

MARLOW BROWN

SCIENTIST IN THE MAKING

Written by Kesta Fleming

Illustrated by Marjory Gardner



Teacher Notes

written by
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About the series

The Marlow Brown books are suitable for girls and boys in middle to upper primary and are about a strong female character – Marlow Brown – exploring interests that don't fit the female stereotype and typically lead to professions with female under-representation. There's a focus on family relationships as well as STEM subjects in the school curriculum.

What makes this series interesting? Readers will find the humour and voice, plus Marlow's special relationship with her dog, Rockstar, particularly engaging. There is also a mix of 3rd and 1st person storytelling as we get sneak-peaks into Marlow's special notebooks. The 'Try It Yourself' sections at the back of each book as well as the factual 'A Note About ...' pages encourage readers to engage with the story beyond the final page. The line art illustrations are fun and reflect the characters and their traits. The illustrations also make reference to the cultural make-up of Marlow's family, which, coupled with the fact that there is no overt reference to this in the text, allows cultural diversity to be shown as a simple fact of life needing no comment.

About this book

Marlow Brown: Scientist in the Making is about a girl who dreams of being a scientist. Marlow, however, is not just a dreamer — she is a girl of action. When every experiment she conducts ends with Mum inventing more rules to reign in the chaos, Marlow must be creative to continue following her dream. In the end she discovers that her meticulous record keeping effort is the key to being allowed to continue conducting her home experiments and follow her dream of being a scientist like her eccentric Uncle Q.

About the author

[Kesta Fleming](#) is a children's writer and poet. She was born in England but grew up in the Adelaide Hills in a house full of books, bells and music. With a love of stories and a fascination for words she began writing when young. In addition to *Marlow Brown*, she has had numerous poems, plays, articles and short stories published in *The School Magazine* and in anthologies. Kesta is a former teacher and now divides her time between writing for children and her therapeutic work helping people manage stress and anxiety. She lives in Melbourne with her husband, two teenagers and a Brittany Spaniel.

About the illustrator

[Marjory Gardner](#) is a freelance artist, illustrating mainly for children's books. She lives in Melbourne, Australia, with her partner and a Jack Russell terrier, who sometimes appears in her drawings. Marjory was born in Malaysia and came to Australia with her family to begin high school. Her favourite subject was Art. After studying Graphic Design at the Royal Melbourne Institute of Technology she worked at various design studios before deciding to go freelance, specialising in children's illustration. Marjory's work has appeared in trade and educational publications within Australia and internationally. She also illustrates for magazines, and has designed a range of greeting cards. She uses felt tipped pens, colour pencils, pen, brush and ink, and occasionally, collage.

Australian Curriculum Outcomes

This book is suited to: Stage 1 (more able independent readers & class novel studies) & Stage 2 (shared reading & independent novel studies)

Key Learning Outcomes covered in the following areas:

English

Science

Critical and Creative thinking (General Capabilities)

Themes:

Family Relationships, Science, Resourcefulness, Record Keeping

Teaching and Learning Activities by Chapter

Chapter One

1. Draw a picture of Uncle Quentin's house through the eyes of Marlow or Rockstar. How might they see it differently?
2. What does Uncle Q look like? Draw your own image of him before you reach page 7, then compare to see how you 'heard' his description with how Marjory Gardner has drawn him.
3. Why did the beanstalks remind Marlow of Jack? Are there any other objects that remind you of fairy tales?
4. What is 'Gibberellic acid'? What can it be used for?

Chapter Two

1. Why does the world need creative thinkers?
2. Why do you think Dad does not approve of Uncle Quentin? How are these two characters different and similar?
3. What is an after school ramble? Do you ever go on 'rambles'?
4. What does it mean that Uncle Quentin has a 'humble-jumble' of books?

Chapter Three

1. How do real scientists write up their experiments? Why do they need to follow this structure?
2. Do you think scientists draw pictures when they write up science experiments?
3. If you could choose to investigate something, what would you like to investigate? Read over the different hypotheses that Marlow wrote & decide on some for yourself.
4. Make a prediction - what is Marlow going to do with the jar and the spoon?

Chapter Four

1. Write a short passage about how the ants are feeling in the cake tin before and after Mum discovers them.
2. Why did Mum's look soften slightly?

3. Which hypothesis do you think Marlow was testing out?
4. What was the difference between how Marlow got rid of the ants compared to what her mum did?
5. Why might rules be important in any science experiment?

Chapter Five

1. If Marlow were to try this experiment again, what do you think she would have to change?
2. What do the words 'perky' and 'depressed' mean?
3. What can be impenetrable? What must be impenetrable in the world?
4. Why would an ant choose fruit cake over dog food and carrots?

Chapter Six

1. Go back to some of the hypotheses that Marlow wrote down in Chapter 2. What do you think the outcome would be for some of these? Have a guess or give some of these experiments a go yourself using Marlow's method of writing up the experiment. If you can't do these, create one yourself.
2. Make a prediction as to how you think Marlow will teach Rockstar how to play 'pass the parcel'
3. What does it mean: 'Rockstar thumped his tail approvingly'? What else do dogs do that tell us something?

Chapter Seven

1. What does the word 'trainer' mean? Explore the different meanings of this word. What type of word is this called that has different meanings?
2. Why is Marlow's conclusion that dogs are intelligent enough to play pass the parcel & kids are not?
3. When you saw the illustration in this chapter, is this what you imagined the party to look like? Discuss & compare how we each imagine scenes differently.

Chapter Eight

1. What is a 'mini-copter'?
2. What does 'deftly' mean? 'Slump'? Confined space?
3. Why do you think Marlow's parents are making more rules?
4. List the rules that Marlow now has to follow.

5. Why does Marlow need to now think more creatively?

Chapter Nine

1. What is an omen?
2. Make a prediction about what is going to happen with the roses.
3. IS there a rose called 'Blue Moon'? What does it look like?
4. What if Marlow didn't have Rockstar as a pet? Do you think this story would have different outcomes?

Chapter Ten

1. Conduct the flower or celery in coloured water experiment yourself. (See page 68 to help you out.) Record the changes over a period of time and draw your own conclusions.
2. Why do people give each other flowers? List all the different occasions you might give or get flowers.
3. What does 'Mum wrung her hands. Rockstar whined mournfully.' mean?
4. Where did the meaning 'once in a blue moon' come from?
5. Do you think Mum was fair in banning Marlow from doing experiments? Explore the reasons for and against this decision.
6. Why do you think the illustration of Mum was given a whole page?

Chapter Eleven

1. What does it mean that Marlow and Rockstar were a 'picture of misery'?
2. How is it important to Marlow that Uncle Q has turned up?
3. Predict what you think Marlow will do with the Gibberellic acid.

Chapter Twelve

1. Why was Uncle Q oblivious to Mum and Dad's looks at the dinner table?
2. How do you think Dad feels about Marlow being able to experiment one last time?
3. Should Marlow's parents make more rules before allowing Marlow to start experimenting again?
4. The chapter finishes with: 'Absolutely nothing could go wrong. Could it ...?' What is this telling us?
5. Write the next chapter (or next few) as to how you think Marlow might use the Gibberellic Acid. (The illustration might inspire you!)

Big Thinking Activities

Character Study #1 — Marlow, Dad, Mum, Uncle Quentin, Rockstar

This activity should be started in Chapter One and then added to as the story progresses. Look at how the character changes throughout the book and also how the reader's perspective of the character changes.

Facts – What do you know about the character? <i>E.g. Who is Marlow? What does she like? Dislikes? What is she good at?</i>	Quotes – What does the character say? <i>E.g. Choose something that Marlow said that helped you to understand her more. Explain why you like this quote.</i>
Actions – What does the character actually do? <i>E.g. What does she do in this chapter?</i>	Getting inside the character's head – Write down some of the character's thoughts and feelings.

Character Study #2

If you were to meet one of these characters, which character do you think you would get along with best and why?

Character Study #3

In many stories we can often categorise the characters according to their personality traits. It's often their different personality traits that create the intrigue, problems & excitement in a story.

E.g.

- The Big Bad Wolf is often shown as mean, not very smart yet cunning.
- Princesses are often shown as helpless & kind.

Look at the categories below.

Do you think any of the characters in 'Marlow Brown' fall into these categories? Some characters may fall into more than one category. Discuss & compare with a friend why you have placed the characters into these boxes.

High bravery	Grumpy	Lovable
Easily scared	Happy	Not easy to like
Smart	Neat	Organised
Not very smart	Messy	Disorganised
Relaxed	Up-tight	Can you think of your own?

Science Investigations — Plan a Cass Science Investigation Month

Everyone in your class is a scientist! Spend some time in class brainstorming all of the different things you would each like to know more about in the world, then either as individuals or in pairs, come up with an investigation you are going to take part in over a few weeks.

Use Marlow's structure of how she writes up her experiments. Present your findings to the class to not only learn new things but also discover different ways to conduct investigations.

What If ...

What if we didn't have scientists?

What if we were not allowed to investigate?

Are there some things we should not investigate?

What if children could conduct experiments every week in school science lessons?

Illustrations

Marjory Gardner illustrates different parts of the story throughout this novel. Do you think illustrations are important in books for younger children? Do you think they help or hinder your imagination as you read the story?

If you were in charge of illustrating this book, think about which parts you would illustrate and draw one illustration that you think would help. (Remember illustrations in books can also be maps & diagrams.)

Additional Activities

Try out some of the experiments at [The Experimenting Spot](#) on Kesta Fleming's website.

Submit an experiment of your own for inclusion at 'The Experimenting Spot'. This could be one of your own design, or a well-known favourite that is not already listed. Make sure your instructions are clear, easy to follow and include your hypothesis, equipment and method.