



UNIT 3: WIND AND WATER / WEEK 1 - 2

Weather Research - RESOURCE

Standard
Connection:
ELA.RI.PK4.1
ELA.W.PK4.5
M.MD.PK4.2
S.ES.PK4.2
PD.FM.PK4.5

ALL ABOUT BLIZZARDS



Playing in the Snow



Too Much Snow



Sometimes it snows really fast.



Blizzards make it hard to walk.



When there is a blizzard, it is best to take shelter and stay safe inside.



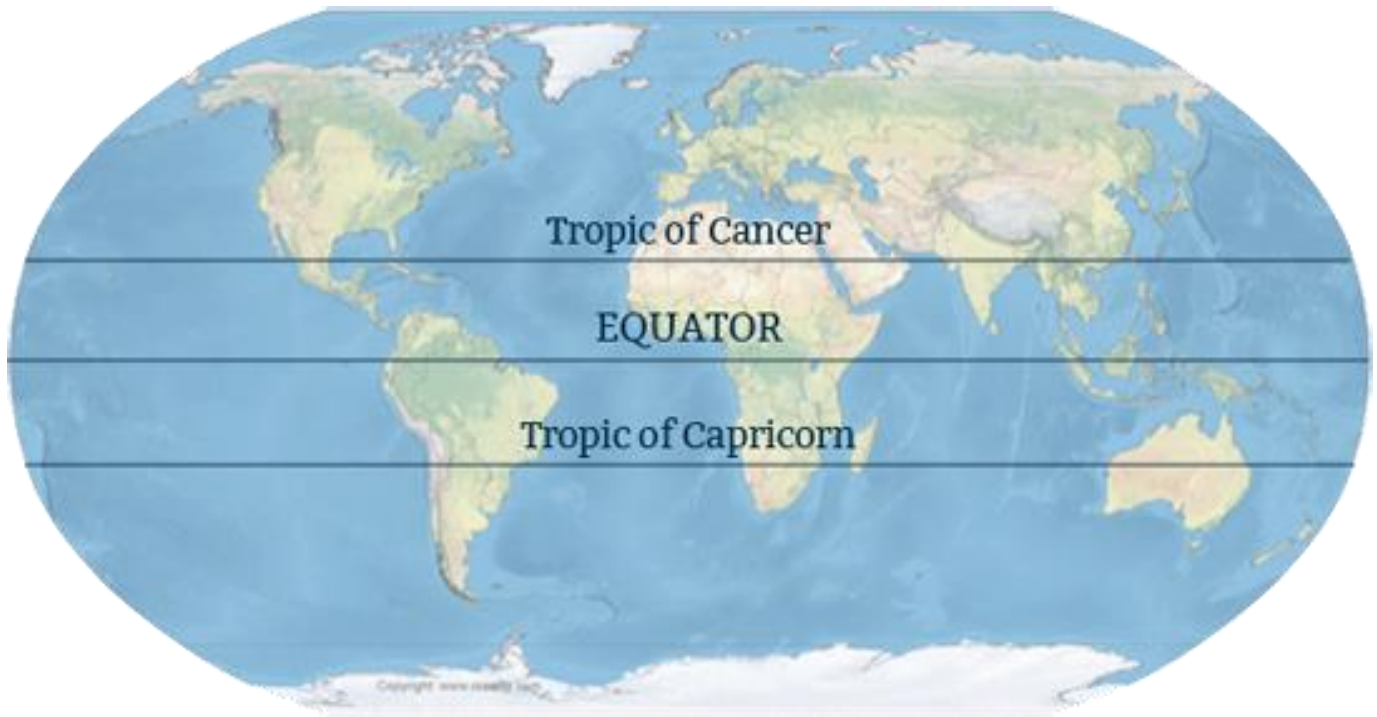
Blizzards make it hard to drive.



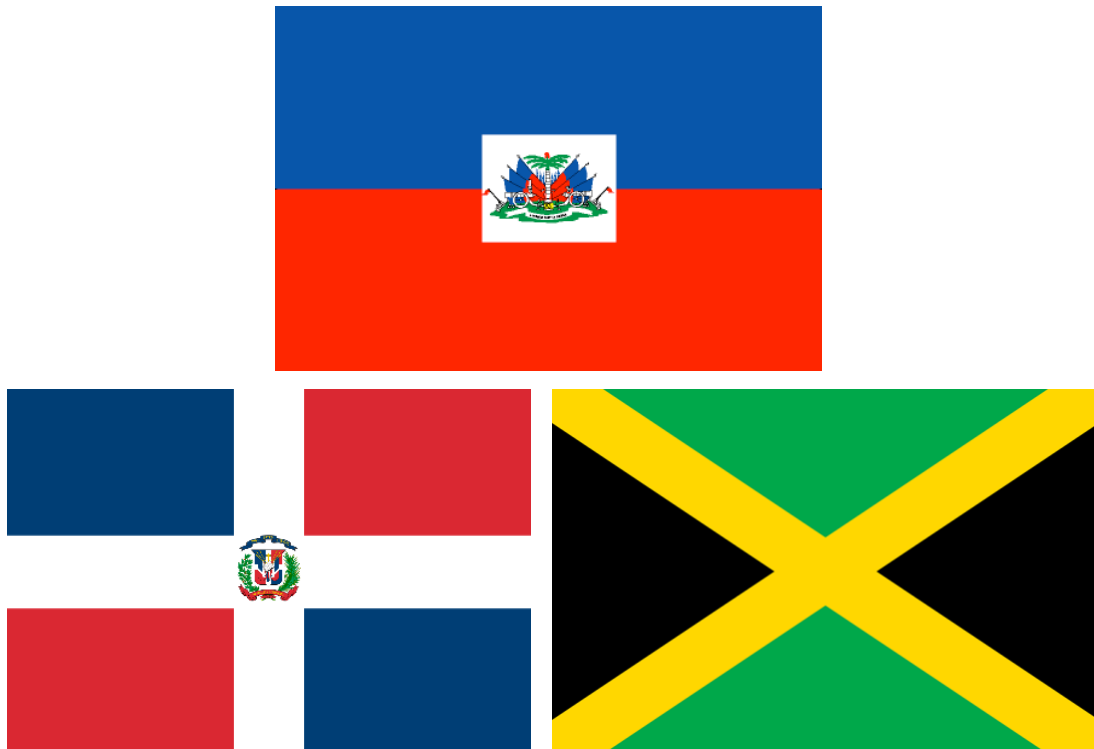
ALL ABOUT HURRICANES



Hurricanes form in a part of the world called the tropics.



Haiti, The Dominican Republic, and Jamaica are tropical countries.



**A hurricane needs two ingredients:
First, it needs warm ocean water.**



Second, it needs wind.



**A hurricane begins with a
thunderstorm over the ocean.**



**The thunderstorm becomes bigger.
Now it is called a tropical depression.**



**The thunderstorm spins in a circle.
Now there is an area in the center of
the storm called the eye.**



**When the storm is going as fast as it
can, it is called a hurricane. It moves
over land and has winds so strong they
can knock down trees and buildings.**



**There are five kinds of hurricanes.
Category 1 is the weakest, and
category 5 is the strongest.**

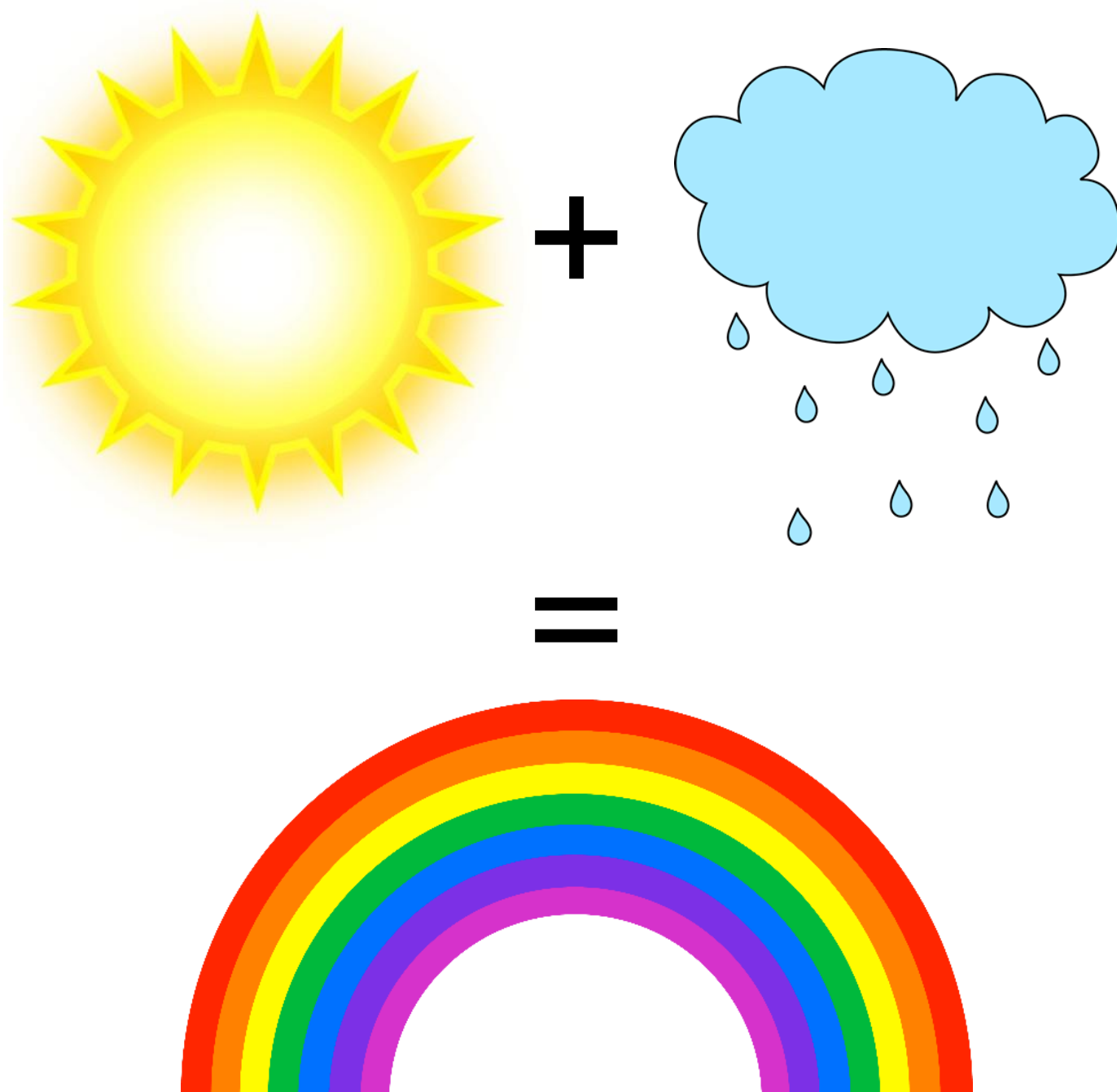
| Category | Wind Speed (mph) | Storm Surge (feet) | Damage |
|----------|------------------|--------------------|--------------|
| 1 | 74-95 | 4-5 | Minimal |
| 2 | 96-110 | 6-8 | Moderate |
| 3 | 111-130 | 9-12 | Extensive |
| 4 | 131-155 | 13-18 | Extreme |
| 5 | 155 + | 18 + | Catastrophic |

ALL ABOUT RAINBOWS



You need two things to make a rainbow.

You need sunlight and rain. Sunlight is special. It is made of seven colors.



To turn sunlight into a rainbow, you need to break the sunlight apart. A prism is a tool that breaks sunlight into its seven colors.



When sunlight hits a prism, it is broken into red, orange, yellow, green, blue, and indigo.



**A raindrop is a
kind of a prism.**

**After it rains,
some raindrops
stay in the air.**



When the sun shines and hits these raindrops, they break the sunlight apart and create a beautiful rainbow.



ALL ABOUT THUNDERSTORMS



A thunderstorm is heavy rain with thunder and lightning.



In a thunderstorm, frozen raindrops in clouds bump into each other and make electricity.



Sometimes this electricity tries to reach the ground. When it does it makes a bright flash of light. This is called lightning.



When lightning travels toward the ground, it pushes air out of the way. This makes a loud cracking or rumbling sound called thunder.

**There are different types of thunderstorms.
Single cells are the weakest and super
cells are the strongest.**



ALL ABOUT TORNADOES



Sometimes during a thunderstorm a tornado can form touching the clouds and the land.



A tornado that touches clouds and the water is called a waterspout.



A tornado, called a funnel cloud or twister, is made from wind that spins very fast.





A tornado is dangerous, and you have to seek shelter in a safe place away from windows.

A tornado can cause a lot of damage.



NOW YOU CAN MAKE YOUR OWN TORNADO!

You will need:

- 2 empty plastic containers, such as water bottles.
- Duct tape
- Water

Instructions:

1. Fill one empty container $\frac{3}{4}$ full with clean water.
2. Add glitter or food coloring. (Optional)
3. Place the empty container on top of the container with water.
4. Seal the container tightly with duct tape.
5. Move the bottle rapidly in a circular motion. After a few seconds, you should see the water creating a funnel.