

REZ ENERGY AGENTS TRAINING MANUAL



The National Theatre for Children

REZ ENERGY AGENTS

**CONFIDENTIAL:
FOR YOUR
EYES ONLY**

**INSIDE IS
EVERYTHING
YOU NEED TO
KNOW TO BE
AN ENERGY
AGENT!**

BROUGHT TO YOU BY



EnergyCo





EDUCATIONAL CONCEPTS:

- What is electricity and why we need it
- How is electricity created
- What is a Renewable Energy Zone (REZ)
- How YOU can be an Energy Agent!

Join **James Blonde**, **John Travoltage** and **Taylor Switch** in a fast-paced mission to stop the sneaky **Captain Catastrophe**! Along the way, you'll discover how electricity is made, how we use the sun and wind to create it, and why the Renewable Energy Zone (REZ) matters.

This *Training Manual* is your official guide to becoming a REZ Energy Agent, with fun facts, missions, and everything you need to know. Let's go! **Renewable is Doable!**



James Blonde



Taylor Switch



Agent Y



Captain Catastrophe



Wattson

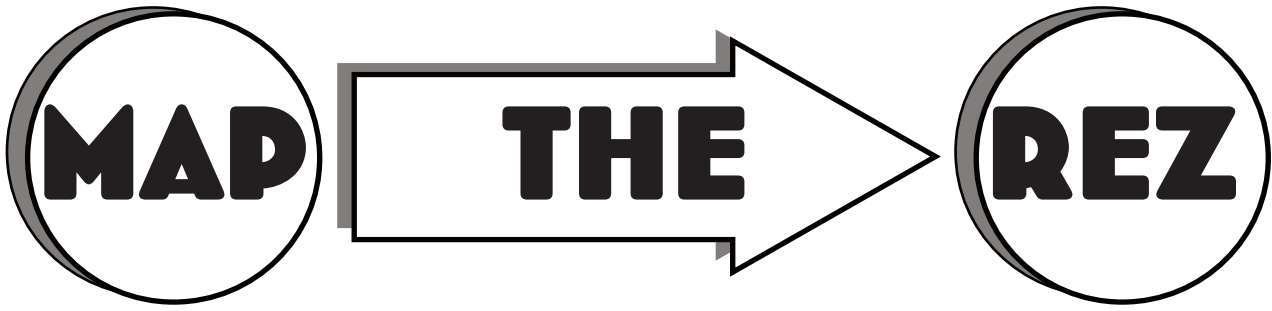


John Travoltage

WORDS TO KNOW

Battery Storage	A way to store electricity generated by a renewable source
Electricity	A type of energy that powers things like lights and devices
Energy	The ability to do work and make things move, or change
Environment	Everything around us that we need to keep healthy for all living things to survive
Natural Resource	Something found in the environment that can be used by people
Non-Renewable Resource	A natural resource that cannot be replaced once it's used, like coal
Renewable Energy	Energy that comes from natural resources that will not run out like wind, sun and running water
Renewable Energy Zone (REZ)	An area where renewable energy is created, stored, and sent through transmission lines to homes and businesses
Renewable Resource	A natural resource that won't run out, like sunlight and wind
Solar Power	Using the Sun's energy to create electricity
Transmission	Moving electricity from where it's created to where people use it, through power lines
Wind Power	Using wind to spin a turbine to create electricity

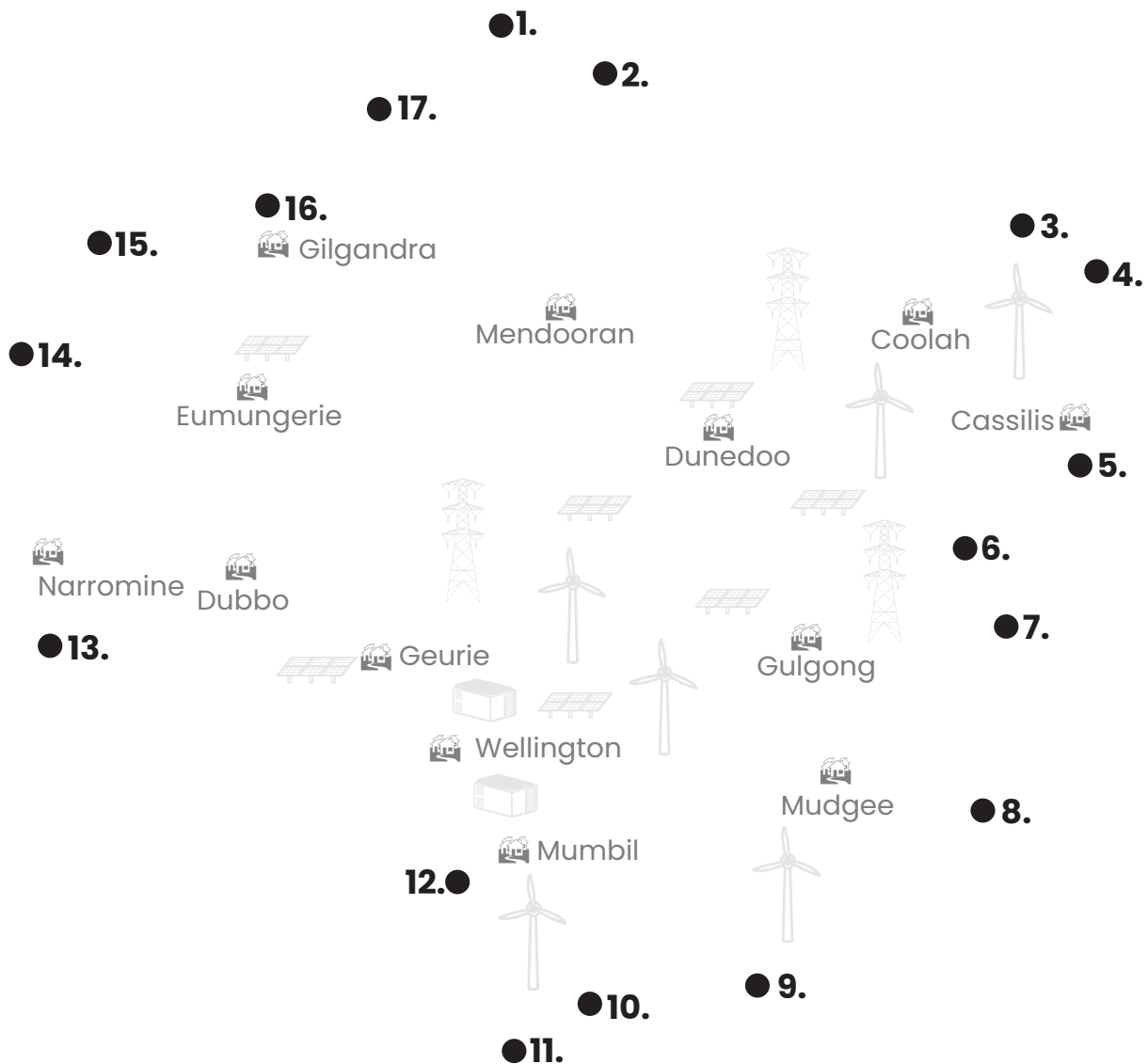
We acknowledge the Traditional Custodians of the land on which we work and live, the Wiradjuri, Wailwan and Kamilaroi peoples, and pay our respects to Elders past and present.



A Renewable Energy Zone, or REZ, is an area where solar and wind farms work together to create electricity. That electricity is stored in big batteries and is sent through transmission towers and powerlines to get it to where people need it.

The Central-West Orana REZ is our very own Renewable Energy Zone.

Connect the dots to draw a map of the Central-West Orana REZ.
When you are finished, draw a dot to show where your school is.



Discuss: How does the REZ help people in your community?

MINDFUL COLOURING

"WALKING WITH THE SUN AND WIND"

This artwork shows the strong connection First Nations people have with the Sun and the Wind. At the centre, the Sun gives light, energy and warmth as it is our guide through each day. Behind it, flowing shapes show the Wind as it moves across Country. The Wind brings change, carries stories, and clears the way forward.

Kangaroo tracks on each side show progress, movement, and travelling together into a cleaner, stronger future. On the outside, pathways remind us that people are always learning, growing, and walking in harmony with nature. This design is a reminder that the Sun and Wind are more than just weather, they are powerful teachers and part of our shared journey.

THE SUN AND THE WIND OUR GUIDES AND GIVERS

For First Nations people, the Sun and Wind are more than just parts of the natural world, they are our teachers, our life-givers, and our reminders of balance.

From the beginning, Aboriginal and Torres Strait Islander people have lived with deep respect for the rhythms of nature. Everything in the world is connected. The land, the waters, the sky, the animals, and us as people. Our Elders teach us that we are not above the land or the elements, but part of them. The Sun and the Wind each carry their own spirit, and we learn from them every day.



THE SUN

The Sun warms the earth and brings light to each new day. It gives energy to the plants, animals and people. Its heat is healing, and its light shows us the path forward. But the Sun can also burn if we don't show it respect. The Sun reminds us to share warmth, to lead with care, and to shine with purpose.



THE WIND

The Wind moves across Country in many ways, from softly to powerfully like a storm. It brings messages from other places, carries seeds, and clears the old to make way for the new. The Wind reminds us to breathe, to slow down and be present. It can be a calm friend or a fierce teacher. The Wind teaches us balance, from stillness and movement, to listening and speaking.

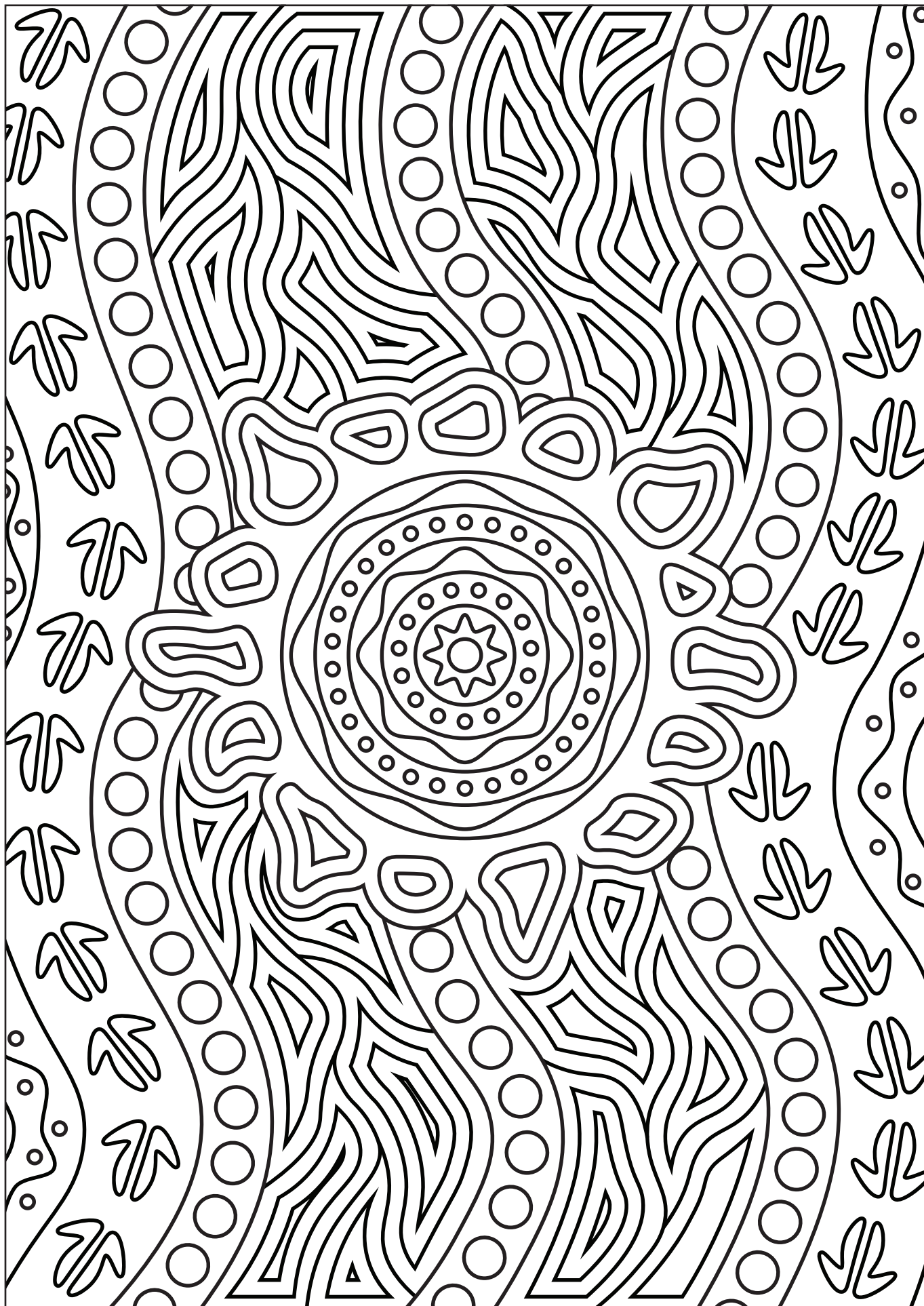
Our people have always known that the natural world provides what we need, if we respect it. Using the Sun and Wind to power our homes and schools is another way of listening to Country, of working with nature instead of against it. In everything we do, we must remember that we are part of a bigger story, one that includes the land, sky, and every living thing. The Sun and Wind are part of that story, just like we are.

Contributed by Mitchell Groat, Wiradjuri, Kamilaroi/Gamilaraay man.

Years: 1 - 6 • **Learning Areas:** Creative Arts, Science and Technology

Capabilities: Literacy, Intercultural understanding

Cross-Curriculum Priority: Aboriginal and Torres Strait Islander Histories and Cultures



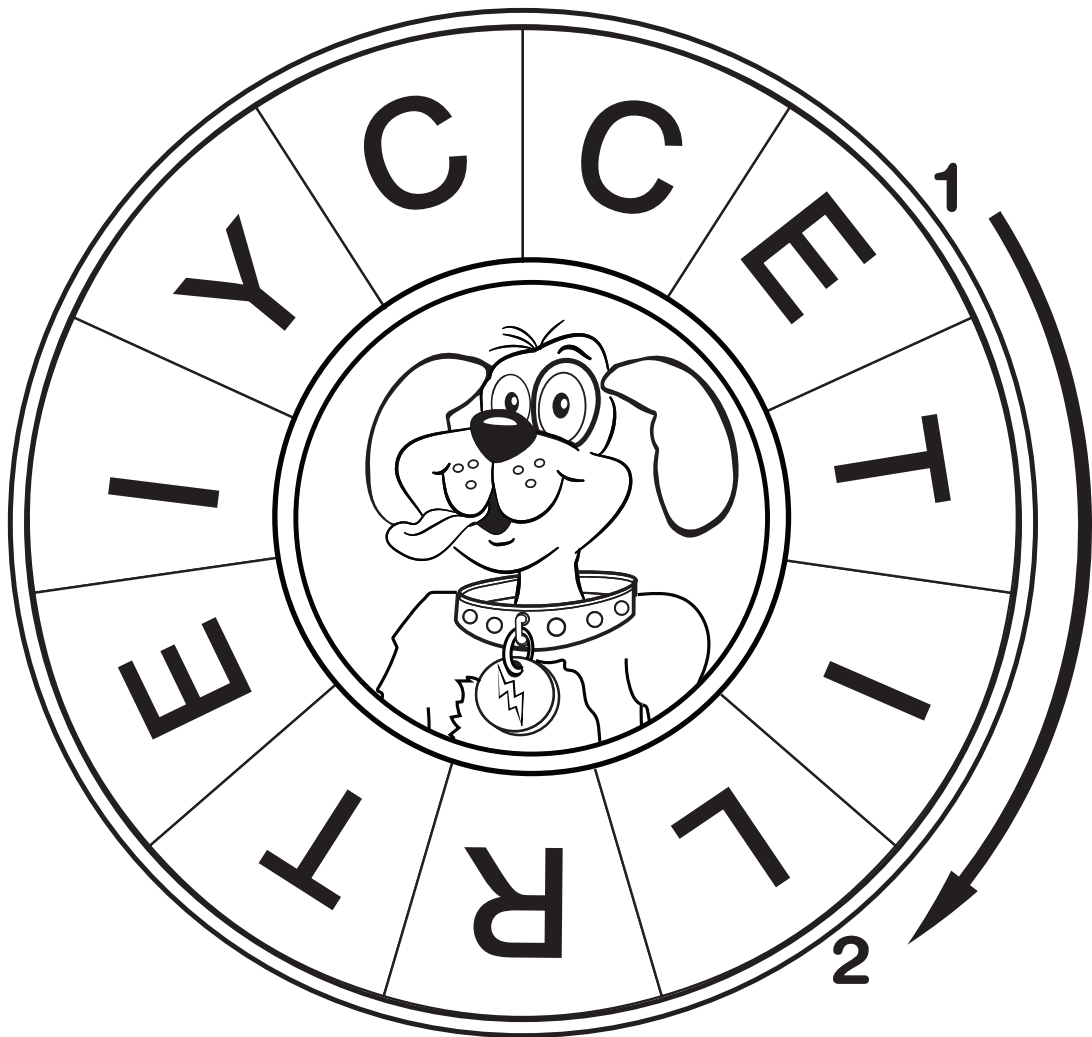
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FETCH THE WORD WITH WATTSON

Go around the frisbee and write down every third letter. The first two are already done for you.
Share the message with one other person.



WE USE

E L

1

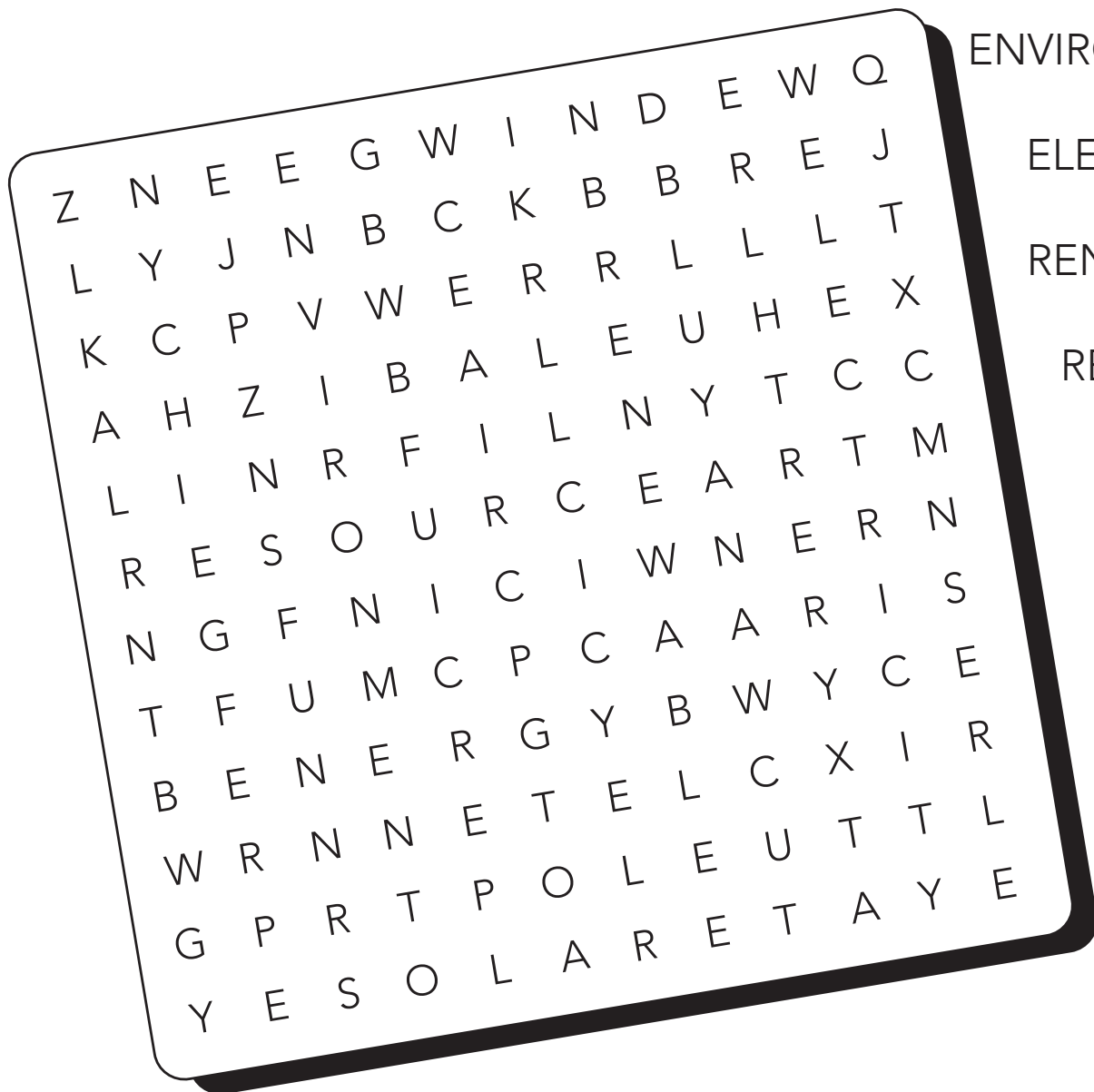
2

EVERY DAY.

AGENT Y'S WORD FIND



Help Agent Y find the hidden words.
Do you remember what the words mean?
Review their meanings on the inside front cover.



ENVIRONMENT

ELECTRICITY

RENEWABLE

RESOURCE

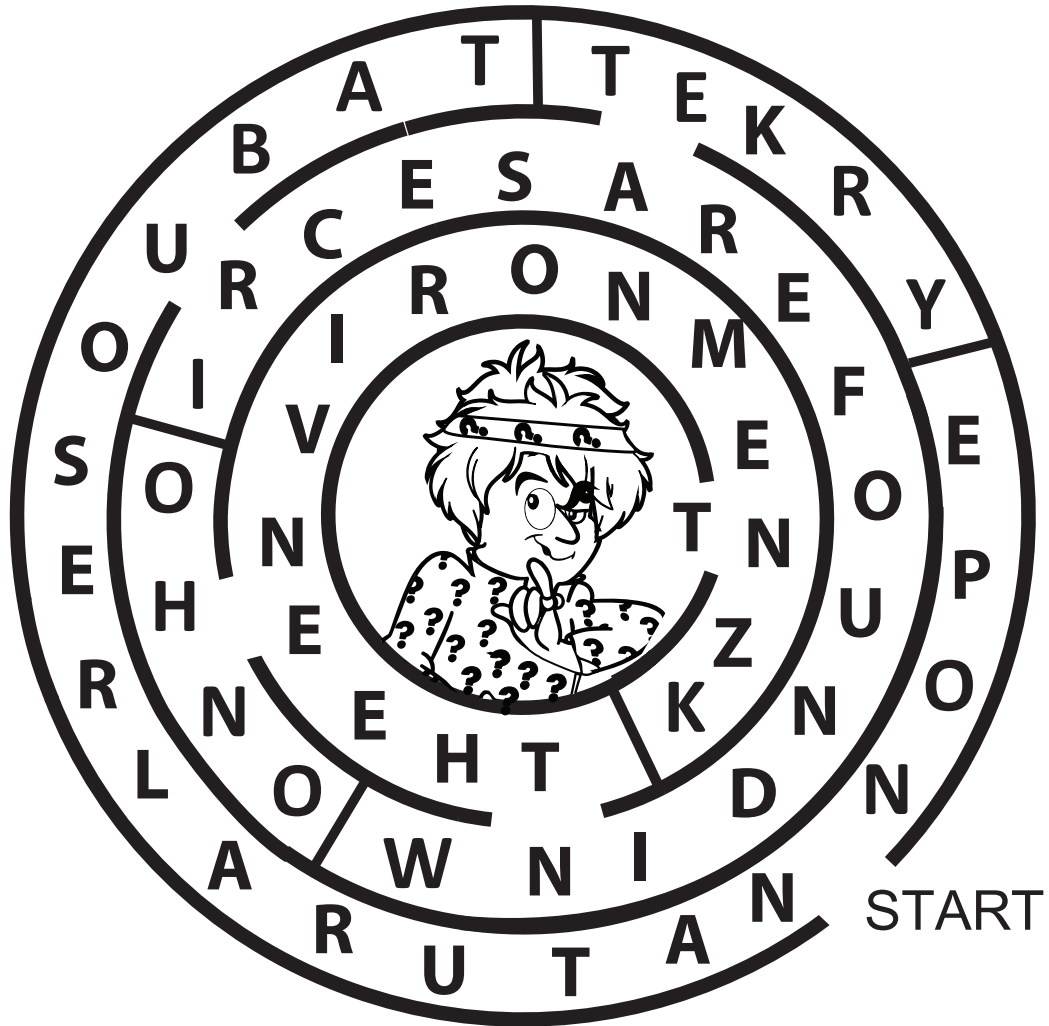
ENERGY

SOLAR

WIND

SUPER MAZE

Find your way through the maze to catch Captain Catastrophe!
Write the letters in the order they appear on the lines below.
Read the sentence out loud once you've completed it.



_____	_____
_____	_____
_____	_____

TAYLOR SWITCH'S MATHS MESSAGE

Taylor Switch has hidden a secret message!

Solve the maths problems, then use your answers to fill in the missing words and reveal the message!

Read the message out loud once you've completed it.

$45 - 30 = \boxed{} \text{ RENEWABLE}$

$64 \div 8 = \boxed{} \text{ AND}$

$2 \times 9 = \boxed{} \text{ SUN}$

$120 \div 12 = \boxed{} \text{ THE}$



$36 \div 9 = \boxed{} \text{ WIND}$

$25 \times 4 = \boxed{} \text{ ARE}$

$50 \div 10 = \boxed{} \text{ WATER}$

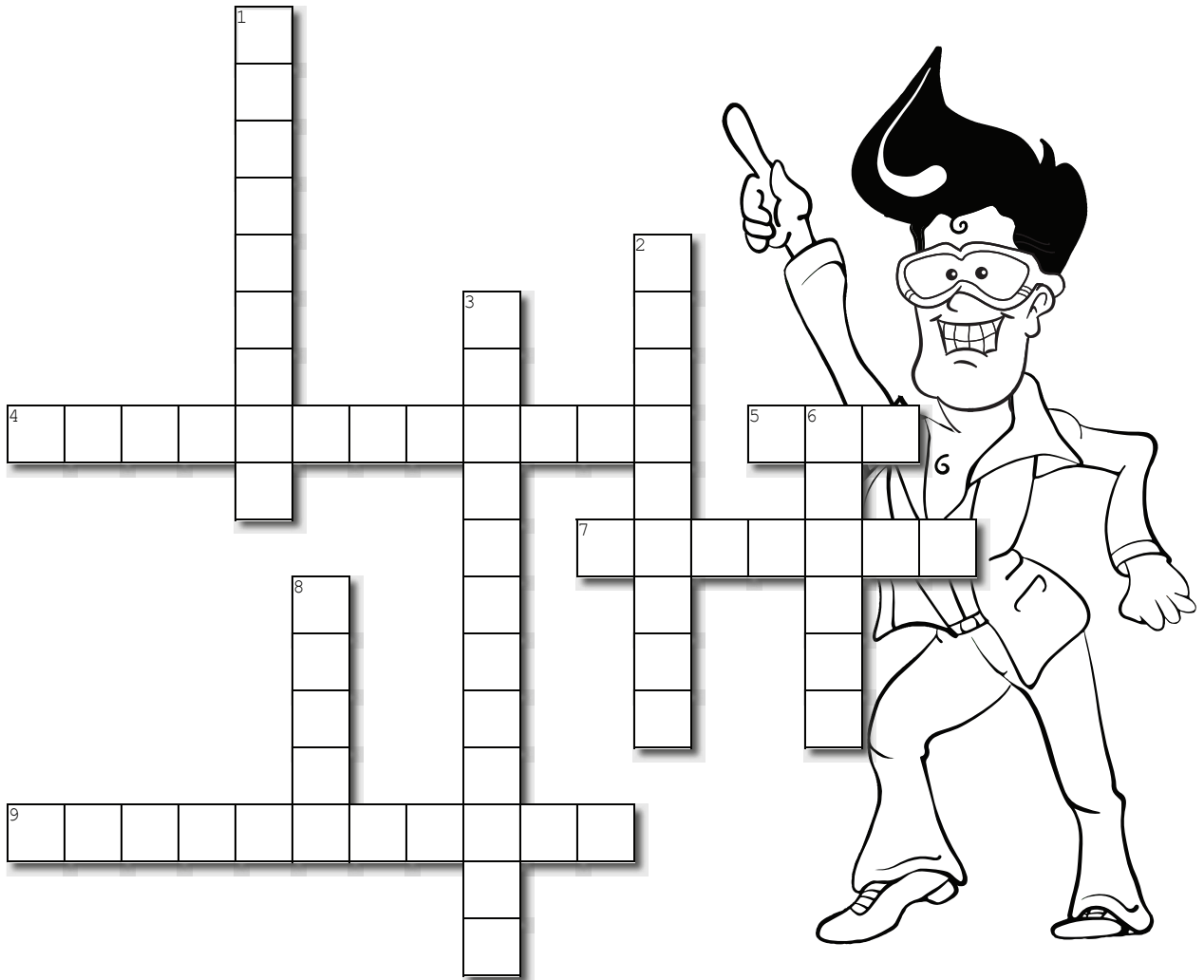
$80 \div 5 = \boxed{} \text{ ALL}$

$19 - 19 = \boxed{} \text{ RESOURCES}$

_____ 10 _____ 18 , _____ 4 _____ 8 _____ 5 _____ 100
_____ 16 _____ 15 _____ 0 .

JOHN TRAVOLTAGE'S CROSSWORD

Find the answer for each clue and write it in the correct space.



Across

4. A natural resource that cannot be replaced once it's used, like coal
5. An area where renewable energy is created, stored, and sent through transmission lines to homes and businesses
7. _____ storage
9. A type of energy that powers things like lights and devices

Down

1. Using wind to spin a turbine to create electricity
2. Energy that comes from natural resources that will not run out, like sunlight and wind
3. Moving electricity from where it's created to where people use it
6. The ability to do work or make things move or change
8. Using the Sun's energy to create electricity

1. Write a headline under the masthead.
2. Draw a picture in the box and colour it.
3. Write a story about the Central-West Orana REZ.
Include at least four of the vocabulary words at the bottom of this page.
Use another piece of paper if you need it.

THE DAILY REZ

[illegible]

Renewable Energy Zone
Electricity
Natural Resource
Renewable Energy
Solar Power
Wind Power
Battery Storage
Transmission

Captain Catastrophe's Secret Notes



Agent Alert! We've found Captain Catastrophe's secret notebook!
Can you uncover the hidden message hidden in his notes?

Your mission: Find the **bold letter** in each sentence.
Match that letter to a number to decode the secret message!

RENEWABLE ENERGY NOTES...

1. Renewable energy comes from natural **r**esources that won't run out, like the sun and wind.
2. But how do **w**e use the sun and wind to generate electricity?

Solar Panels

3. We use solar panels to turn sunlight into **e**lectricity.
4. When the sun shines **d**own on a solar panel - ZAP!
5. The solar cells inside the **p**anel turn the light energy into electricity.

Wind Turbines

6. Wind turbines have long **b**lades that spin when the wind blows to generate wind energy.
7. In some power stations, we **b**oil water to make steam that spins a turbine to generate electricity.
8. Wind turbines use wind instead of **s**team to spin the turbine.

Energy Farms

9. When lots of wind tur**b**ines or solar panels are built in one place it's called a farm.
10. Wind and solar farms gather sun**l**ight and wind to make electricity!

Battery Storage

11. But how do we make sure we never run out of electri**c**ity?
12. That's where big batteries **c**ome in!
13. They keep electri**c**ity flowing when the sun isn't shining and the wind isn't blowing!

Transmission

14. After electricity is made, it needs to travel to **w**here it's needed.
15. Powerlines carry electricity to homes, schools, and **b**usinesses.
16. Transmission towers hold the **l**ines safely above the ground.
17. Even I admit — it's pretty cle**v**er.

13	2	5	3	14	6	7	10	1
—								
11	15	4	12	8	9	16	17	•

CHARGE UP YOUR KNOWLEDGE WITH JOHN TRAVOLTAGE

Read the paragraphs below and then answer the True/False questions. Ask an adult if you need help.

EXTRA CREDIT Read the article to someone else. Quiz them by asking the True/False questions.

Did You Know?

A Renewable Energy Zone (REZ) brings together solar and wind farms to generate electricity, batteries to store it, and transmission towers to deliver electricity to homes and businesses.

Why is this Important?

- Many of Australia's coal power stations are closing, so we need new sources of electricity.
- Renewable energy sources like wind and solar are being added to help meet our growing energy needs.
- REZs group wind and solar farms with battery storage in one area, then send electricity to where it's needed.

The Central-West Orana REZ

- This REZ is located around Dubbo, Dunedoo and Mudgee in New South Wales.
- It covers about 20,000 square kilometres.
- It's on the traditional land of the Wiradjuri, Wailwan, and Kamilaroi peoples.
- It will group new wind farms and solar farms into one area where the electricity can be stored in batteries and sent where it is needed via transmission towers.

The Good News!

- REZs help make sure there's enough electricity for homes, schools, and businesses.
- Grouping energy projects in one area makes it easier to store and share electricity.
- They are part of a plan to keep our energy system strong and reliable into the future.

True or False?

Read each statement carefully.

If you think it is true, circle 'T'. If you think it is false, circle 'F'.

- T / F 1. A Renewable Energy Zone (REZ) connects solar and wind farms, batteries, and transmission towers.
- T / F 2. The Central-West Orana REZ is located near Dubbo and Dunedoo in New South Wales.
- T / F 3. REZs are built to create electricity only for large cities, not for homes and schools.
- T / F 4. REZs do not use transmission towers to move electricity.
- T / F 5. The Central-West Orana REZ is on the traditional land of the Wiradjuri, Wailwan and Kamilaroi peoples.

TOP SECRET MISSION: *from Agent Y*

REZ Energy Agents,

Your mission:

Sort the following energy sources into two categories:

- Renewable (they come back again and again)
- Non-Renewable (once they're used, they're gone!)

Use everything you learned watching the show,
and do your own research to complete this task.

*The REZ is
counting on
YOU!*

RESOURCES	RENEWABLE	NON-RENEWABLE
Coal		
Sunlight (Solar)		
Natural Gas		
Wind		
Oil		
Water (Hydropower)		
Uranium (Nuclear)		

Agent Research Brief - Investigate & Report

1. Which of these energy sources are used in a Renewable Energy Zone (REZ)?

2. Choose one renewable and one non-renewable energy source and explain how each is used to create electricity.

3. Why is renewable energy important for our future?

**YOU'VE SEEN THE SHOW
NOW TAKE...**



You're officially a member of **THE REZOURCE FORCE**—the team that's preparing for our energy future!

Find out how your school can get involved in
The REZource Force School Challenge at

REZOURCEFORCE.COM.AU

There are discoveries to be made and prizes to be won.

**START YOUR CHALLENGE PROJECT TODAY
AND HELP POWER THE FUTURE!**

BROUGHT TO YOU BY



EnergyCo



ACEREZ has been appointed network operator by EnergyCo to design, build, finance, operate and maintain the Central-West Orana REZ transmission network.