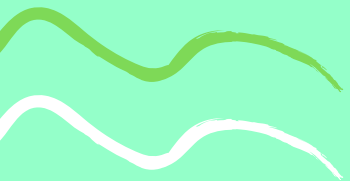


Milford
Waterfront
ACTIVITY
BOOK



Energy Kingdom

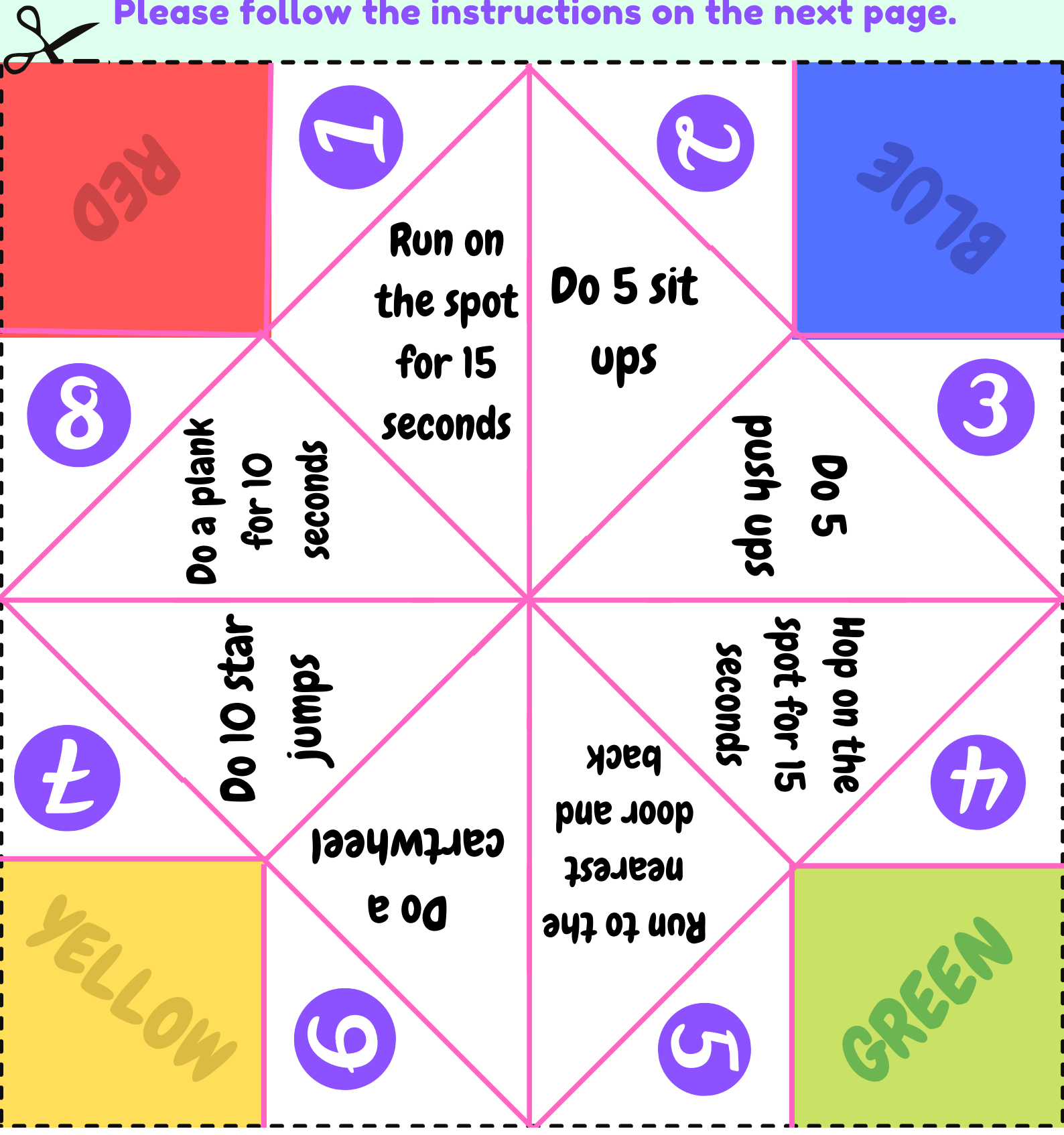


Milford Waterfront

HUMAN ENERGY FORTUNE TELLER

Cut and fold the fortune teller to demonstrate human energy or cut out a square piece of paper and copy the design below (no printing needed!)

Please follow the instructions on the next page.

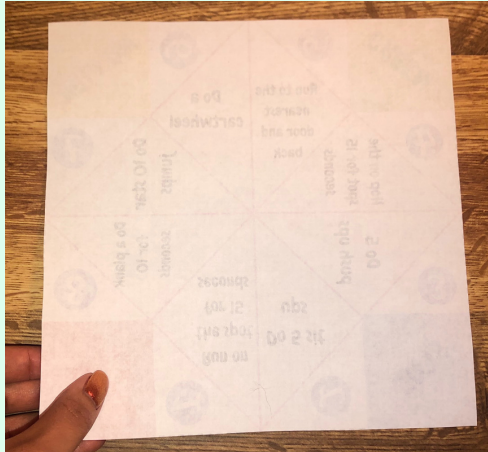


Milford Waterfront

HUMAN ENERGY FORTUNE TELLER

How to assemble...

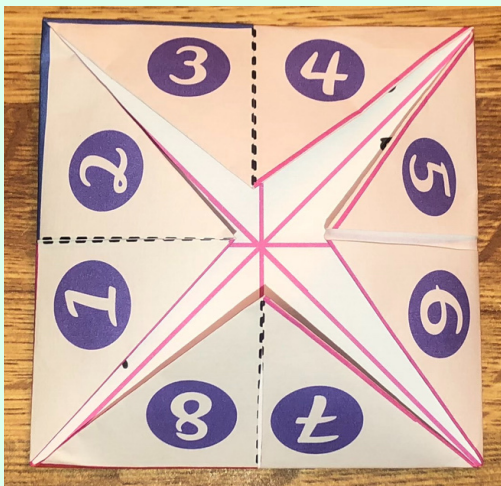
STEP 1: Cut out the fortune teller and turn the picture face down



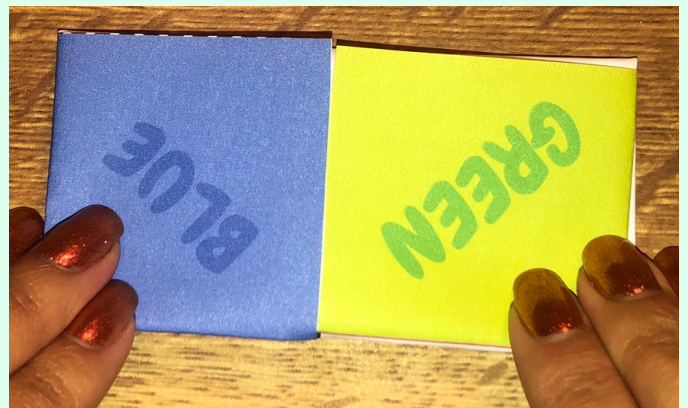
STEP 2: Fold all four corners to the centre



STEP 3: Flip the fortune teller over and again fold all four corners to the centre



STEP 4: Fold in half from top to bottom and keep it folded



STEP 5: Slide fingers under the squares to move the fortune teller



Milford Waterfront **ENERGY MATCH UP!**

Can you match the renewable energy type to the correct object?

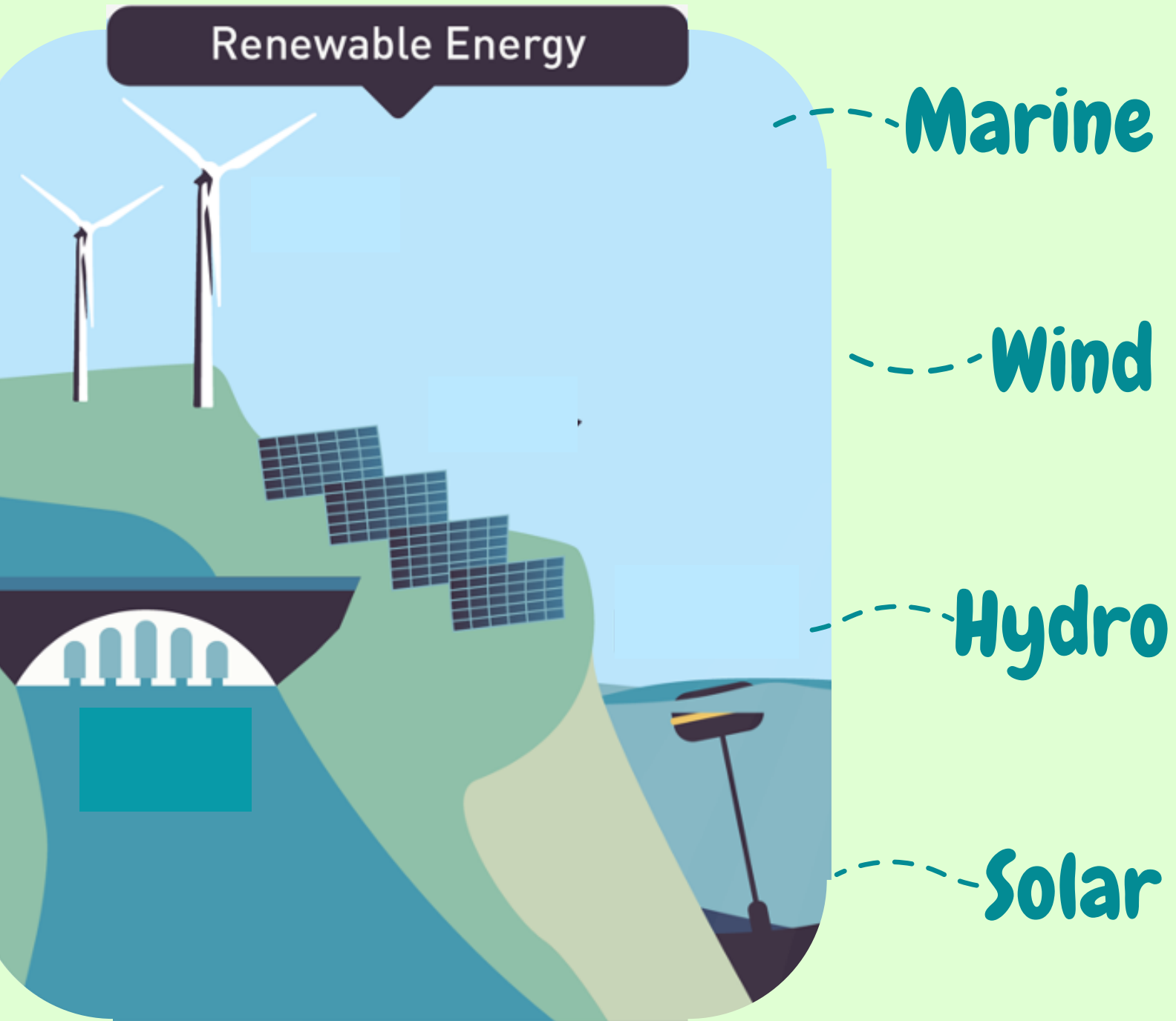


Image from [Marine Energy Wales](https://www.marineenergywales.co.uk/)

Energy Joke

Why did the silly gardener plant
a light bulb?
He wanted to grow a power plant!

Did you know?

The energy facilities based around
the Milford Haven Waterway help
supply 3.5 million homes with
electricity

Milford Waterfront MARINE ENERGY WORDSEARCH

Marine energy is a great form of renewable energy! Can you find all the words?

Fun Fact!

In some places around the Pembrokeshire Coast, the tidal flow has more energy than a hurricane force wind!

Fun Fact!

Tidal power has been used in Pembrokeshire for centuries! You may have visited Carew Tidal Mill but did you know there was similar mill in the middle of Pembroke?

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

CURRENT

MOON

TIDAL

ELECTRICITY

RENEWABLE

TURBINES

GENERATOR

SEA

WAVE

KINETIC

STREAM

WIND

Fun Fact!

Tidal energy is energy produced by the tides of the ocean and is created by the pull of gravity from the Moon as well as the spin of the Earth. There is a lot of energy in the movement of that much water.

Thanks go to Pembrokeshire Coastal Forum for these great facts.
For more information on Marine Energy visit
<https://www.marineenergywales.co.uk/about/education/>

Milford Waterfront

ARTS & CRAFTS WINDMILL

Wind is a renewable source of energy as we will never run out of wind, and it is free! Wind energy is also used to generate electricity using wind turbines.

WHAT YOU'LL NEED:

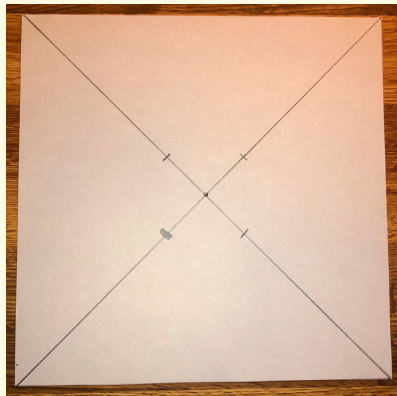
- Thin card or thick paper
- 1 Drawing pin or similar
- 2 Pencils, one with a rubber top
- Ruler
- Scissors

Make sure you ask a parent or adult for help!

STEP 1:

Prepare the paper

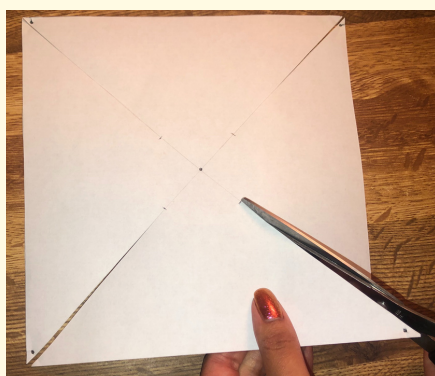
- Cut a 20cm x 20cm square out of the card or paper
- Draw a line diagonally across the paper from each corner to the opposite corner
- Mark the middle of the square (where the two lines cross) and make a small hole, you can use a pencil or the pin to do this
- Measure 3cm from the hole along each of the diagonal lines and mark with your pencil



STEP 2:

Cut to mark the blades of the windmill

- Cut along each of the diagonal lines starting from the outside corners to the mark you made
- Create a hole on the left top corner of each of the four flaps by using the pencil or pin



STEP 3:

Create the windmill's blades

- Pick up each flap by the corner with the hole in and pull it towards the centre hole
- Push the pin through the hole, so the pinhead is on top of the folded flaps



STEP 4:

Assemble the windmill

- Push the pin into the rubber part of one of the pencils. DON'T push the pin in too far so it doesn't stick out the other side. You may need to ask an adult to help you with this.



STEP 5:

Test it out!

- Congratulations! You've made a windmill, why don't you test it out if it's a windy day or blow on it



Milford Waterfront ELECTRIC SAFETY



Us humans are a great conductor for electricity. This means electricity flows easily through our bodies. Why? It's because electricity moves quickly through water and the human body is 70% water! It sounds scary, and it is...so it's important to be responsible and safe around electricity.

Match the correct answer to the question

#1. What are dangerous when combined?

- a. Toothbrush & toothpaste
- b. Water & electricity
- c. Socks & sandals

#2. What item should never be taken into the bathroom?

- a. Magazine
- b. Rubber duck
- c. Plugged in electrical items

#3. What should you never put in a toaster?

- a. A knife
- b. Bread
- c. Potato waffles (Look it up! You'll thank us later 😊)

#4. What must you do before you touch electrical items if you have wet hands?

- a. A cartwheel
- b. Dry them properly
- c. Clap

#5. What should you do if the light bulb stops working in a room?

- a. Hop on one leg
- b. Hum your favourite song
- c. Let a grown up know

Follow the cables to complete the sentence.

DON'T

DON'T

DO

make sure electric cords are tidy and out of the way. Pets can chew on electric cables laying around, and people could trip and hurt themselves.

plug too many things in one socket or an extension cord. It could damage the electric system in your home or even cause a fire.

yank an electrical cable from the wall. Instead, pull from the plug and make sure it's turned off at the socket. Pulling on a cord can damage the appliance, the plug or the socket.

ENERGY KINGDOM

Colour in your own Energy Kingdom!

