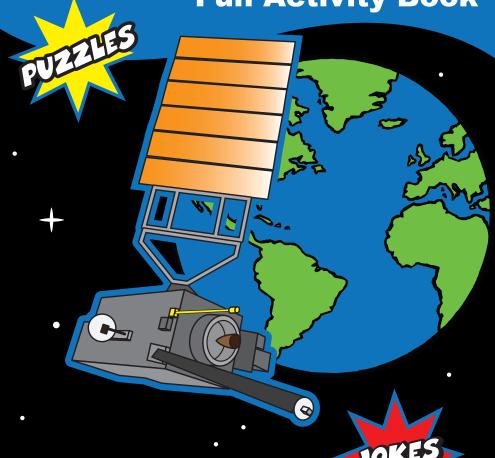




# COESTB

**Fun Activity Book** 



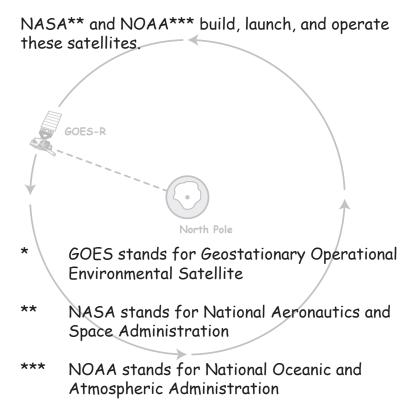
www.nasa.gov

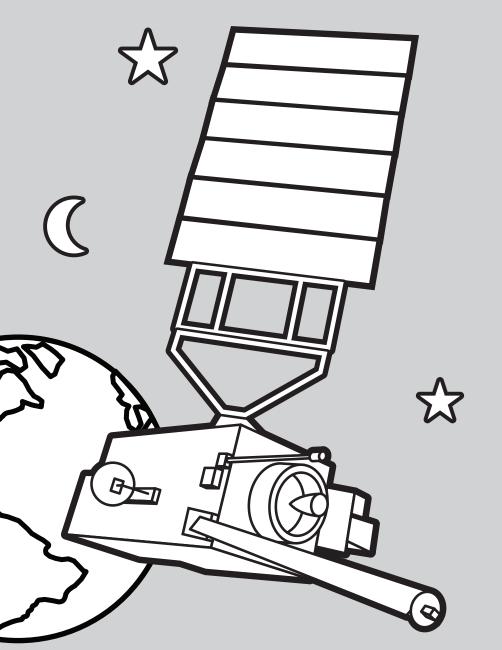
www.noaa.gov

#### Meet GOES-R

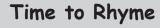
Did you read about the GOES\* weather satellites? Well, the new GOES-R satellites will be even more amazing. GOES-R is the name of some new weather satellites. Engineers are building them right now. The first one will be ready in early 2016. Like the GOES, it will orbit Earth once per day and take very detailed pictures of Earth and its weather.

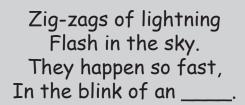
This new kind of satellite will do all the jobs the old GOES do, like take pictures of Earth's weather. GOES-R will also study the Sun, lightning, and Earth's magnetic field.





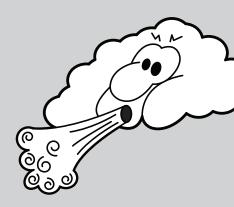
The GOES-R satellites can see in infrared light — a kind of light our eyes cannot see.





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?"

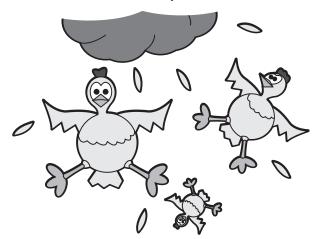
To keep you from stepping in a poodle.

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.

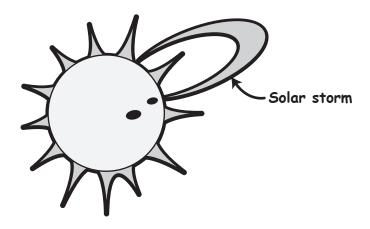


GOES-R can't eat any candy until after early 2016, for that is its launch time.

# Unscramble the Letters

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

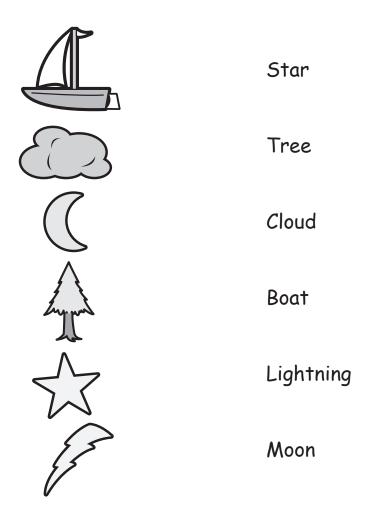
| MROST | CLOUD |
|-------|-------|
| THO   | STORM |
| OLDUC | SPACE |
| LOCD  | HOT   |
| CEPAS | COLD  |



The Sun can have stormy weather too.

## What is this?

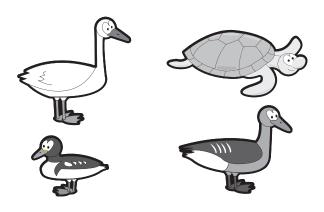
Draw a line from the picture to the word that says what it is.



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

## What does not fit?

Circle the object that does not belong.



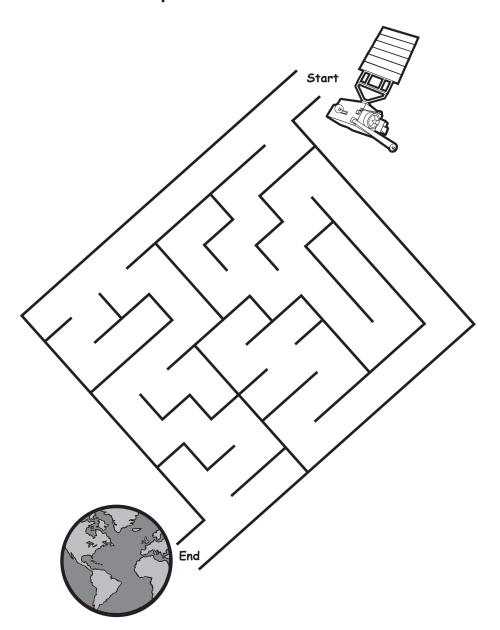


A raincoat will not protect Space Station astronauts from bad "space weather."



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

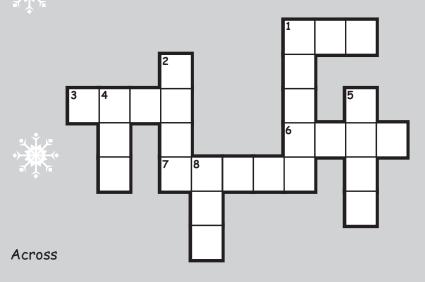
# Help GOES-R Find Earth



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



Fill in the words that fit the clues.

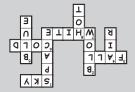


- 1 After it rains, we may see a rainbow in the \_ \_ \_.
- When trees lose their leaves and darkness comes sooner each day.
- 6 In winter, the weather is \_\_\_\_.
- 7 The color of snow.

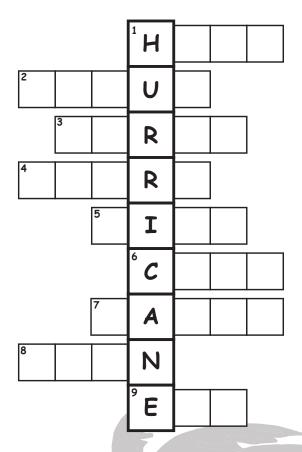
#### Down

- 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 = 1.
- 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

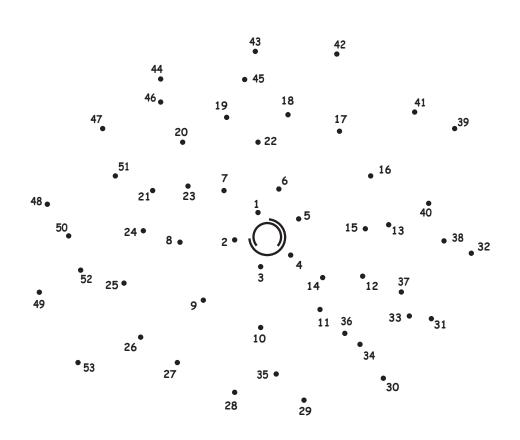
Find these words

EARTH OCEAN GOESR STORM SATELLITE

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

Warmer oceans make stronger storms.

# Connect the Dots



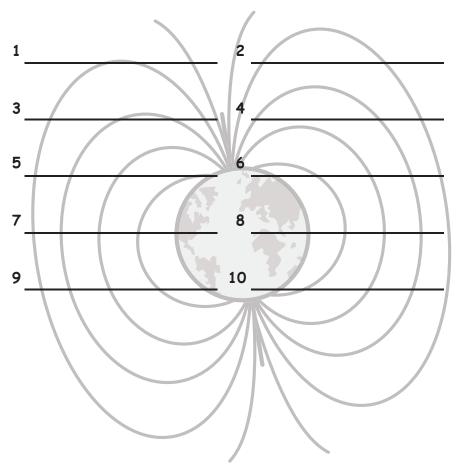
Hurricane

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

#### Words in Words

How many words can you make with the letters in

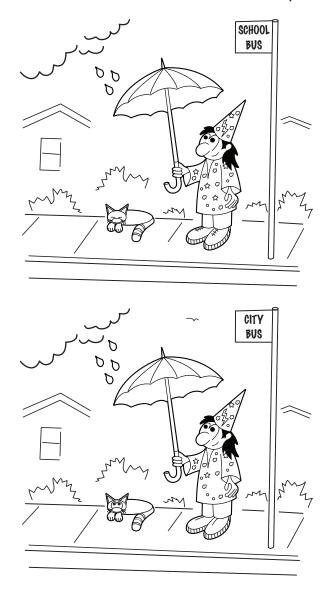
# magnetosphere



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!