us understand fiction books – i.e. reread; ask questions; make connections; predict; & summarising.

# Introduce 'Night Light'

Today I'm going to read a text called 'Night Light'. This is an article which will tell me lots of important facts about the moon. Each main fact is in a small section with a heading. It has photos, illustrations, and diagrams which will help me to better understand. At the end of the article is a Glossary (turn to the relevant page and show the students) which gives the meanings of some new words. If I don't understand the meaning of a new word, I can check it in the Glossary.

At night-time, I often look out the window and look up into the sky. I can see the moon. Sometimes I can see a very big, bright moon and sometimes I can only see a small part of the moon (making connections).

#### Page 2

Read the title and the three lines below aloud..." It's our moon and it's special." Think aloud asking questions e.g. I wonder why the moon is special? I wonder if it helps us in some way? (asking questions). Get ideas from the students.

Read the title of the first section aloud. 'It's near, but it's far'. Think aloud — 'How can something be near and far? I wonder why the author has chosen that as a heading? Read aloud the first section and then **summarise**. Okay so the author is comparing how far the earth is away from the moon with how far the earth is from the sun. The moon is a long way from the earth but it is a lot nearer to earth than the sun is.

Show the diagram of the jet-propelled skateboard to indicate how long it would take to get to the moon.

**On page 3**, I can see the heading 'It's big, but it's small'. I wonder if the author is going to compare the size of the moon. I'm going to look at the diagrams first to see if they help me work out what I will learn in this section.

In this diagram I can see New Zealand is lying on its side with a dotted line going across the circle (the moon) and some numbers written above it. I think the dotted line might tell me how far it is from one side of the moon to the other. Let's read the section and find out. Read aloud the first sentence. 'The moon's diameter is 3,476 kilometres'. I wonder what diameter means? I will check in the Glossary. Turn to the Glossary and read the meaning of diameter aloud. So, I was right the line going across tells us how far it is from one side of the circle/moon to the other side. It's the diameter of the moon.

Read the rest of that paragraph aloud. Okay so the moon's diameter is over 2 times the length of New Zealand but the moon is 4 times smaller than the earth. Compared to New Zealand the moon is big, but compared to the earth the moon is small and compared to the sun the moon is extremely small.

Read aloud the second paragraph on Gravity. Why would I be able to jump higher on the moon than I can on earth? I think gravity must keep me from jumping very high (making predictions)

Read the sidebar on Gravity aloud. Okay so it's gravity that stops me from floating. We can't see gravity that's why the author says it's invisible. Everything in our universe has gravity but the bigger the object is, the stronger it's gravity is. So, because the moon is small it doesn't have much gravity. (summarising).

#### Page 4

The heading on this page says, 'It's had a hard life'. I wonder what that means? If I turn that heading into a question it might help me to focus on the main ideas when I'm reading. So, my question is, "How has the moon had a hard life?"

Read the first paragraph aloud. So, 4 billion years ago another planet hit the earth and there was a big explosion. Lots of pieces of the earth broke off into space. Some of the pieces joined together to make the moon.

Read paragraph 2. After reading the paragraph, model using the Glossary to find out what a meteorite is. I don't really know what a meteorite is, so I will check in the Glossary. So little pieces of rock or metal have crashed into the moon. If we look at the photo on page 4 we can see the big holes or craters that are on the moon's surface. The meteorites made these.

#### Page 5

Look at the moon landing photo on page 5 and read the heading "Humans have been there. Turn it into a question, 'Where have humans been?' Get suggestions from students – talk about the photo and the moon landing and introduce the word astronauts and ask How did they get to the moon?

Discuss what the astronauts are wearing and why they might need special space suits and special space craft (predicting/asking questions)

Read the section aloud then **summarise.** So, 12 astronauts walked on the moon 40 to 50 years ago. They brought samples of rocks back to earth so that scientists could do experiments with them.

Look at the second photo and ask students what they think it might be. (predicting)

Read the first sentence of the second section. Ask 'We now know that there is no air or wind on the moon, so what does that tell us about the footprint in the photo?' (predicting) Read the second sentence aloud to confirm predictions.

Read aloud the heading of section 3, It's bright, but it's dark and ask 'How can the moon be bright but dark as well? I know that sometimes we can still see the moon in the daytime. So, it must be bright. I wonder why it is also dark? (asking questions)

Read through the section then **summarise** aloud. The moon is dark because it doesn't make its own light it just reflects light from the sun.

## Pages 6 and 7

Read the heading aloud, 'It's always the same, but it keeps changing'. I want to find out how the moon can always be the same but keep changing. I'm going to look at the diagram on pages 6 & 7 and see how it can help me understand the information in this section.

Go through the 4 phases of the moon as outlined in the diagram and talk through what each phase looks like. Then go back and read the first paragraph aloud. Stop and illustrate this by referring back to the diagram. Continue in this manner – **reading/rereading** a sentence and then illustrating it on the diagram until the section on page 7 is completed.

**Summarise aloud**. It takes the moon about 28 days to turn around completely on its own axis (an imaginary line which the moon spins around on) as well as go completely around the earth. So, there is always one side of the moon we can't see. When the moon is between the sun and earth we can't see it and that's called a new moon. It rises slowly each day and we can see a bit more of it each day. After 2 weeks we can see all of it. This is a full moon. It keeps moving and we see less and less of it until 2 weeks later and it is a new moon again.

#### Page 8

Point out the illustration of the children at the beach. I can see in the first illustration the children are making a big sandcastle and it has some water surrounding it. They look so happy with their sandcastle but in the second illustration they look sad and unhappy. What's happened? (making predictions). Get ideas from the students e.g. the water has come in and covered their sandcastle.

Ask, I wonder what made the water come in? Encourage ideas from students.

Read the heading aloud and then refer to the Glossary to find the meaning of tides. Then read the section aloud. **Summarise** Okay, as the moon goes around the earth its gravity pulls our oceans and this makes the oceans go in and out. These are called tides. Now I know why sometimes when I go to the beach in summer the water is a long way away and I can't go swimming (**making connections**). We get very large tides when the sun and the moon are in line because the gravity from both the sun and the moon work together and are extra strong.

Read heading 'There are lots of interesting stories about it'. I know that when I was a little girl I thought I could see a man's face in the moon. There are lots of stories about the moon. Do you know any moon stories? (making connections). Look at the illustration and discuss relevant story — made of cheese; full moon; wolves howling

Read through the section aloud.

## Page 9

Read heading aloud and turn it into a question and ask students i.e. 'It's leaving us' What will happen to earth if it leaves us? (making predictions)

Read through the section then **summarise**: So, the moon is very slowly moving away from earth. In a few billion years it will be just another star in the sky. When that happens I wonder if earth will be able to continue as it is now and if people will be able to live here? What do you think? Students give opinions and justify.

Possible follow up activity – watch a video/YouTube clip on the phases of the moon

Go to Building Science Concepts – <u>scienceonline.tki.org.nz</u> for ideas on how to physically illustrate how the moon rotates