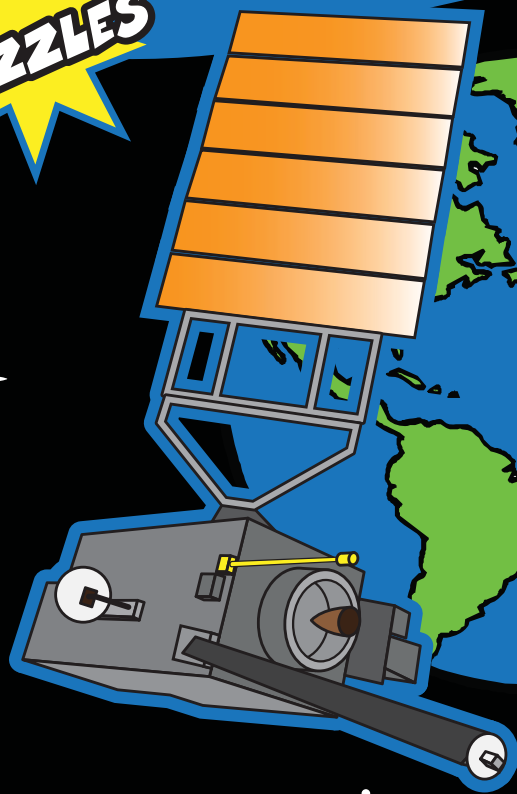


# GOES-R

Fun Activity Book

**PUZZLES**



**JOKES**

[www.nasa.gov](http://www.nasa.gov)

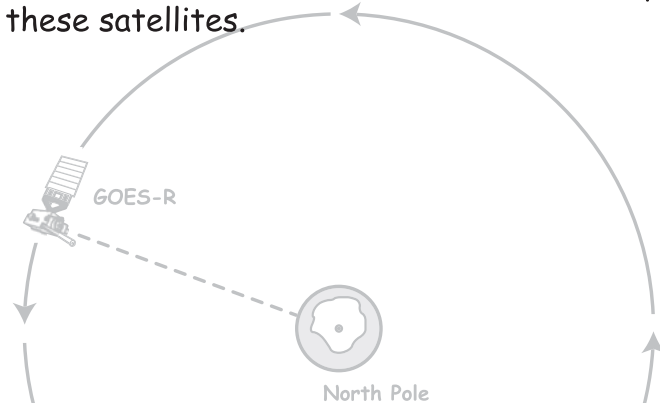
[www.noaa.gov](http://www.noaa.gov)

## Meet GOES-R

Did you read about the GOES\* weather satellites? Well, the new GOES-R satellites will be even more amazing. GOES-R is the name of some new weather satellites. Engineers are building them right now. The first one will be ready in 2015. Like the GOES, it will orbit Earth once per day and take very detailed pictures of Earth and its weather.

This new kind of satellite will do all the jobs the old GOES do, like take pictures of Earth's weather. GOES-R will also study the Sun, lightning, and Earth's magnetic field.

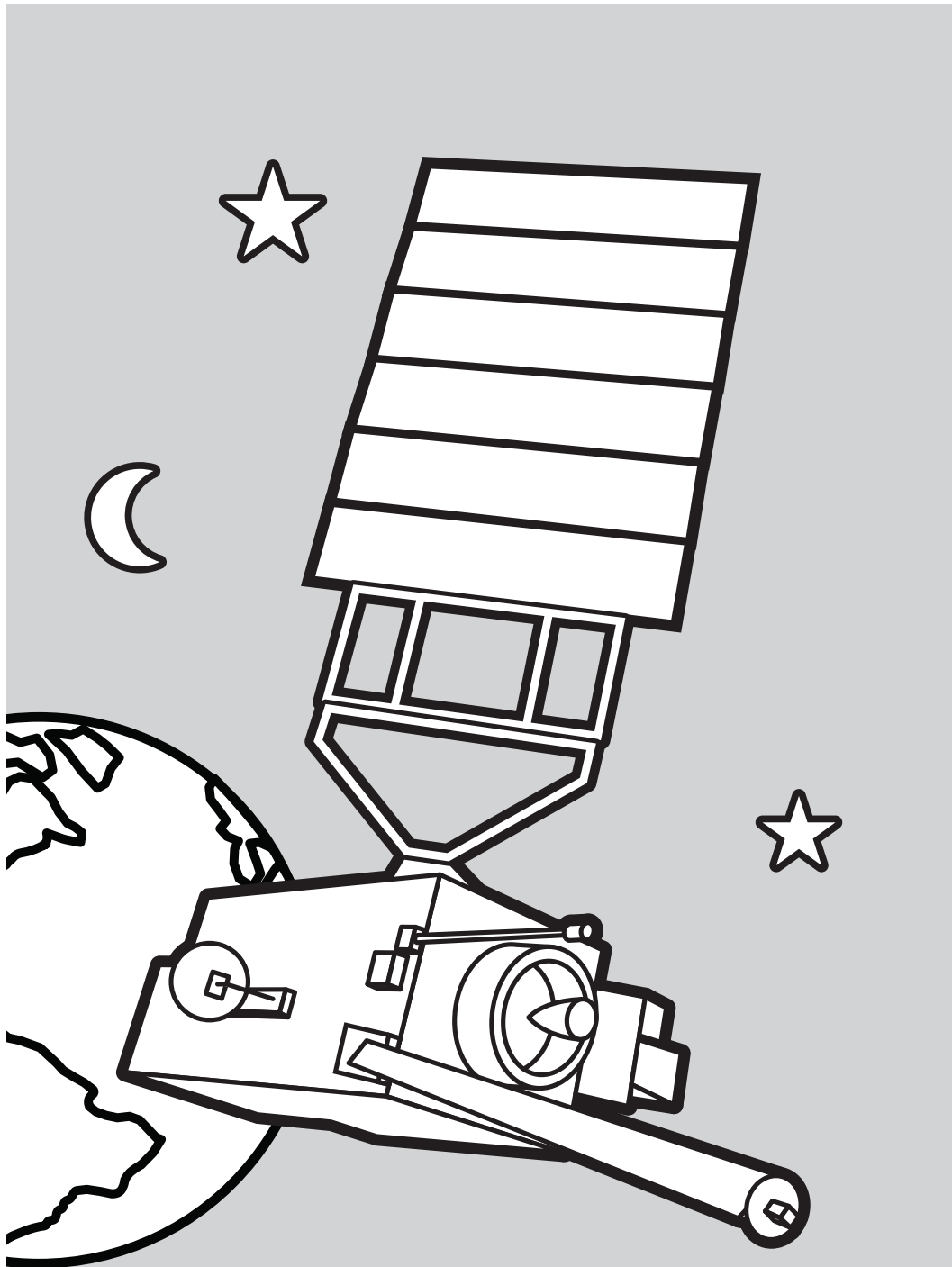
NASA\*\* and NOAA\*\*\* build, launch, and operate these satellites.



\* GOES stands for Geostationary Operational Environmental Satellite


\*\* NASA stands for National Aeronautics and Space Administration

\*\*\* NOAA stands for National Oceanic and Atmospheric Administration



The GOES-R satellites can see in infrared light — a kind of light our eyes cannot see.

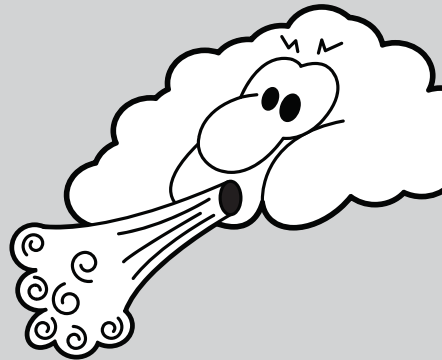
## Time to Rhyme



Zig-zags of lightning  
Flash in the sky.  
They happen so fast,  
In the blink of an \_\_\_\_\_.

The clouds look heavy,  
The sky looks grey,  
There will be no recess,  
On this rainy \_\_\_\_\_.

Thunder is rumbling,  
The air's wet and warm.  
In a very short while  
We'll be in for a \_\_\_\_\_.



GOES-R will see storms as they form and  
help predict what they will do.

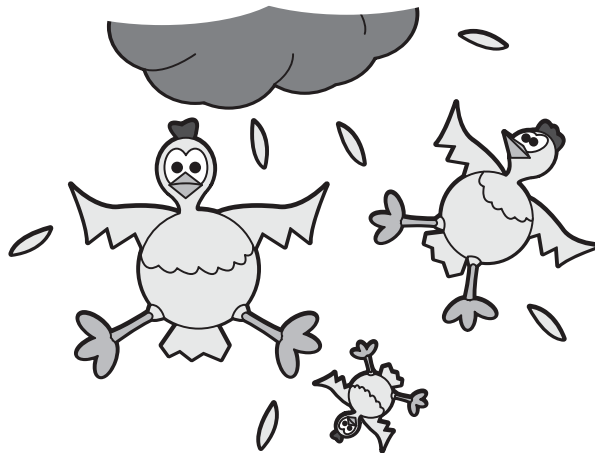
## Riddles

Why don't they show lightning on TV?  
**It's too shocking.**

Why do they say "It's raining cats and dogs?"  
**To keep you from stepping in a poodle.**

When do they say "It's raining chickens and ducks?"  
**When there is really, really fowl weather.**

Why doesn't a GOES weather satellite eat too much candy?  
**It doesn't want to spoil its launch time.**



**GOES-R can't eat any candy until after 2015, for that is its launch time.**

## Unscramble the Letters

Draw a line from the scrambled letters on the left to the word it spells on the right.

MROST

CLOUD

THO

STORM

OLDUC

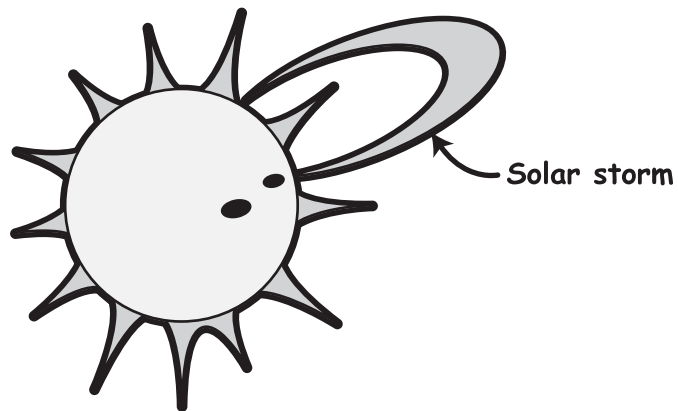
SPACE

LOCD

HOT

CEPAS

COLD



The Sun can have stormy weather too.

## What is this?

Draw a line from the picture to the word that says what it is.



Star



Tree



Cloud



Boat



Lightning

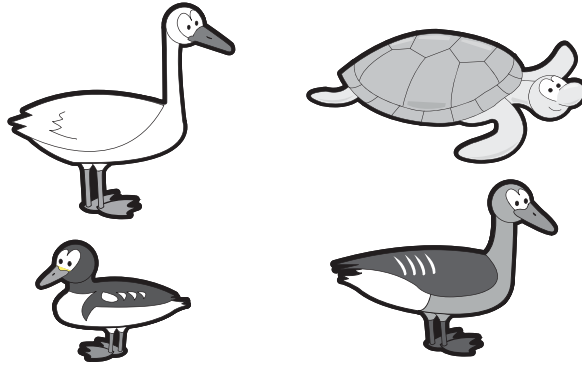


Moon

GOES-R will make lightning maps of the whole country.

## What does not fit?

Circle the object that does not belong.



A raincoat will not protect Space Station astronauts from bad "space weather."

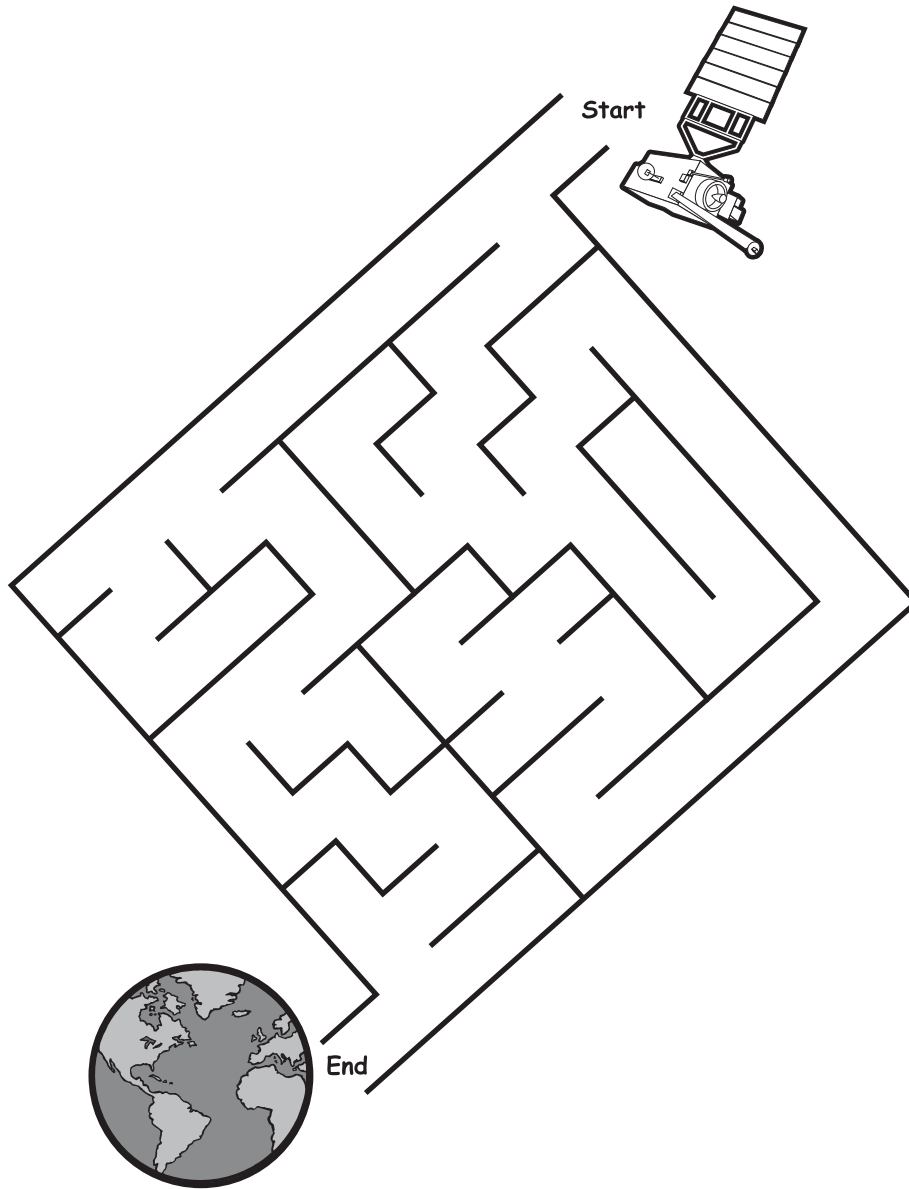


Color me



The Weather Wizard knows when rain  
is on the way...

# Help GOES-R Find Earth

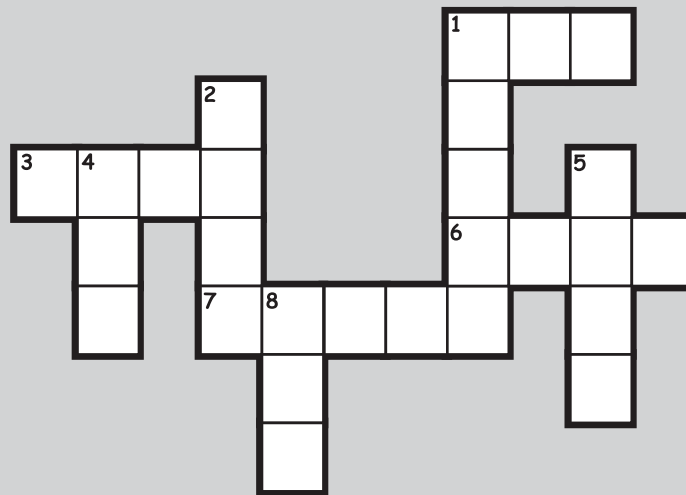


GOES-R will hover over one spot on Earth all the time.



## Earth Words

Fill in the words that fit the clues.



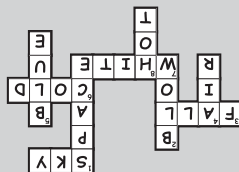
### Across

- 1 After it rains, we may see a rainbow in the \_\_\_\_.
- 3 When trees lose their leaves and darkness comes sooner each day.
- 6 In winter, the weather is \_\_\_\_.
- 7 The color of snow.

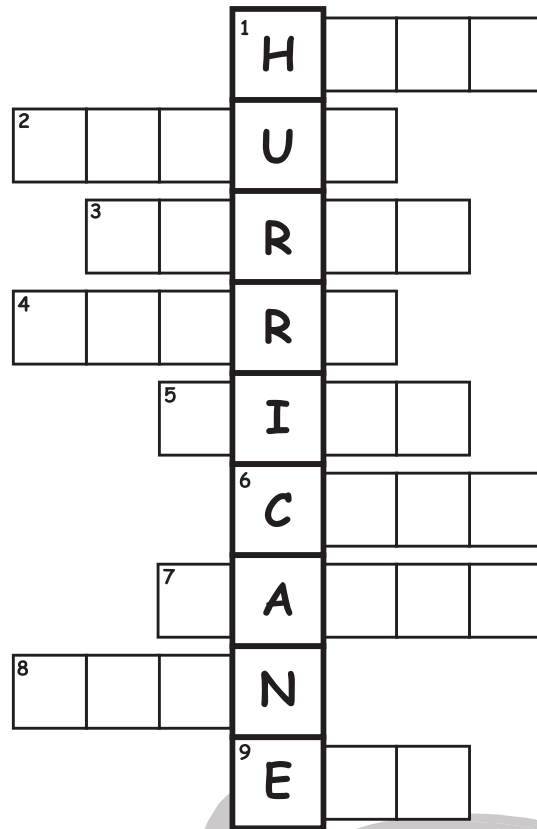
### Down

- 1 The GOES-R satellite will watch Earth from \_\_\_\_.
- 2 This is what the wind does.
- 4 We breathe it in and out.
- 5 The color of the sky on a sunny day.
- 8 In summer, it gets very \_\_\_\_.

**GOES-R will take sharp pictures of clouds and storms.**



## Crossing Words



### CLUES:

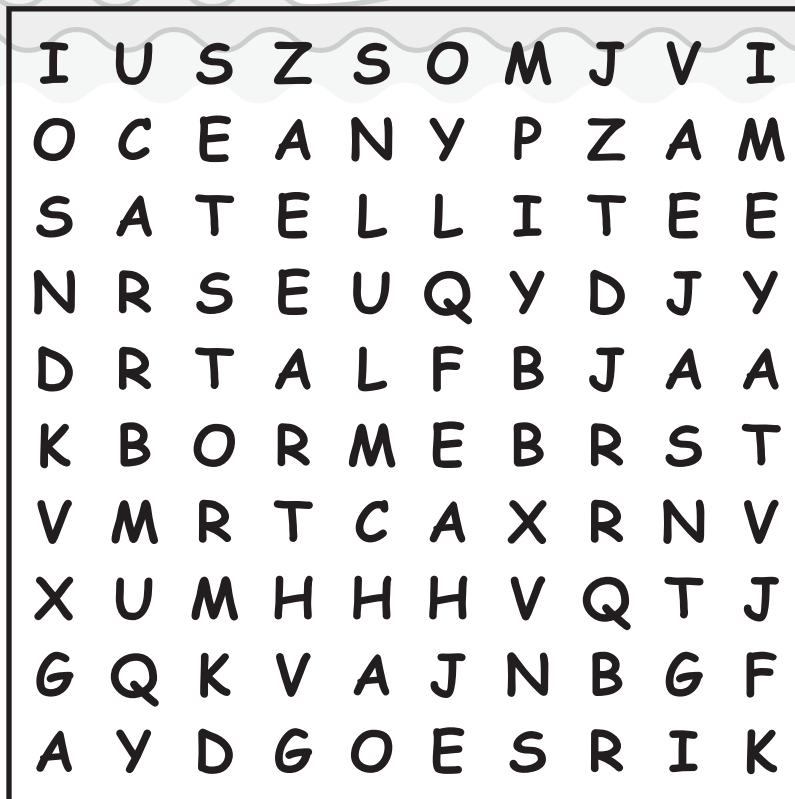
1. H \_ \_ \_ your house to make it warm inside.
2. That big, grey \_ \_ \_ U \_ in the sky is full of rain.
3. We live on planet \_ \_ R \_ \_ .
4. A hurricane is a very strong \_ \_ \_ R \_ .
5. In a hurricane, the \_ I \_ \_ blows really hard.
6. During winter, temperatures at the North Pole are C \_ \_ \_ .
7. Hurricanes cause big \_ A \_ \_ \_ on the ocean's surface.
8. The GOES see bad weather coming and can \_ \_ \_ N us to prepare.
9. A calm "hole" in the center of a hurricane is called its E \_ \_ .

Hurricanes always form over the ocean.

## Find the Hidden Words

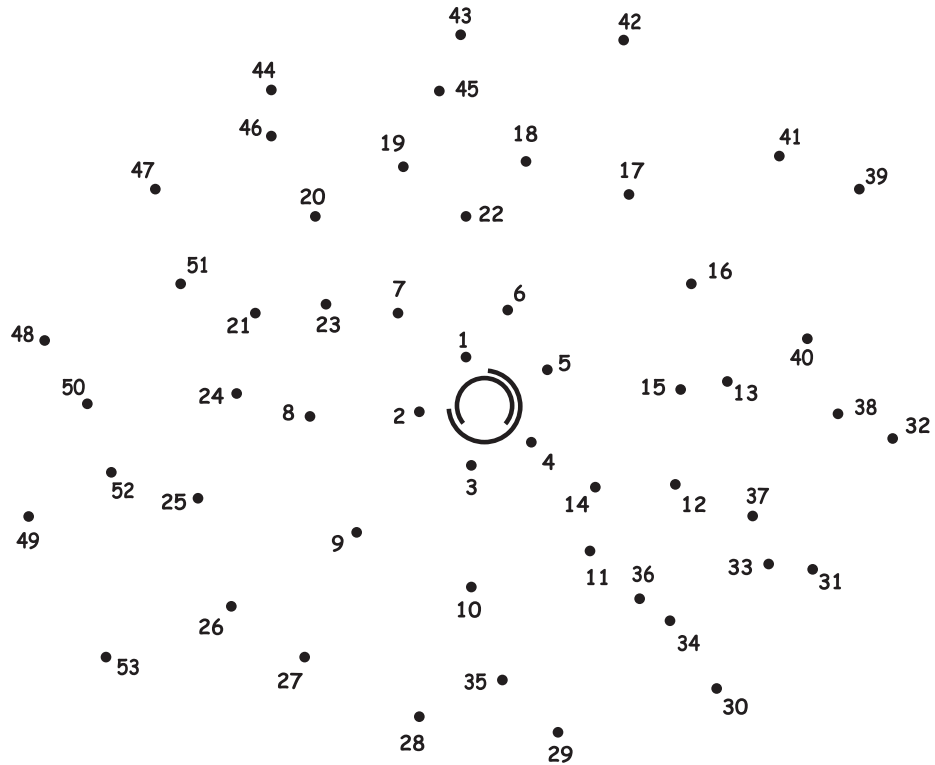
Find these words

EARTH  
OCEAN  
GOESR  
STORM  
SATELLITE



Warmer oceans make stronger storms.

## Connect the Dots



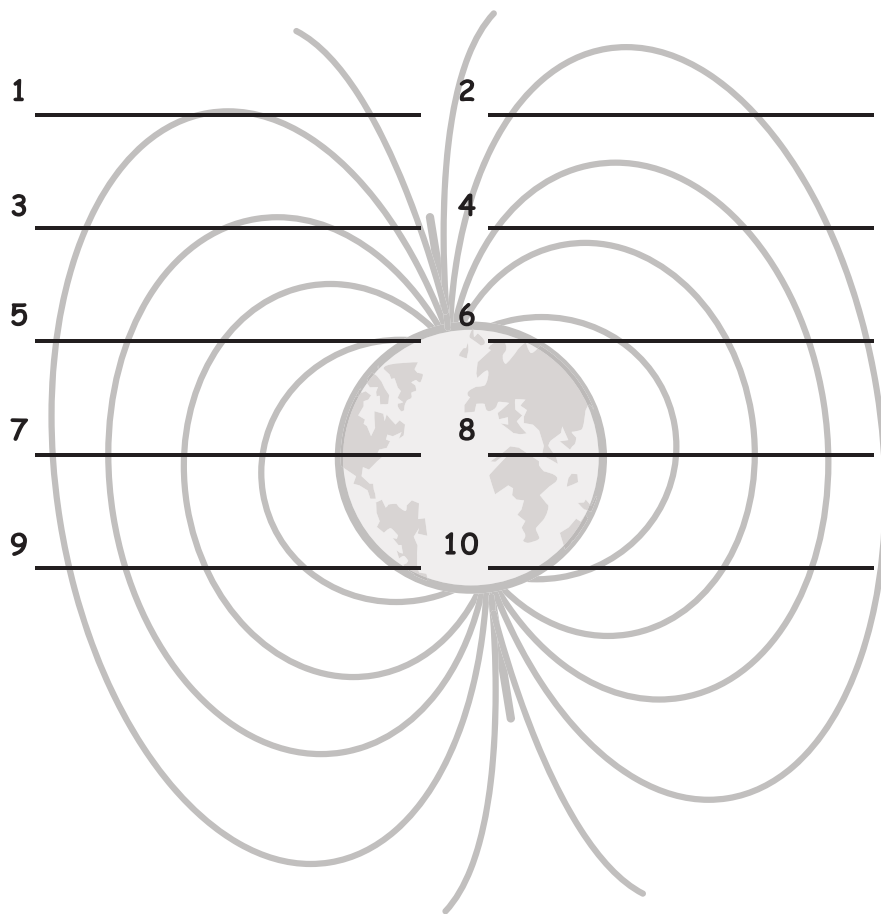
## Hurricane

In a hurricane, clouds swirl around and around, faster and faster.

## Words in Words

How many words can you make with the letters in

m a g n e t o s p h e r e



Earth has an invisible protective shield called the magnetosphere. It protects us from harmful particles and rays from the Sun.

## What's the Difference?

Circle six differences between the two pictures



The new GOES-R satellites will make weather predictions even more accurate.



## Find Rhymes

Find three rhymes for each of the words.

GOES

RAIN

SPACE

SUN

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____



The United States has the wildest weather  
of any country on Earth!