Teacher Notes

Themes

- Weather and clouds
- Perspective
- Observation and wonder

Key learning outcomes

- Explore how weather affects the environment and our daily lives
- Identify different types of clouds and their features
- Understand emotional and physical perspectives
- Build observation and mindfulness skills through natural phenomena

Key curriculum areas

- **Science:** Science Understanding (Earth and space sciences); Science Inquiry; Science as a Human Endeavour
- **English:** Language; Literature; Literacy
- **HASS:** Geography
- **The Arts:** Visual Arts

Publication details

The World from Here

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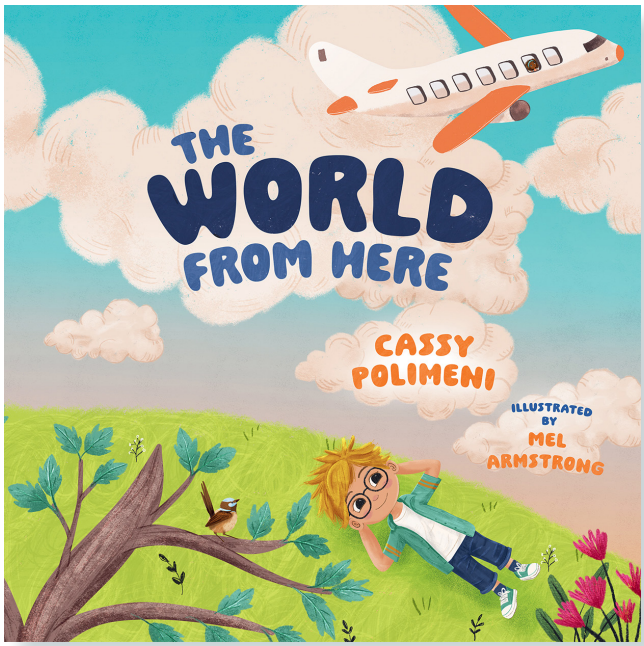

The World from Here

Cassy Polimeni and Mel Armstrong

About the book

Do you ever look for shapes in the clouds?

Milo lies in the grass watching cottony cumulus clouds transform into animals. Maya looks out a plane window and marvels at the sky outside and the shapes countries make below. Through their different perspectives, Milo and Maya remind us that there are countless ways to experience the world.

The World from Here explores the fascinating areas of nephology (the study of clouds), meteorology and geography. These sciences help us understand our world and the wonders that make living here on Earth so rewarding.

Recommended for

Readers aged 5 to 9 (Years 1 to 4)

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About the author and illustrator

Cassy Polimeni is a children's author and freelance editor whose stories celebrate our connection with nature and the environment, and the relationship between science and wonder. She lives and works on Bunurong Country.

Mel Armstrong is an illustrator from New Zealand. She blends digital and traditional techniques to create charming children's books, drawing inspiration from nature and her lively home life.

Pre-reading questions or activities

1. What do you see when you look up at the sky during the day? What about at night?
2. Have you ever looked up at the clouds and imagined shapes or animals in them? What did you see?

Discussion questions

Science

1. What are clouds made of?

   Tiny water droplets or ice crystals that form when the air becomes saturated.
2. Why do some clouds bring rain or storms, while others don't?

   Some clouds produce rain because they are heavy and full of water, while others are too light and thin:

   Cumulonimbus – big, tall storm clouds → heavy rain and thunder.

   Nimbostratus – dark, spread-out clouds → steady rain.

   Cumulus – fluffy, white clouds → usually no rain (unless they grow bigger).

   Cirrus – wispy, high clouds → no rain.

3. How does weather affect people, animals or plants? Does the weather ever affect what you do or how you feel?

   Weather can influence how animals move or find food, how plants grow, and even how people feel or what they wear and do. For example, after rain frogs become more active and mushrooms grow quickly. People might take shelter or even feel scared if it is a big storm.

4. What is lightning and how is it made?

   Lightning is a form of static electricity created when frozen raindrops inside storm clouds bump together and make electrical charges. Lightning happens when the static charge builds up so much in the sky that it has to discharge somewhere, either to the surface of the Earth or in the sky. Have you ever had a static shock from touching metal after walking on carpet? This is similar to how lightning works!

English

1. How does the story use descriptive language to show different perspectives?

   There are some great descriptions, and even similes in the text, which help us to imagine different ways to see things. For example:

   'Things look different from up here, with Earth spread out below like a giant quilt.'

   'Maya feels like she is stuck inside a bowl of jelly, or sailing on a stormy sea.'

HASS

1. What is Pangea, and why is it important?

   Pangea was a supercontinent that broke apart to form the continents we live on today. It shows how Earth has changed over time. For example, Australia used to be connected to Antarctica!

The Arts

1. Can you draw or paint a sky that changes from day to night? What colours and shapes would you use to show time and weather?

Activities

Science

So many clouds!

Learn more about how clouds are formed and their different shapes and names.

1. Lead a discussion about how clouds are formed, or have students write what they think.
2. Ask if anyone is able to draw a type of cloud they saw in *The World from Here* from memory.
3. Have students watch the video https://www.youtube.com/watch?v=jKBgoX1vGnE and then compare what they see to their previous answers for 1 and 2 above.

Sky watchers role-play

On a day where there are discernible clouds in the sky, head outside and get students to look up! Then ask students to pretend to be meteorologists and report on today's weather. They should describe the clouds and give imaginative weather forecasts.

Students can refer to pages 4–7 in the book to help them identify the types of clouds. The following website has some great information on clouds that can also help with identification: https://sciencenotes.org/types-of-clouds-and-how-to-recognize-them/

English

My weather diary

Have students keep a week-long weather diary. Each day, they are to draw the sky and describe how it looks and feels. Optional: They can use the worksheet on page 6 to record their observations.

Extension:

- Ask students to predict what the weather will be like and note this in their diary entries when they record their sky observations.
- Challenge students to name the types of clouds that they see in the sky.

Mindfulness and the senses

Lead students through the 5-4-3-2-1 senses activity (see pages 16–17 in *The World from Here*). Discuss how we can use our senses to feel calm in stormy weather, and how there could be other situations where this routine could help us to feel calm. Have students suggest times when they think this could help.

Consider making this a part of your class routine! It could work particularly well after recess or lunch to recentre your class and help them transition back into the classroom.

Visual Arts

Cloud shape art

Provide students with cotton balls, paper and glue. Ask them to make their own cloud animals or scenes and label the type of cloud it might be.

My weather diary

Name: _____

Day of the week	Weather in the morning (e.g. cloudy, raining, blue sky)	Drawing of the clouds	Cloud name
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Saturday			
Sunday			

The World from Here word search

Name: _____

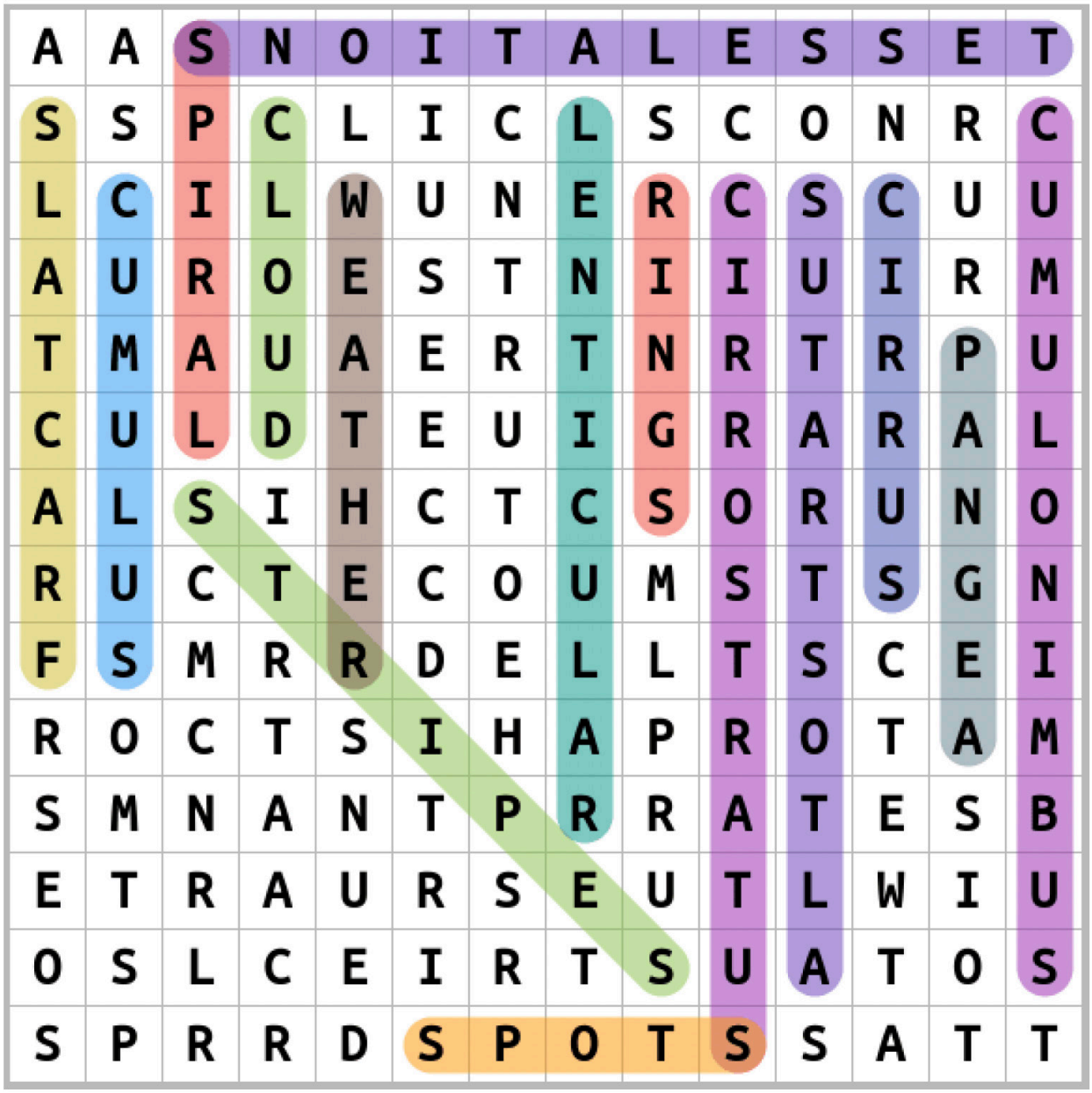
Find each word in the list on the right within the word search grid. Answers are on the next page.

A	A	S	N	O	I	T	A	L	E	S	S	E	T
S	S	P	C	L	I	C	L	S	C	O	N	R	C
L	C	I	L	W	U	N	E	R	C	S	C	U	U
A	U	R	O	E	S	T	N	I	I	U	I	R	M
T	M	A	U	A	E	R	T	N	R	T	R	P	U
C	U	L	D	T	E	U	I	G	R	A	R	A	L
A	L	S	I	H	C	T	C	S	O	R	U	N	O
R	U	C	T	E	C	O	U	M	S	T	S	G	N
F	S	M	R	R	D	E	L	L	T	S	C	E	I
R	O	C	T	S	I	H	A	P	R	O	T	A	M
S	M	N	A	N	T	P	R	R	A	T	E	S	B
E	T	R	A	U	R	S	E	U	T	L	W	I	U
O	S	L	C	E	I	R	T	S	U	A	T	O	S
S	P	R	R	D	S	P	O	T	S	S	A	T	T

STRIPES
CIRROSTRATUS
SPIRAL
ALTOSTRATUS
CUMULUS
CIRRUS
LENTICULAR
FRACTALS
SPOTS
WEATHER
PANGEA
CLOUD
CUMULONIMBUS
RINGS
TESSELATIONS

Teacher Notes

Word search answers:



A	A	S	N	O	I	T	A	L	E	S	S	E	T
S	S	P	C	L	I	C	L	S	C	O	N	R	C
L	C	I	L	W	U	N	E	R	C	S	C	U	U
A	U	R	O	E	S	T	N	I	I	U	I	R	M
T	M	A	U	A	E	R	T	N	R	T	R	P	U
C	U	L	D	T	E	U	I	G	R	A	R	A	L
A	L	S	I	H	C	T	C	S	O	R	U	N	O
R	U	C	T	E	C	O	U	M	S	T	S	G	N
F	S	M	R	R	D	E	L	L	T	S	C	E	I
R	O	C	T	S	I	H	A	P	R	O	T	A	M
S	M	N	A	N	T	P	R	R	A	T	E	S	B
E	T	R	A	U	R	S	E	U	T	L	W	I	U
O	S	L	C	E	I	R	T	S	U	A	T	O	S
S	P	R	R	D	S	P	O	T	S	S	A	T	T

Made using www.thewordsearch.com

Australian Curriculum Links (Version 9.0)

Year level	Learning area: Science	Other learning areas
Years 1/2	**Science Understanding: Earth and space sciences** • Describe daily and seasonal changes in the environment and explore how these changes affect everyday life (AC9S1U02) **Science Inquiry: Planning and conducting** • Make and record observations, including informal measurements, using digital tools as appropriate (AC9S2I03) **Science Inquiry: Communicating** • Write and create texts to communicate observations, findings and ideas, using everyday and scientific vocabulary (AC9S1I06)	**English: Language: Language for expressing and developing ideas** • Experiment with and begin to make conscious choices of vocabulary to suit the topic (AC9E2LA09) **English: Literacy: Creating texts** • Create and re-read to edit short written and/or multimodal texts to report on a topic, express an opinion or recount a real or imagined event, using grammatically correct simple sentences, some topic-specific vocabulary, sentence boundary punctuation and correct spelling of some one- and two-syllable words (AC9E1LY06) **HASS: Geography** • How places can be spatially represented in geographical divisions from local to regional to state/territory, and how people and places are interconnected across those scales (AC9HS2K03) **Visual Arts: Developing practices and skills** • Experiment and play with visual conventions, visual arts processes and materials (AC9AVA2D01)
Years 3/4	**Science Understanding: Earth and space science** • Identify sources of water and describe key processes in the water cycle, including movement of water through the sky, landscape and ocean; precipitation; evaporation; and condensation (AC9S4U02) **Science Inquiry: Questioning and predicting** • Pose questions to explore observed patterns and relationships and make predictions based on observations (AC9S3I01) **Science as a Human Endeavour: Nature and development of science** • Examine how people use data to develop scientific explanations (AC9S3H01)	**English: Literature: Creating literature** • Create and edit imaginative texts, using or adapting language features, characters, settings, plot structures and ideas encountered in literary texts (AC9E3LE05) **HASS: Geography** • The importance of environments, including natural vegetation and water sources, to people and animals in Australia and on another continent (AC9HS4K05) **Visual Arts: Creating and making** • Use visual conventions, visual arts processes and materials to create artworks that communicate ideas, perspectives and/or meaning (AC9AVA4C01)
All	**Cross-curriculum Priority: Sustainability** • Systems: All life forms, including human life, are connected through Earth's systems (geosphere, biosphere, hydrosphere and atmosphere) on which they depend for their wellbeing and survival (SS1)	

Related books from CSIRO Publishing

- *Look, See, Find Me* (https://www.publish.csiro.au/book/8211)
- *Our World Full of Wonder* (https://www.publish.csiro.au/book/8148)
- *Our World of Wild Wonders* (https://www.publish.csiro.au/book/8176)
- *Shine, Star, Shine!* (https://www.publish.csiro.au/book/8089)

For older readers:

- *Astronomy for Curious Kids: An illustrated introduction to the solar system, our galaxy, space travel—and more!* (https://www.publish.csiro.au/book/8163)
- *The Great Australian Science Book* (https://www.publish.csiro.au/book/8083)

Other CSIRO resources

CSIRO has developed and delivered a broad range of high-quality STEM education programs and initiatives for nearly 40 years. Our programs aim to inspire the pursuit of further STEM education among students and the community, to equip the emerging workforce with tomorrow's skill sets, and to strengthen collaboration between industry and classrooms across Australia. For more information visit: https://www.csiro.au/en/Education