



# GOES-R

Fun Activity Book



**PUZZLES**

**JOKES**

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

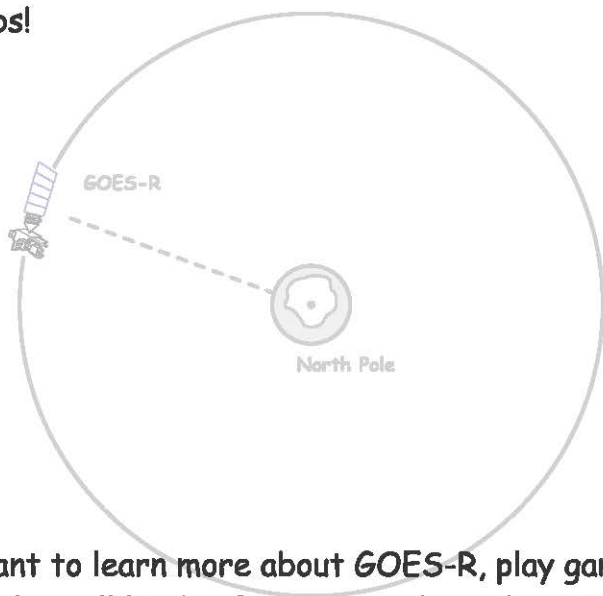
[www.noaa.gov](http://www.noaa.gov)

## Meet GOES-R

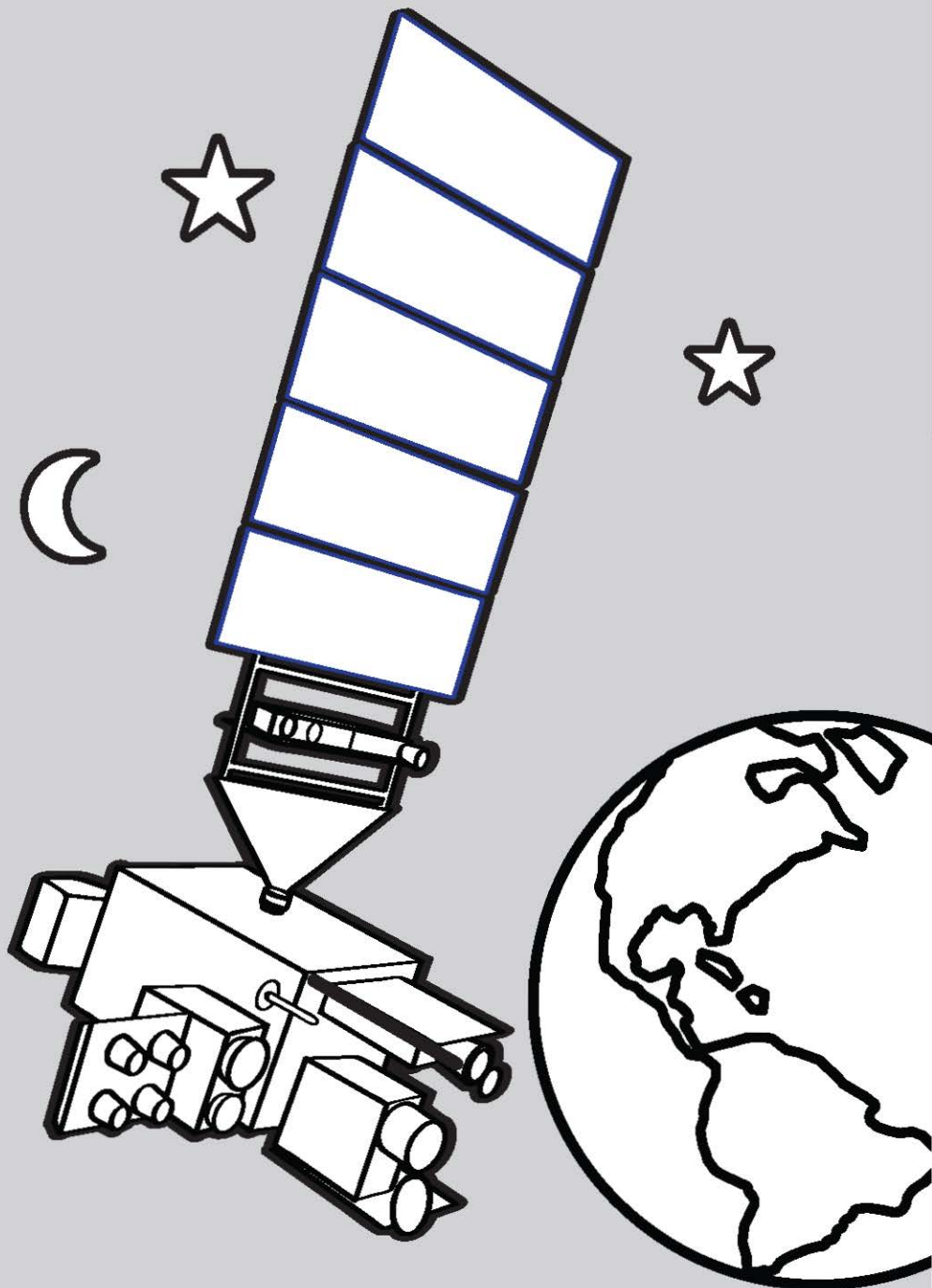
The new GOES-R weather satellite will take pictures of weather from space—22,000 miles above Earth! GOES-R will travel around Earth, making one trip around our planet each day.

From way up there, GOES-R can do a lot to help us down here on Earth. The satellite can see the weather on Earth in amazing detail. It can even tell the difference between clouds, snow, smoke, and smog!

GOES-R is great at watching storms form and it can help with hurricane, tornado, and flood warnings. The pictures that GOES-R will take of these types of weather will help weather forecasters to do their jobs!

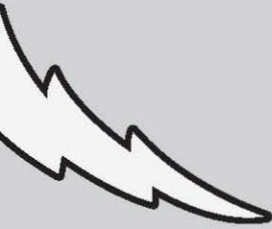


Want to learn more about GOES-R, play games, and explore all kinds of science and weather? Visit us online at [www.sci.jinks.nasa.gov](http://www.sci.jinks.nasa.gov).



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

**GOES-R can't eat any candy until after  
2016, 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

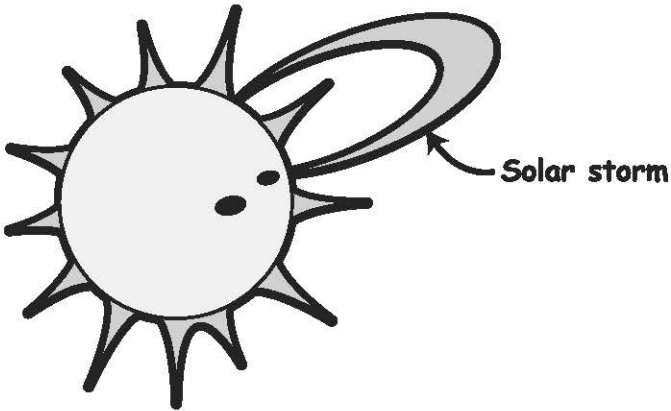
SPACE

LOCD

HOT

CEPAS

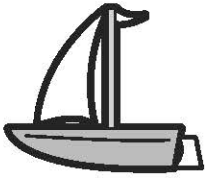
COLD



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

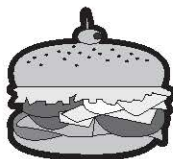
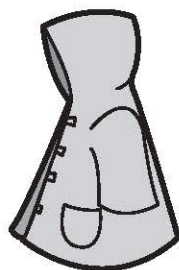
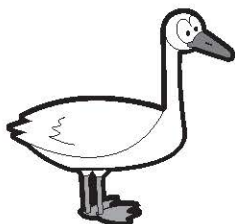


Moon

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."

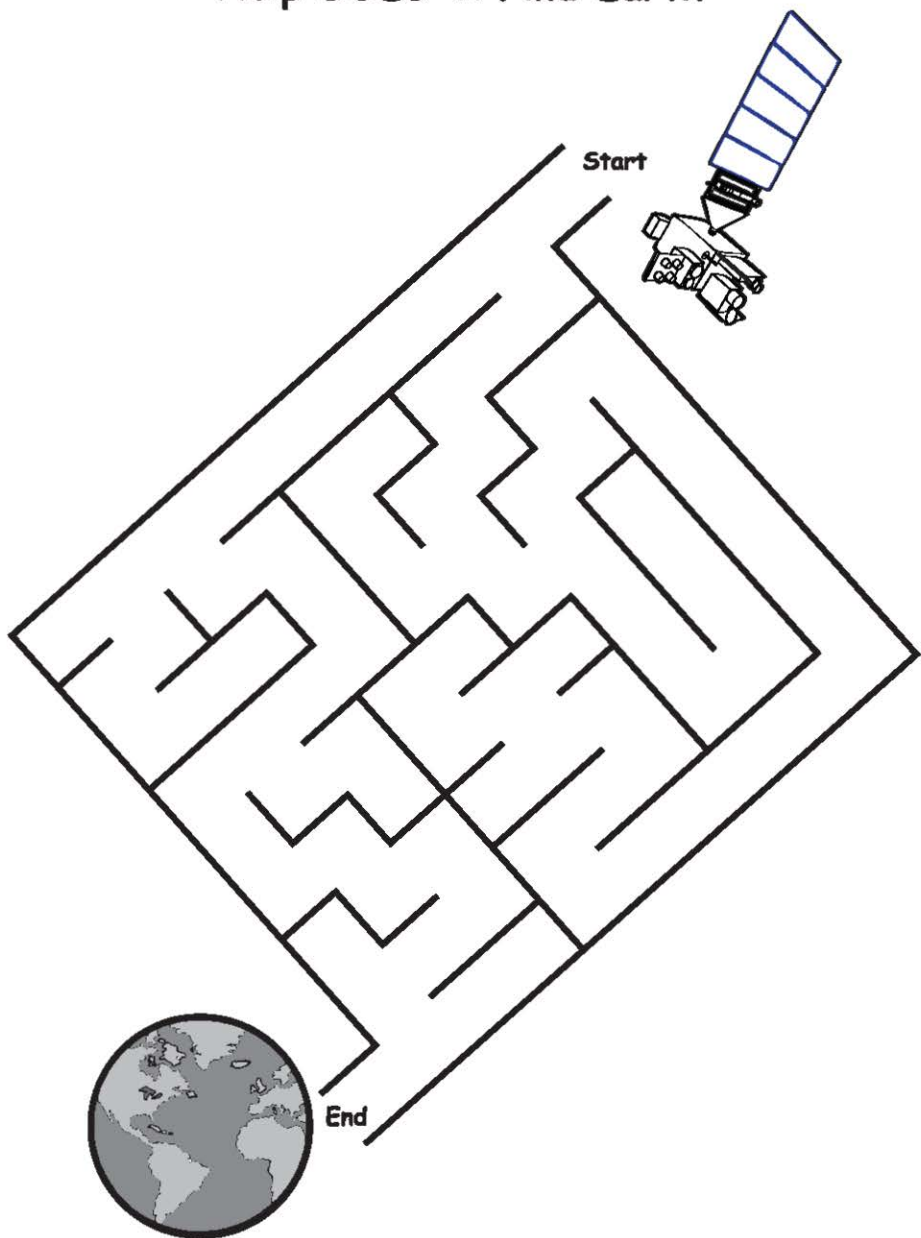


Color me



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

# Help GOES-R Find Earth

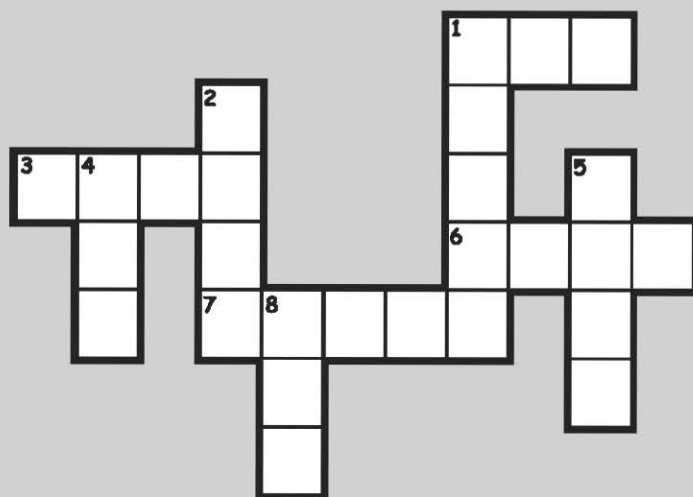


GOES-R will hover over one spot on Earth all the time.



## Earth Words

Fill in the words that fit the clues.



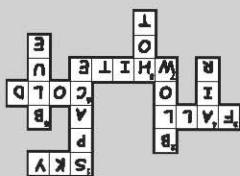
### Across

- 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.

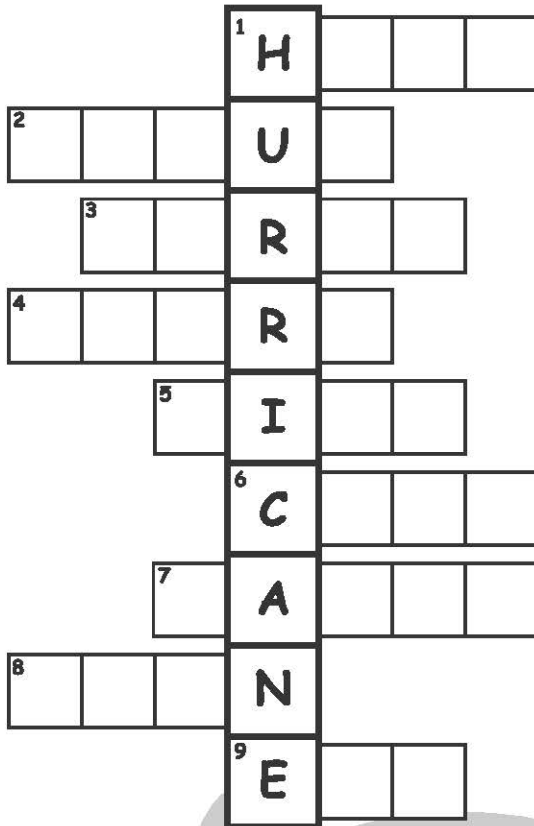
### Down

- 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. GOES-R can 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

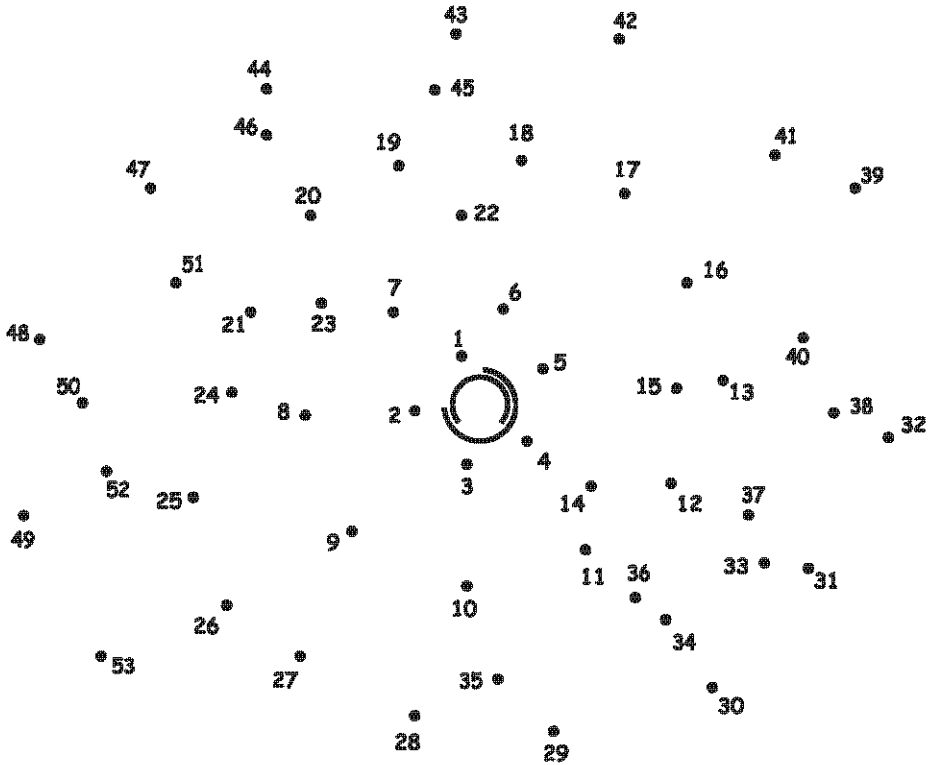
Find these words

EARTH  
OCEAN  
GOESR  
STORM  
SATELLITE



Warmer oceans make stronger storms.

# Connect the Dots



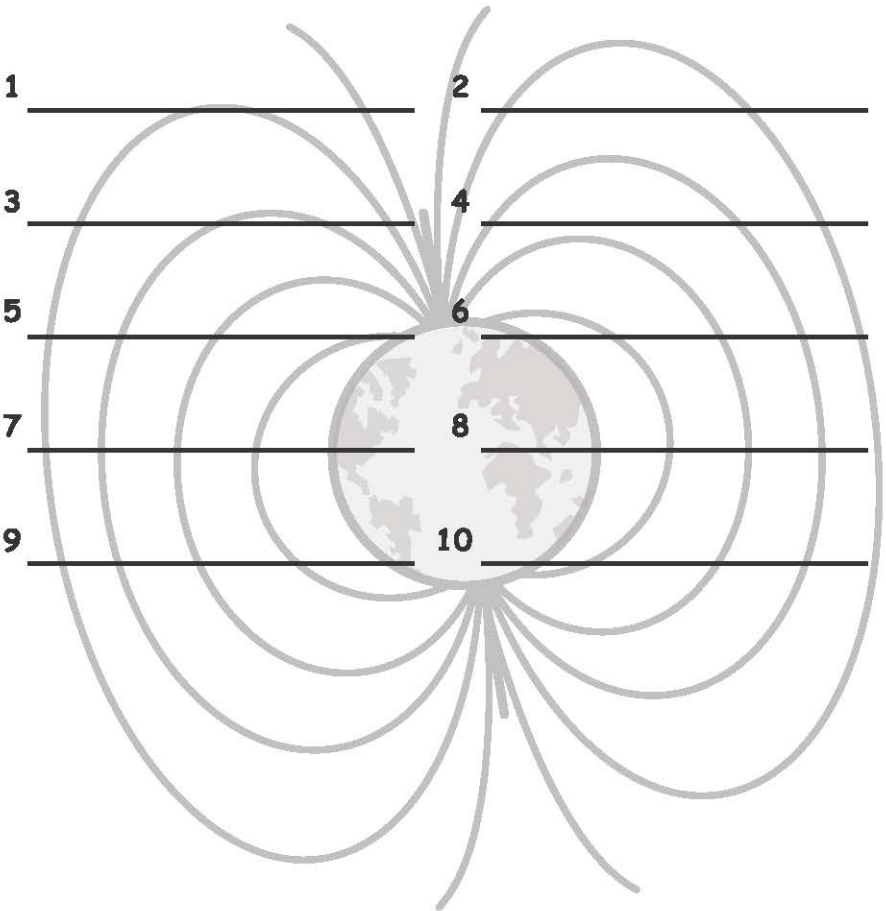
## Hurricane

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

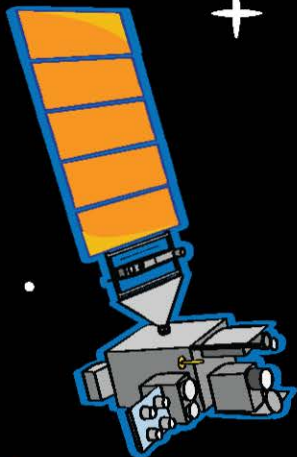
## Words in Words

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.



# GOES-R

Geostationary Operational  
Environmental Satellite-R Series

For information for students, visit NOAA's SciJinks web site at [scijinks.gov](http://scijinks.gov).



GOES-R Facebook: [www.facebook.com/GOESRsatellite](http://www.facebook.com/GOESRsatellite)



NOAA Satellites Facebook: [www.facebook.com/NOAANESDIS](http://www.facebook.com/NOAANESDIS)



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NOAA Satellites Flickr: [www.flickr.com/noaasatellites](http://www.flickr.com/noaasatellites)



## Find Rhymes

Find three rhymes for each of the words.

CLOUD

RAIN

SPACE

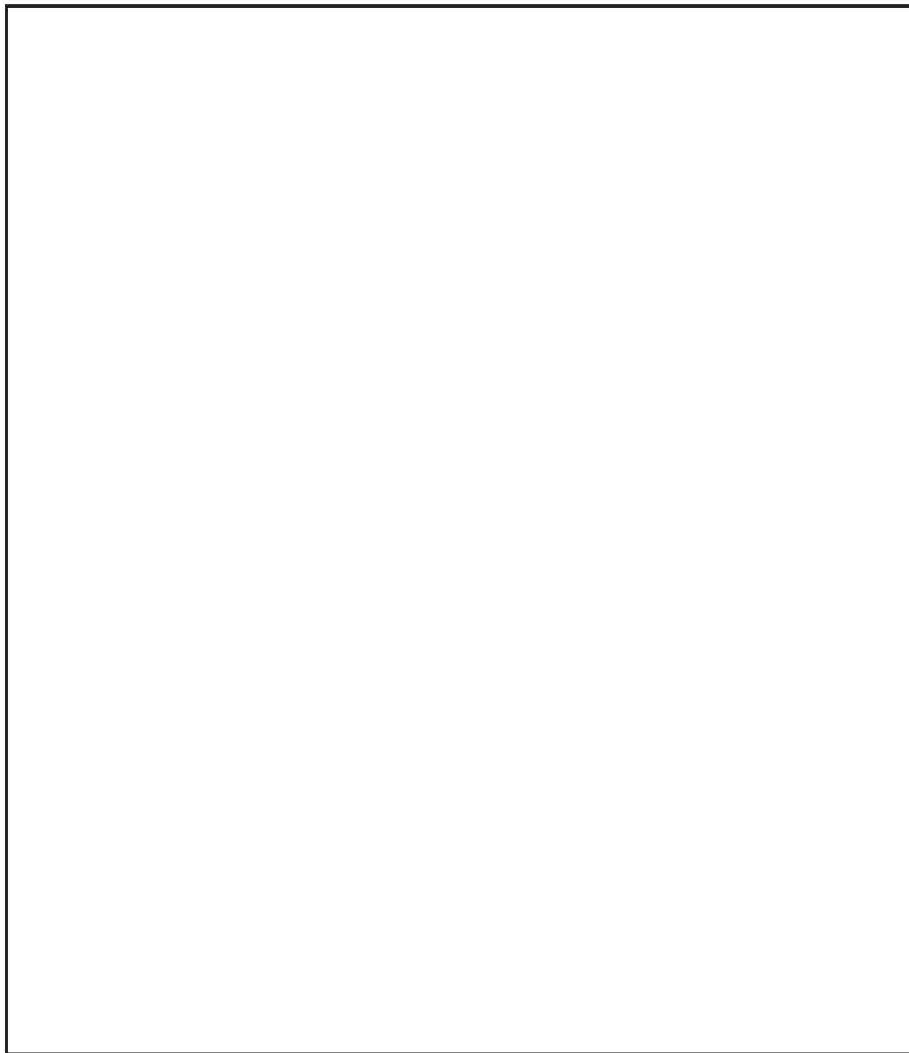
SUN

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



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

**Draw Your Favorite Weather**



**Weather is an adventure!**

## Time to Rhyme

Silent and soft,  
The snowflakes drift.  
They leave the world  
Wrapped up like a \_ \_ \_ \_.



Monday it's all rainy.  
Tuesday brings the sun.  
Wednesday is a snow day.  
Weather's lots of \_ \_ \_ !

GOES-R helps us know what kind of weather is on the way for Thursday, Friday, and beyond.

## Riddles

Why don't older people like jokes about snow?

**It's just a lot of skid stuff.**

Why can't you rely on snow during the winter holidays?

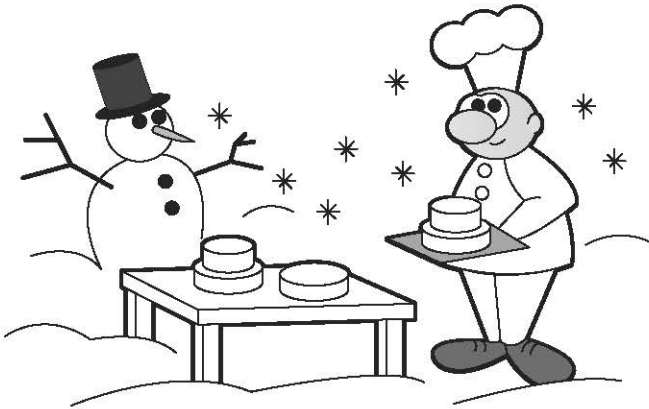
**Because it's so flaky!**

Why did the baker work outside on cold nights?

**So he wouldn't have to frost the cakes.**

What did the hurricane say to the GOES-R weather satellite?

**"I have my eye on you."**



**It's actually GOES-R that has its eye on the hurricane!**

## Unscramble the Letters

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

NIWD

AIR

ANIR

SUN

YSK

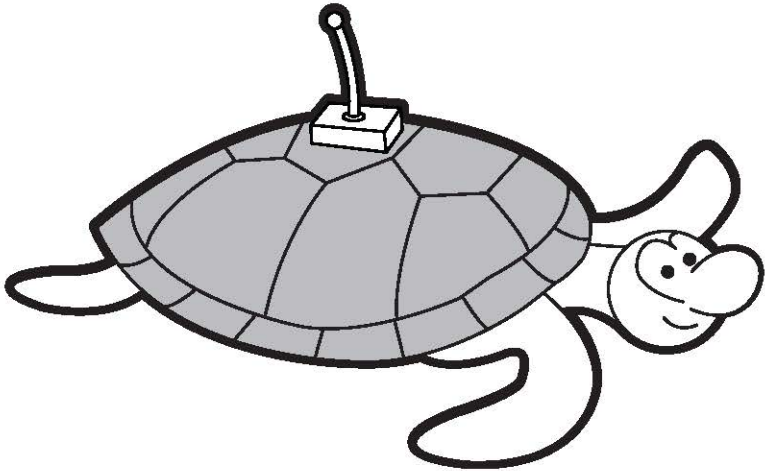
SKY

SNU

WIND

IRA

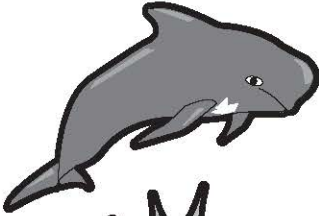
RAIN



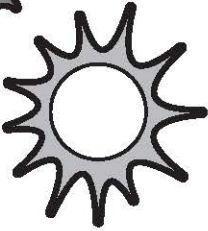
Satellites track some endangered animals, like this sea turtle.

## What is this?

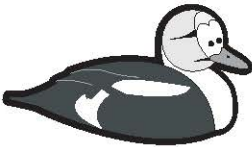
Draw a line from the picture to the word that says what it is.



Sun



Earth



Clock



Whale

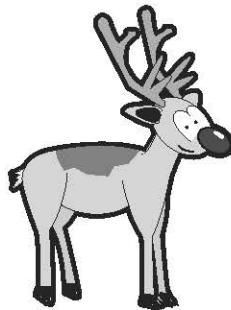
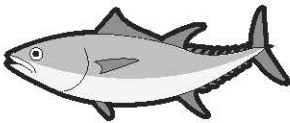
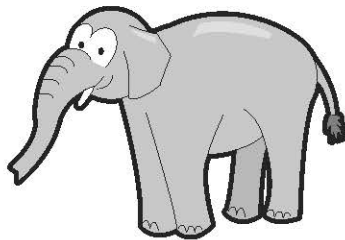
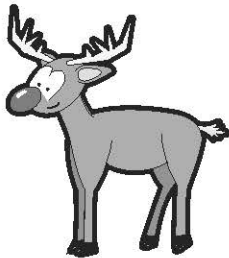
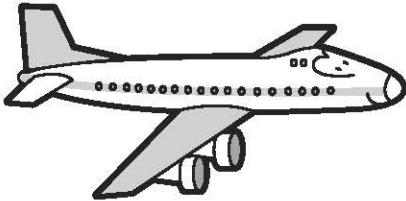
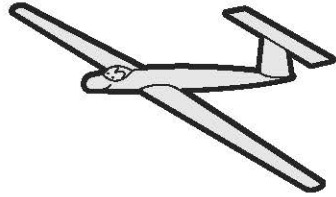
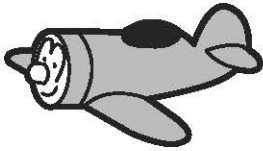


Duck

The National Weather Service tells everyone what kind of weather is on the way.

## What does not fit?

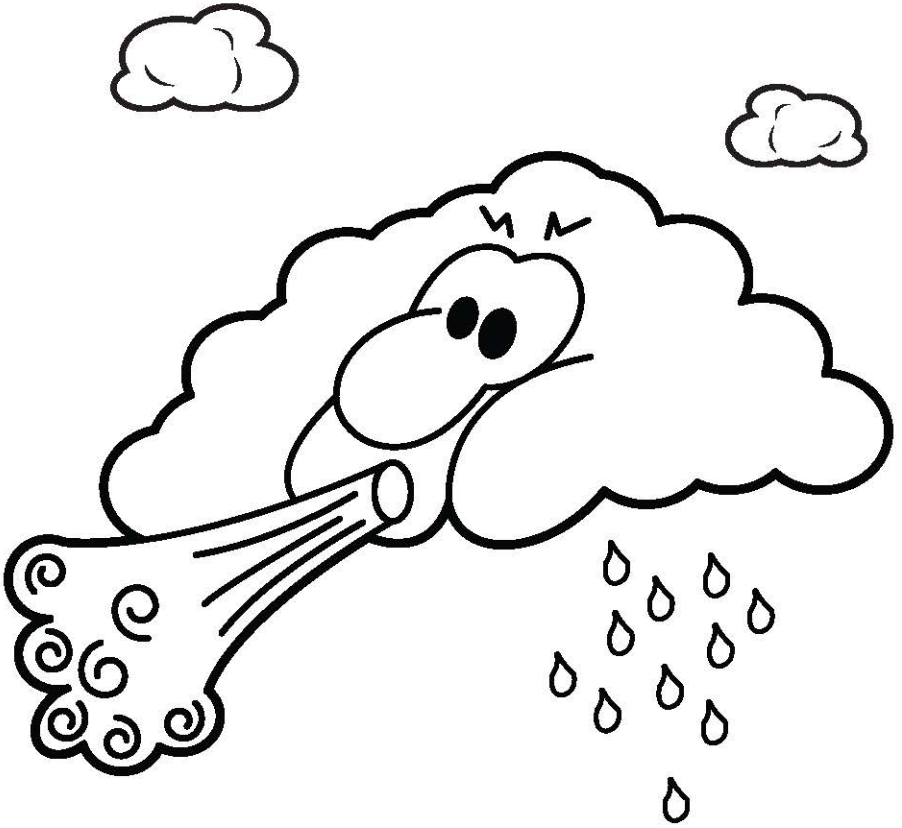
Circle the object that does not belong.



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Satellites watch the weather over the whole Earth.

Color me



This big cloud is blowing up a storm...



# What's the Difference?

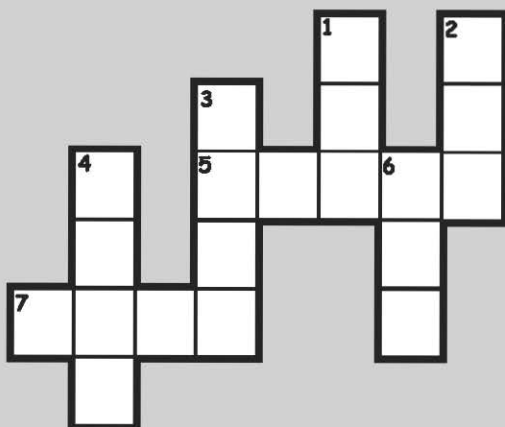
Circle six differences between the two pictures



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

## Earth Words

Fill in the words that fit the clues.



Across

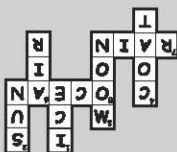


- 5 Water over most of Earth.  
7 Falls from the sky in wet drops.

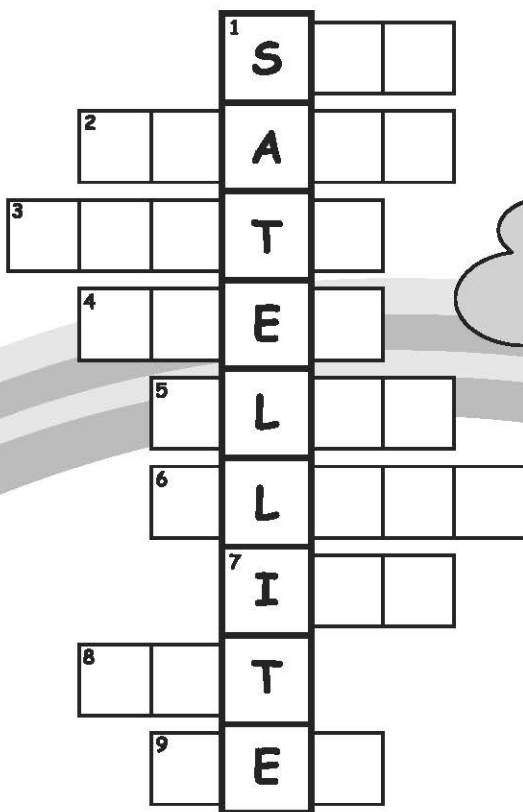
Down

- 1 Frozen water.  
2 Our own star.  
3 Bright and white and shines at night.  
4 Wear this if it is cold outside.  
6 What we breathe.

Satellites help us understand Earth better.



## Crossing Words



### CLUES:

- 1 After it rains, we may see a rainbow in the S \_ \_ .
- 2 GOES-R will watch Earth from \_ \_ A \_ \_ .
- 3 The color of snow is \_ \_ \_ T \_ .
- 4 When it's hot, sit under a shady \_ \_ \_ E.
- 5 The color of the sky on a sunny day is \_ L \_ \_ .
- 6 The fluffy, white \_ L \_ \_ \_ looks like cotton.
- 7 When water freezes, it makes I \_ \_ .
- 8 In summer, the weather is \_ \_ T.
- 9 I was out in the rain, so my hair is \_ E \_ .

Satellites study weather, the oceans,  
the land, and the air.

## Find the Hidden Words

Find these words

HEAT  
WIND  
SMOG  
HUMID  
CLIMATE



The atmosphere is a very thin blanket around Earth, like the skin of an apple.

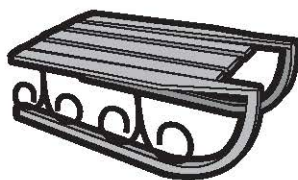
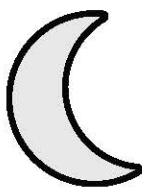
# Connect the Dots



If you could throw a ball hard enough  
and high enough, it would go into orbit!

## What goes together?

Draw a line from one thing to the thing that goes with it.



**GOES-R can sense temperatures on Earth's surface—from way up in space!**

Answers: Cloud-Lightning, Snowman-Sled, Moon-Earth