GENERATION E

LET'S EXPLORE ENERGY EFFICIENCY!



THIS BOOK BELONGS TO:

Materials in this activity book align with
the Manitoba Kindergarten curriculum.

WHAT IS ENERGY EFFICIENCY?

Energy is what makes things work and move. It makes our toys light up, helps us travel from one place to another, helps us cook, and gives us the strength to run and play. It's important to use energy carefully so we don't waste it.

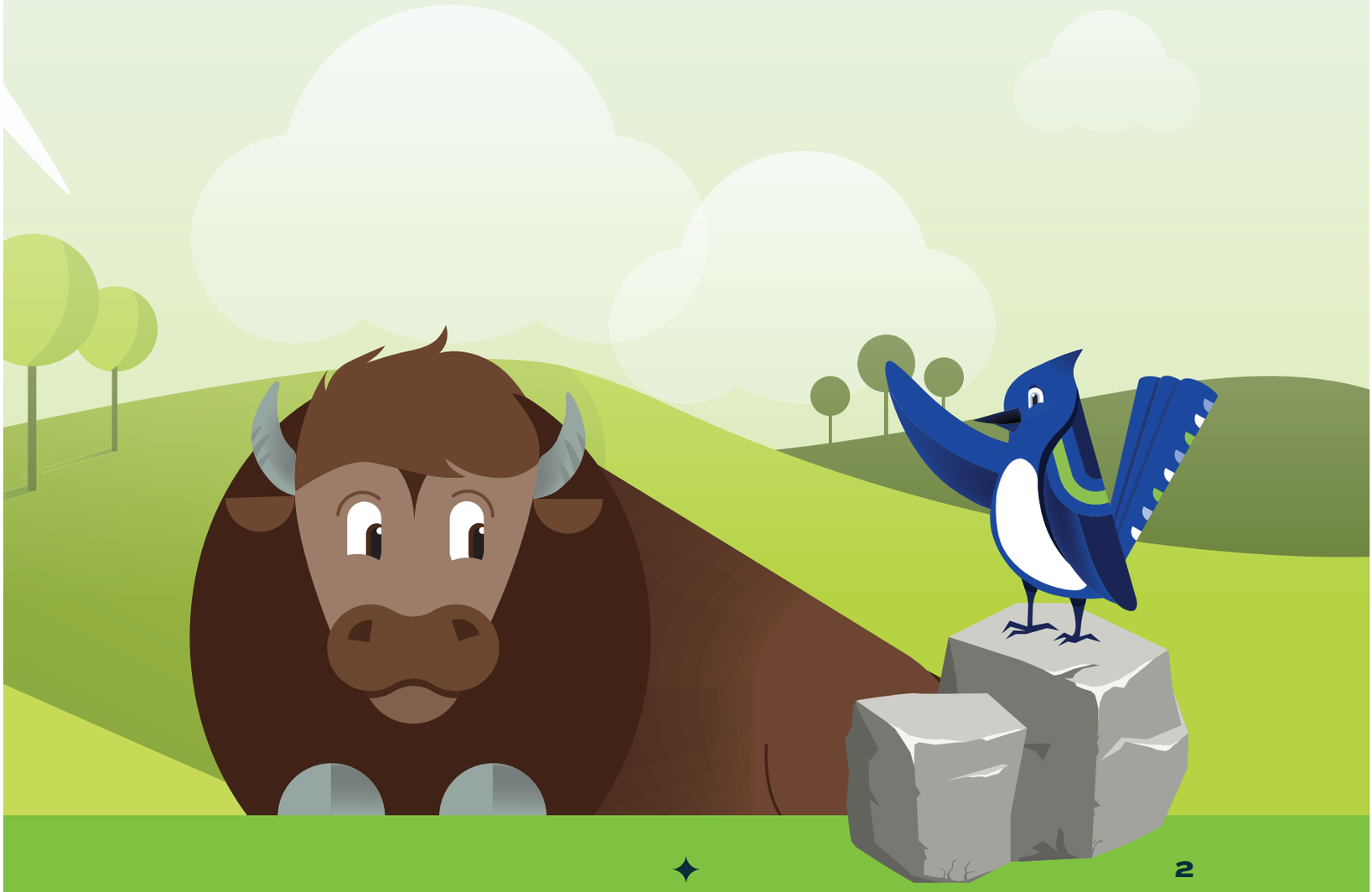
Energy efficiency is doing the same things with less energy. Being efficient with energy helps the planet by using less resources. Each of us can change some habits to use energy more wisely. Join our friends Energy Ed and Jenny Jay to learn how!



MEET ENERGY ED AND JENNY JAY!

Energy Ed is a curious bison from Riding Mountain National Park. He grew up listening to stories about how we as humans use energy. With his best friend Jenny Jay, he discovers and shares fun ways to save energy.

Jenny Jay is a clever bird from Birds Hill Provincial Park. She loves finding ways to save energy. She shares her ideas with Energy Ed to show that saving energy can be smart and fun!



ACTIVITY 1

COLOUR JENNY JAY AND ENERGY ED



DID YOU KNOW/ FUN FACTS

1. We can make electricity using moving water.
2. Turning lights off saves energy.
3. Opening blinds lets sunlight light up a room.
4. Some lights use less energy than others.
5. Devices can use energy even when they look like they’re off.
6. Closing doors helps keep rooms warm or cool.
7. Some windows keep heat inside better than others.
8. The sun gives us light and heat.

ACTIVITY 2

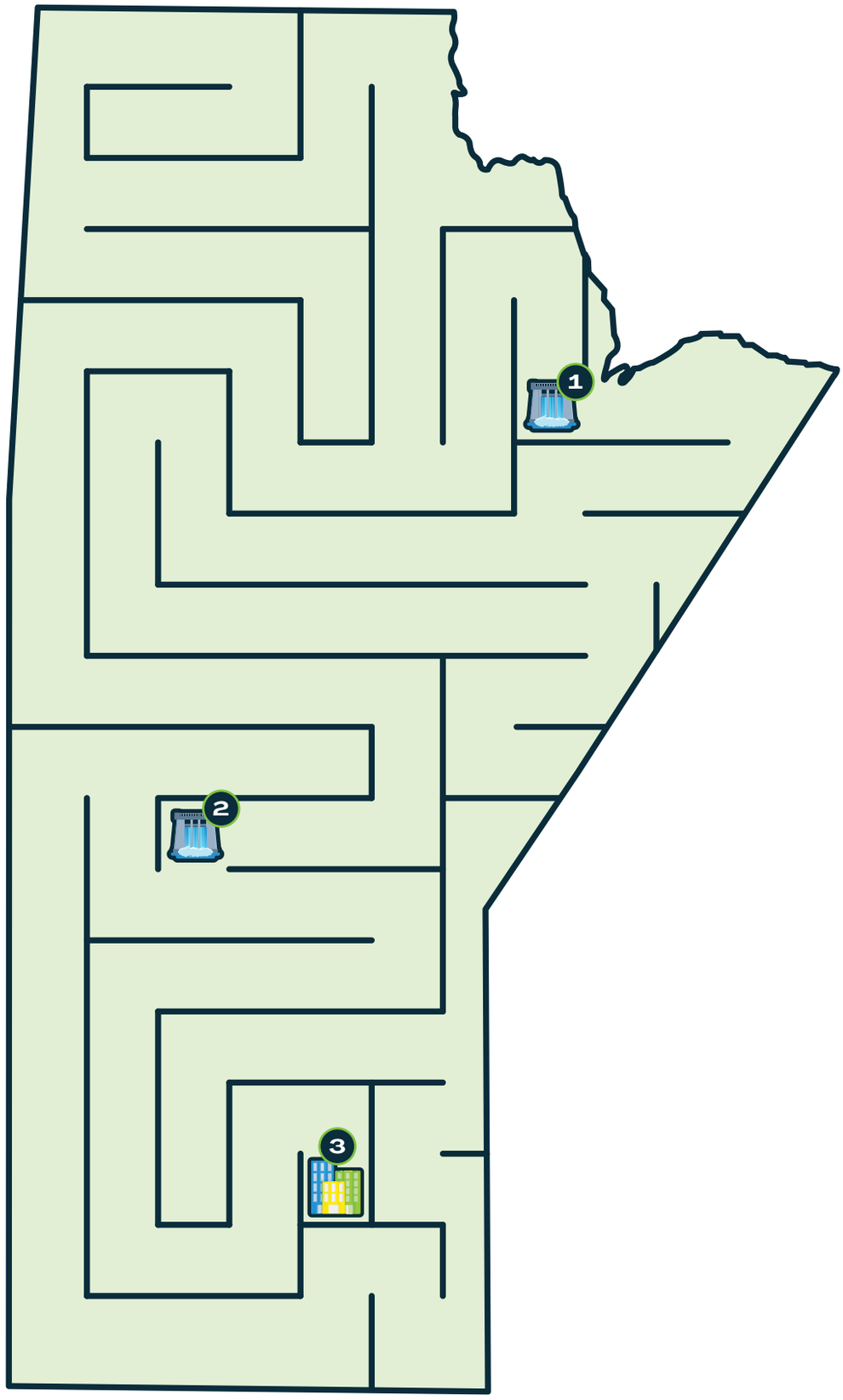
MANITOBA MAZE

Help Jenny Jay and Energy Ed visit generating stations before heading back to Winnipeg. Starting at the Limestone Generating Station (#1), draw a path to Grand Rapids (#2), and finish in Winnipeg (#3)!

Maze points

1. Limestone
2. Grand Rapids
3. Winnipeg




1
2
3

ACTIVITY 3

WORD SEARCH

Can you find the words hidden in the puzzle? Look up, down, and across to find them all!

Word list


SUN


ENERGY


METER


SWITCH


WATER


POWER


WIND


HEAT


DIMMER


LIGHT







X L D J Q G B I U
T Y W A T E R D N
E P O W E R M I Q
N H E A T F E M D
E H P F K N T M L
R B C Q U E E E I
G J R H N A R R G
Y J H J C U W T H
V S W I T C H W T
R E G S M H D W P
M I W S U N J B T
V H Q G R W I N D

ACTIVITY 4

SPOT THE DIFFERENCES

Jenny Jay and Energy Ed are visiting a friend's house. Can you spot all 9 differences between these pictures? Circle the differences between the two images in image 2.



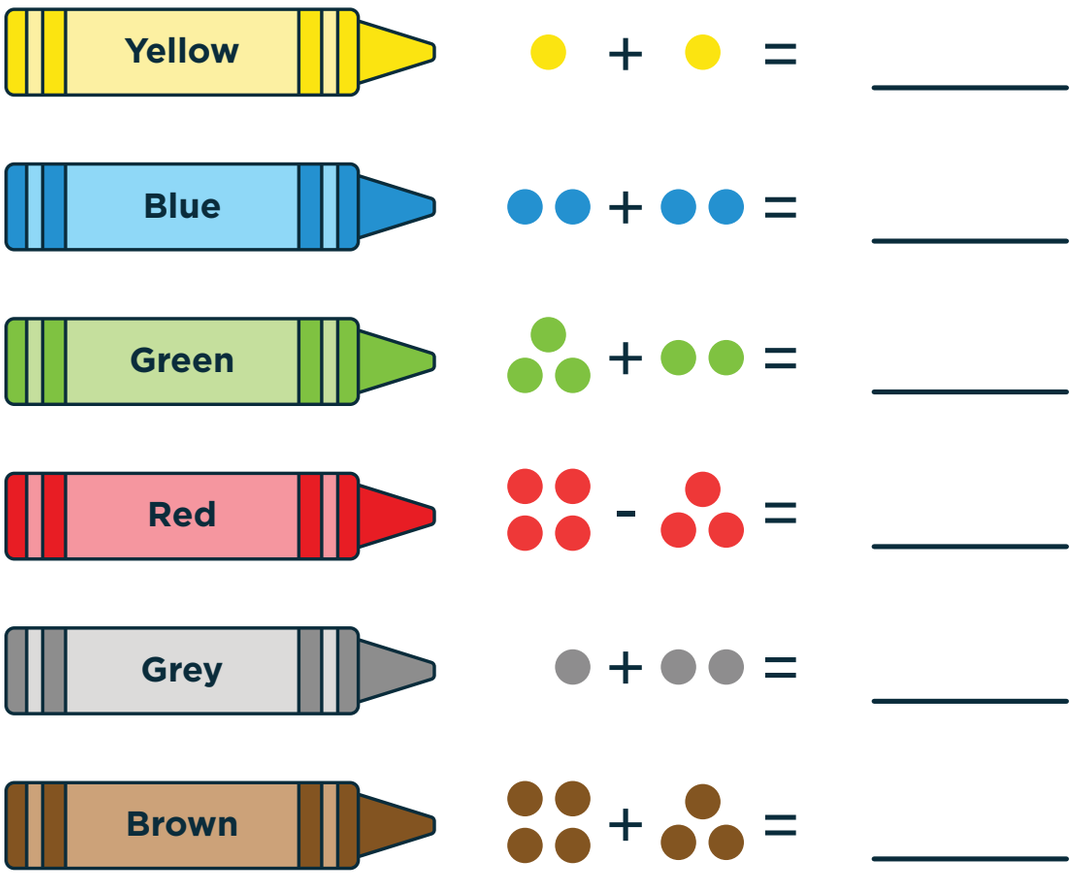

IMAGE 1
RING RING
IMAGE 2
BUZZ
BUZZ

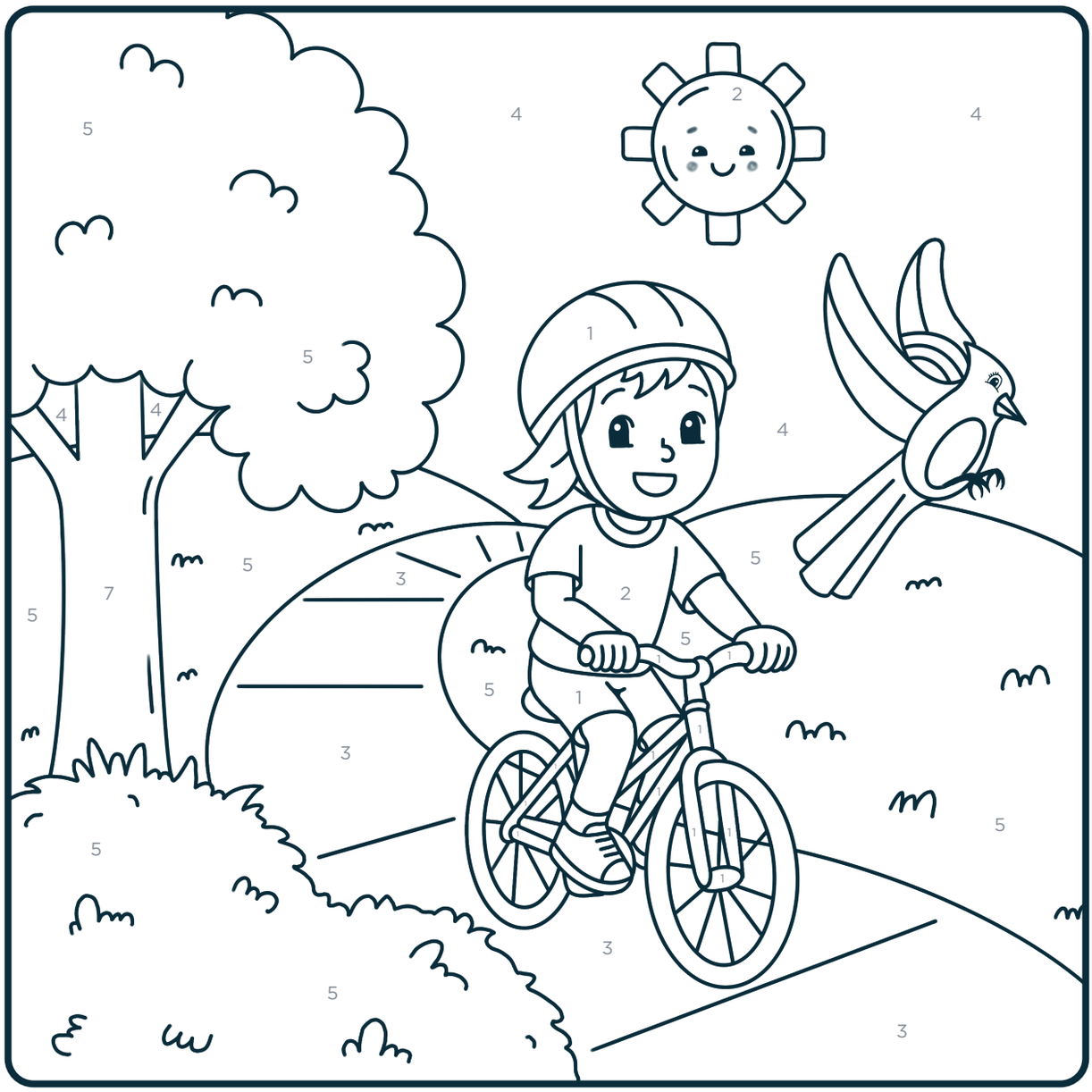
ACTIVITY 5

COLOUR BY NUMBER

Biking to school instead of driving saves energy and keeps the air clean!

Each number in the picture matches a colour. To find out which colour goes where, solve the equation next to it!




5
4
2
4
5
4
4
1
4
5
7
5
3
2
5
5
1
3
5
5
3
5
3

CROSSWORD

Jenny Jay and Energy Ed have learned lots about energy efficiency, and they want to see what you know! Use the clues to finish the crossword puzzle.

Across

2. Walk or  to save energy.

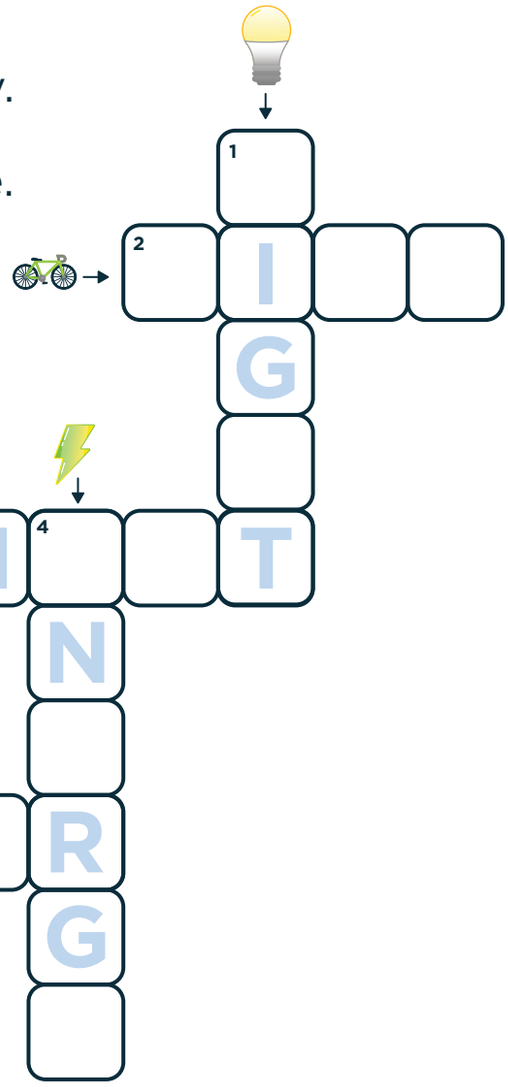
3. Turn down the  at bedtime.

5. Close the .

Down

1. Turn off the .

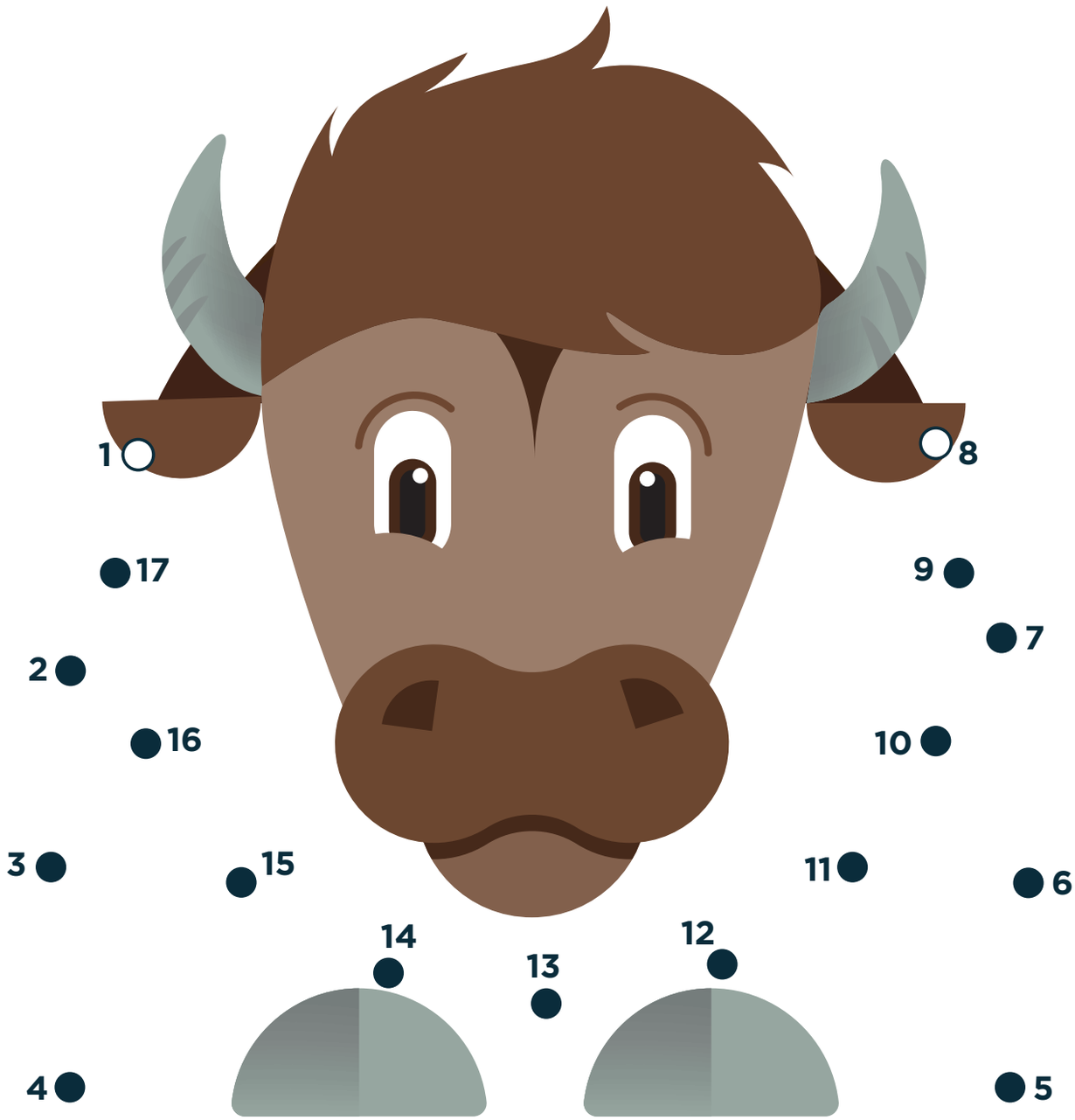
4. Save .



ACTIVITY 7

CONNECT THE DOTS

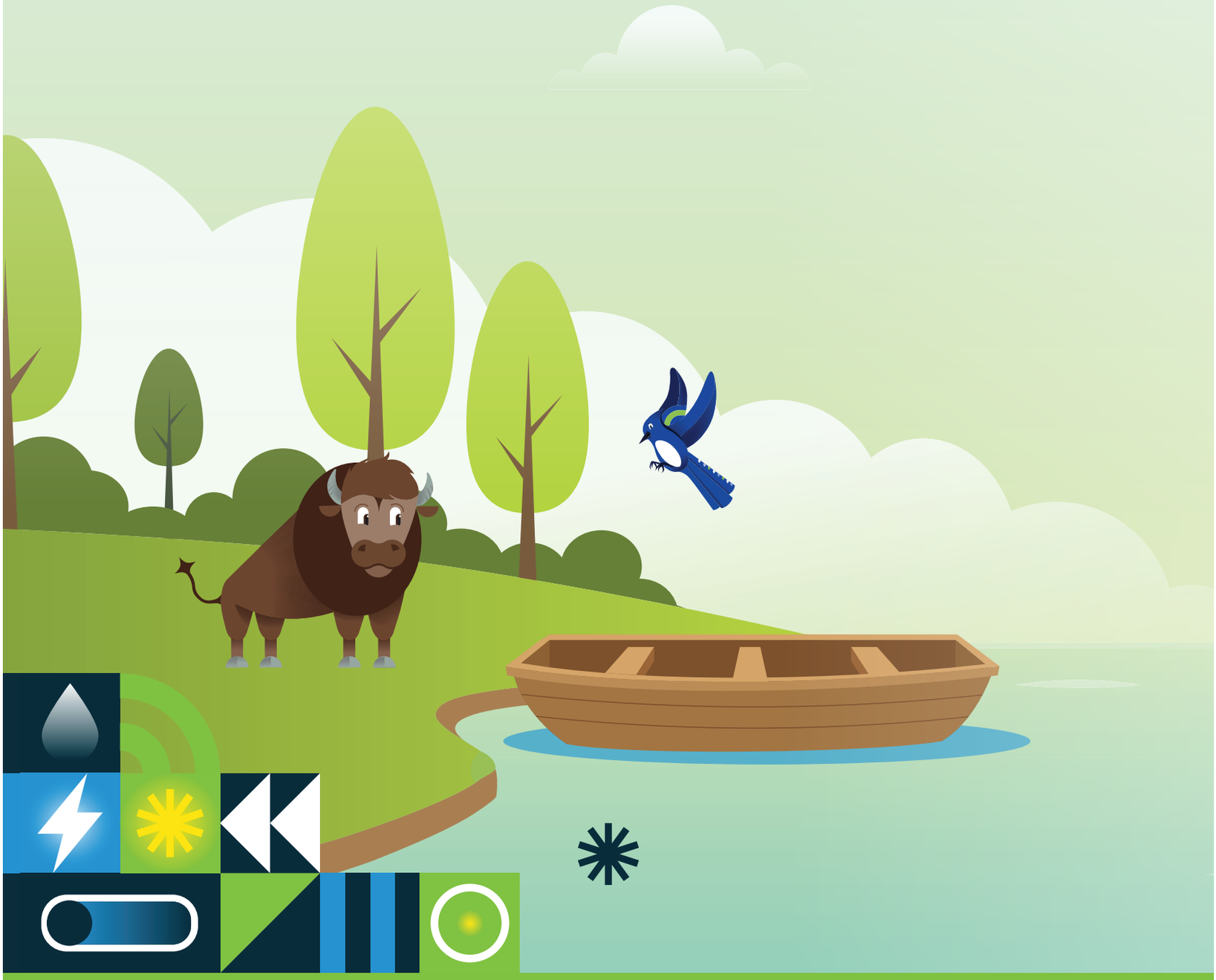
Connect the dots to create a picture of Energy Ed.



ACTIVITY 8

MATCHING GAME

Different types of energy are all around us. Draw a line to match each type of energy to the correct picture.



CHEMICAL ENERGY
FOOD

Food gives us the energy to play.

RADIANT ENERGY
SUNSHINE

The sun helps plants grow.

KINETIC ENERGY
MOVEMENT

A ball is rolling fast.

ELECTRICAL ENERGY
LIGHT BULB

Electricity turns on the lights.

THERMAL ENERGY
HEATED STOVETOP

The stove makes the soup hot.

SOUND ENERGY
MUSIC

Music makes our ears happy.

GRAVITATIONAL ENERGY
FLOWING WATER

The dam uses flowing water to make electricity.



ENERGY DETECTIVE STICKER CHART

Save energy at home and earn stickers!

What you need:

- Coloured paper or cardstock
- Crayons, markers, or colouring pencils
- Stickers
- Glue (optional)
- Pictures to glue (optional)

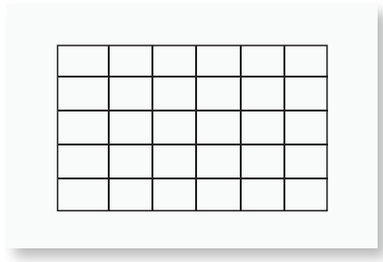
Note for adults: *Help with cutting, gluing, and reading.*



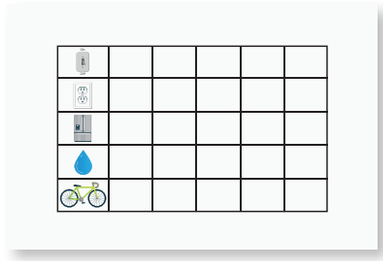


Instructions:

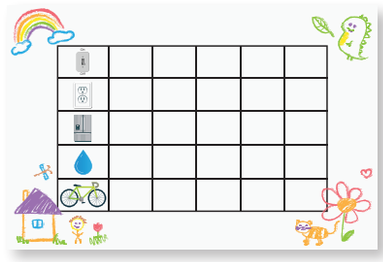
1. Draw a 6×5 grid. Don't forget to make the boxes large enough to draw or glue your pictures into!



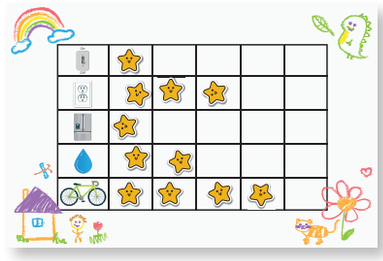
2. In the first column, draw or glue pictures of energy saving actions like:
   - Turning off the lights
   - Unplugging devices
   - Closing the fridge quickly
   - Using less water
   - Riding your bike or walking



3. Add decorations to your paper.



4. Every time you do an energy saving action, put a sticker on your chart. Great job!



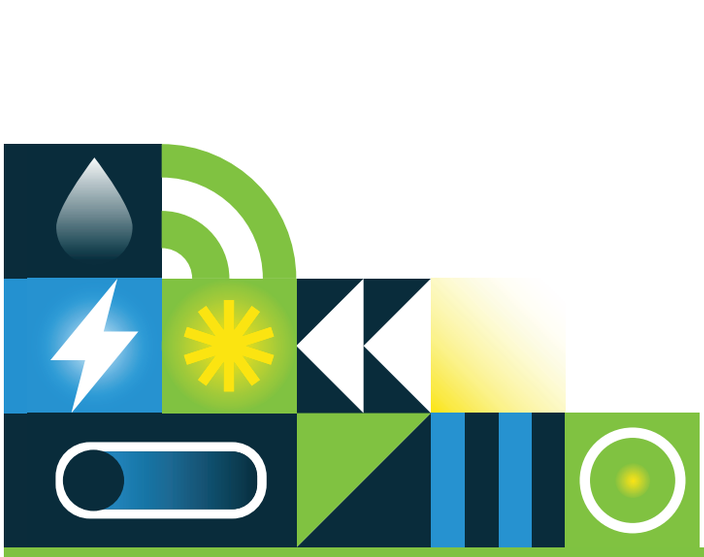
SOLAR OVEN SNACK

Use the sun to warm a snack!

What you need:

- Shoebox or pizza box
- Aluminum foil
- Plastic wrap
- Black construction paper
- Snack (s'mores or other small snack)
- Sunny spot

Note for adults: *Help with setting up, food handling, and checking the snack.*





Instructions:

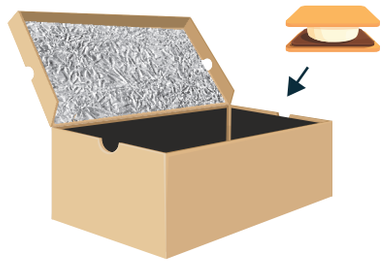
1. Line the box with black construction paper.



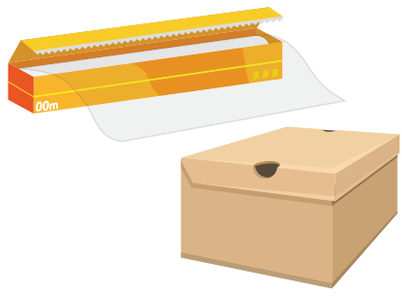
2. Cover the inside of the lid with foil.



3. Place your snack inside the box, close the lid, and cover with plastic wrap.



4. Put the box in the sun and wait 30 to 60 minutes.





5. Watch the snack melt!



ED AND JENNY'S TOP TIPS FOR SAVING ENERGY

If you're chilly in the winter, open up your curtains or blinds! The sunshine helps to keep you toasty.



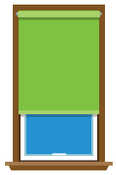
Ask your grown-up to unplug any electronics that aren't being used, even if they're turned off!



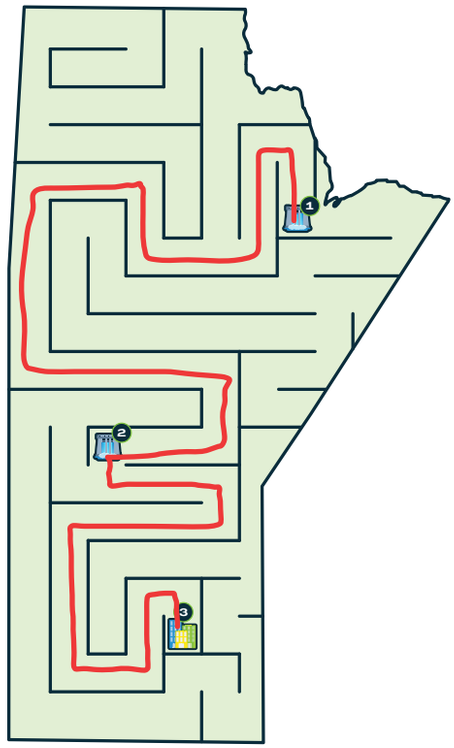
Turn off the lights if you're the last one leaving the room.



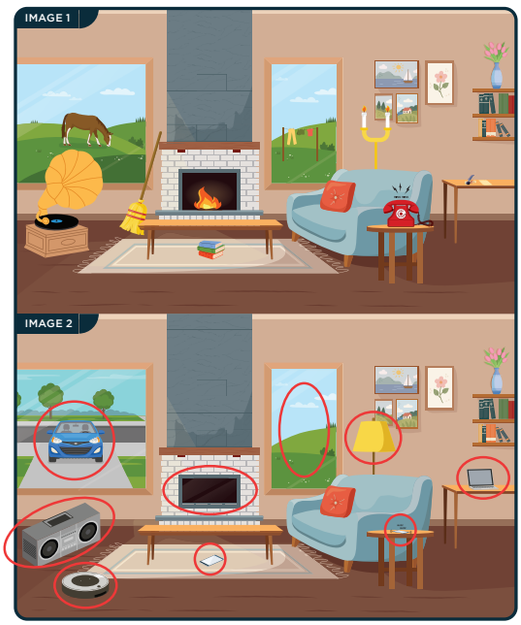
In the summer, close your curtains or blinds to keep the heat out and the inside cooler.



ANSWER KEY



X	L	D	J	Q	G	B	I	U
T	Y	W	A	T	E	R	D	N
E	P	O	W	E	R	M	I	Q
N	H	E	A	T	F	E	M	D
E	H	P	F	K	N	T	M	L
R	B	C	Q	U	E	E	E	I
G	J	R	H	N	A	R	R	G
Y	J	H	J	C	U	W	T	H
V	S	W	I	T	C	H	W	T
R	E	G	S	M	H	D	W	P
M	I	W	S	U	N	J	B	T
V	H	Q	G	R	W	I	N	D





● + ● = 2



●● + ●● = 4




+ ●● = 5




- 
= 1

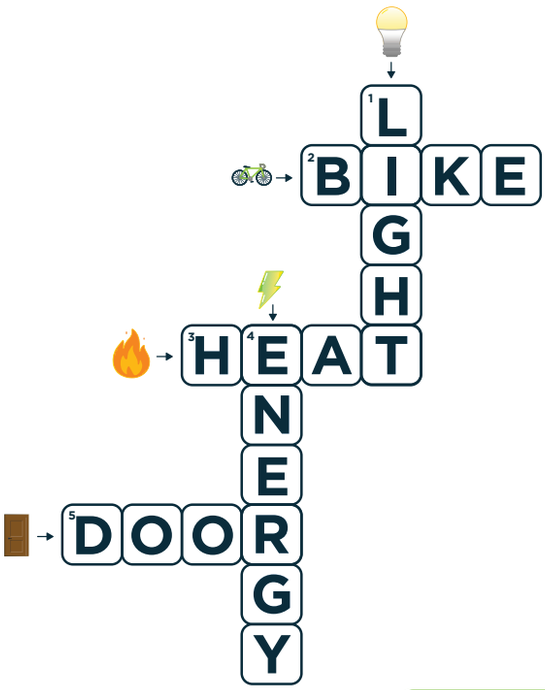


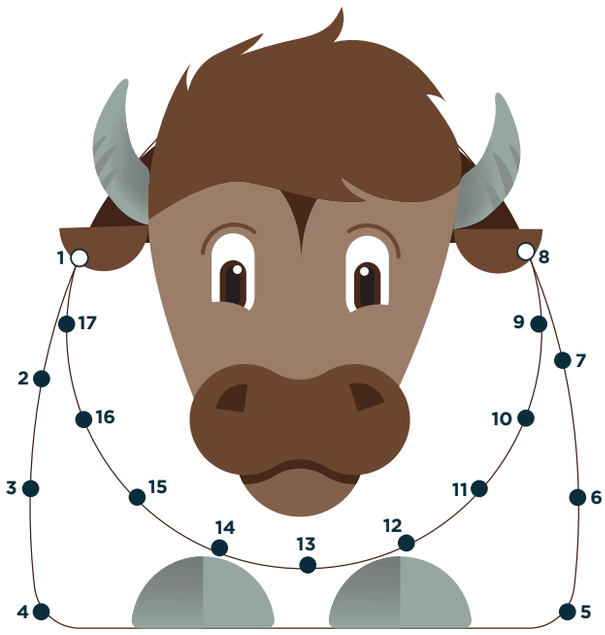
● + ●● = 3




+ 
= 7

ANSWER KEY





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FOOD
Food gives us the energy to play.

RADIANT ENERGY
SUNSHINE
The sun helps plants grow.

KINETIC ENERGY
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The stove makes the soup hot.

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Music makes our ears happy.

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The dam uses flowing water to make electricity.









EFFICIENCY MANITOBA

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