Date:	May 4 to May 8, 2015
Subject Matter:	Science
Course/Grade Level:	8th grade
Lesson Title:	Storms
Time Period:	5 Days

Procedures for Meeting Objectives:

Monday, May 4, 2015

Bell Ringer:

We see these types of alerts on television often. Out of the ordinary weather that can cause damage or harm is…?

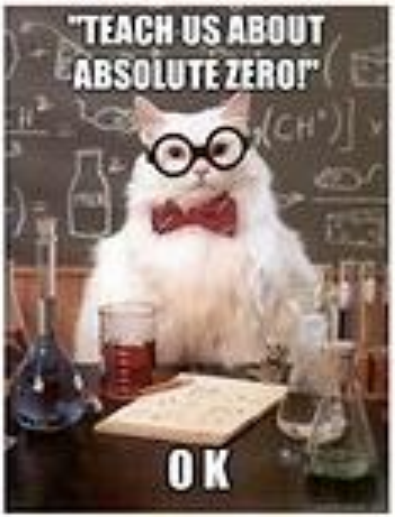
Best Answer:

Severe weather.

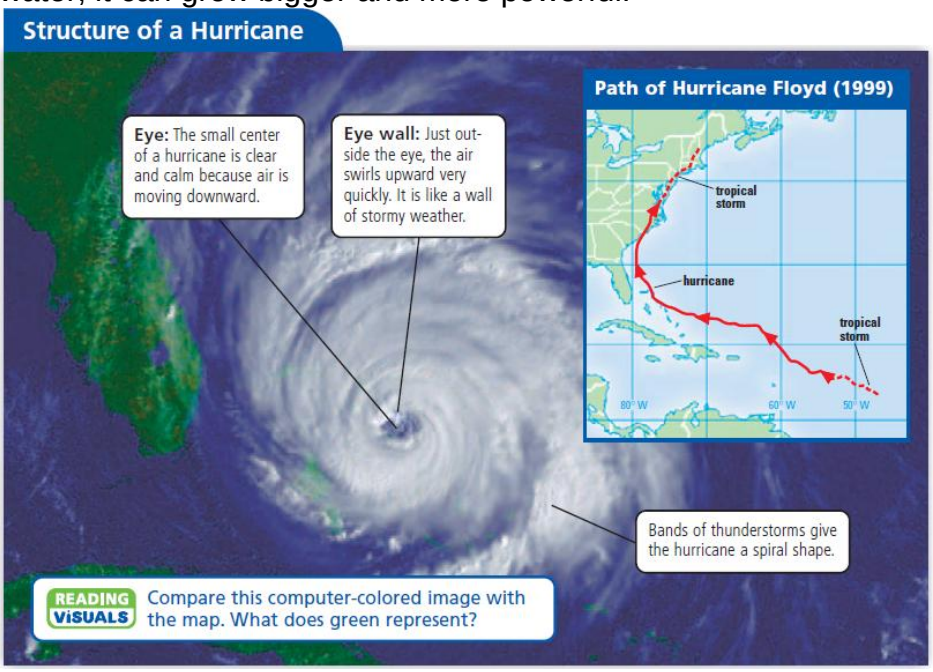
Next segment of class:

Students will do SSR for the next approximately five (5) minutes of class.

Figure 1 Next segment of class. Science joke of the day



Next segment of class (Brief lecture):
Tropical storms and hurricanes generally move westward with the trade winds. Near land however, they will often move north, south, or back eastward. As long as a storm stays above warm water, it can grow bigger and more powerful.



Next segment of class:

On the Parr-class.tripod.com home page, students will then click on ***"3.2 Low Pressure Systems Can Become Storms"***. SSR when done.

- Answer (3) *Check Your Reading* questions.
- Answer (1) *Reading Visuals* questions.
- Answer (3) *Key Concept* questions at the end (Total of 7 questions).
- Pre-Ap Only: Also Answer *Challenge* question at the end (Total of 8 questions).

Exit Card:

What is the source of a hurricane's energy?

Best Answer:

Warm water is the source of a hurricane's energy.

Tuesday, April 28, 2015

Bell Ringer:

What can you tell from the first name of an air mass category?

Best Answer:

The first name of an air mass category tells whether the air mass formed over land or water.

Next segment of class:

Students will do SSR for the next approximately five (5) minutes of class.

Next segment of class (Brief lecture):
Air masses can travel away from the regions where they form. They move with the global pattern of winds. In the United States, air masses generally move from west to east.

Next segment of class:

On the Parr-class.tripod.com home page, students will then click on ***"3.1 Weather Changes As Air Masses Move"***. SSR when done.

- Answer (4) *Check Your Reading* questions.
- Answer (3) *Reading Visuals* questions.
- Answer (3) *Key Concept* questions at the end (Total of 10 questions).
- Pre-Ap Only: Also Answer *Challenge* question at the end (Total of 11 questions).

Exit Card:

What does ***each*** word of a air mass name tell us?

Best Answer:

Each word of an air mass name gives us the ***characteristics*** of an air mass.

Wednesday, April 29, 2015

Testing

Thursday, April 30, 2015

Bell Ringer:

What kind of air mass would form over Indiana?

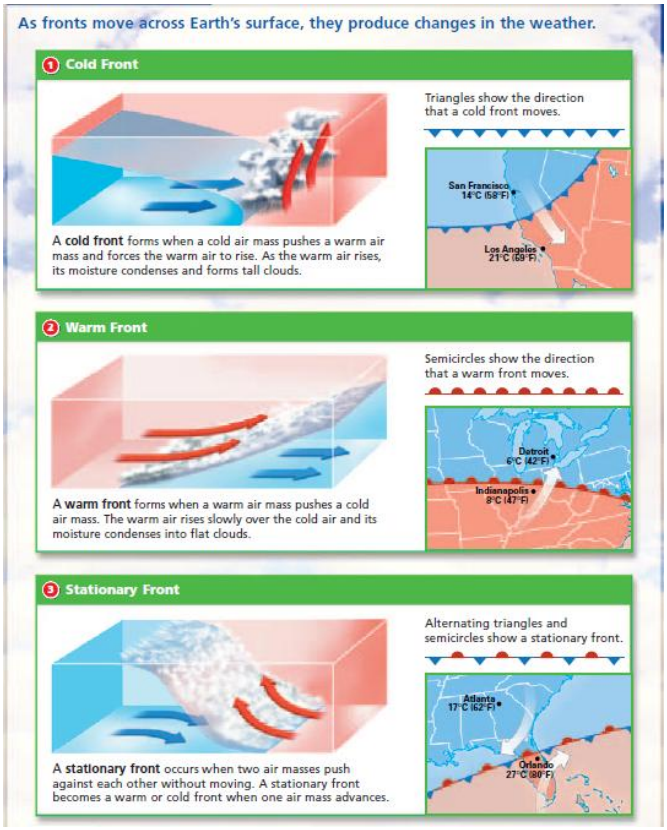
Best Answer:

The kind of air mass that would form over Indiana is a Continental air mass. An air mass over dry land.

Next segment of class:

Students will do SSR for the next approximately five (5) minutes of class.

Next segment of class (Brief lecture):
When a new air mass moves over an area, you can expect the weather to change. Perhaps you have heard a weather forecaster talk about fronts. A ***front*** is a boundary between air masses.



Next segment of class (lab):

INVESTIGATE Air Masses

What happens when air masses collide?

PROCEDURE

1. Cut the cardboard to create a snug barrier that divides your beaker in half.
2. Mix about 5 mL of salt, 50 mL of water, and a drop of blue food coloring in one cup. This dense mixture represents a cold air mass.
3. Mix 50 mL of water with a drop of red food coloring in the other cup. This less-dense mixture represents a warm air mass.
4. Carefully pour the red water into one side of your divided beaker and the blue saltwater into the other side. As you look through the side of the beaker, quickly remove the barrier.

WHAT DO YOU THINK?

- What happened when the two liquids met?
- To what extent did the liquids mix together?

CHALLENGE How are the liquids like air masses?

SKILL FOCUS
Inferring

MATERIALS
- 500 mL beaker
- stiff cardboard
- scissors
- 2 cups
- small beaker for measuring
- salt
- water
- food coloring

TIME
25 minutes

Exit Card:

When does a cold front form?

Best Answer:

A cold front forms when a cold air mass pushes a warm air mass and forces the warm air to rise.

Friday, May 1, 2015

Bell Ringer:

When does a cold front form?

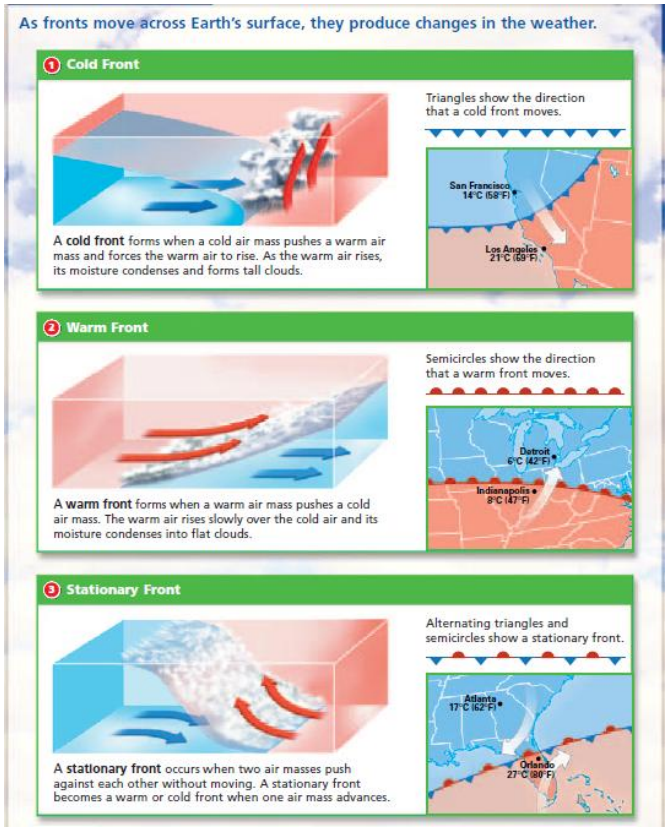
Best Answer:

A cold front forms when a cold air mass pushes a warm air mass and forces the warm air to rise.

Next segment of class:

Students will do SSR for the next approximately five (5) minutes of class.

Next segment of class (Brief lecture):
When a new air mass moves over an area, you can expect the weather to change. Perhaps you have heard a weather forecaster talk about fronts. A ***front*** is a boundary between air masses.



Next segment of class (lab continued):

INVESTIGATE Air Masses

What happens when air masses collide?

PROCEDURE

1. Cut the cardboard to create a snug barrier that divides your beaker in half.
2. Mix about 5 mL of salt, 50 mL of water, and a drop of blue food coloring in one cup. This dense mixture represents a cold air mass.
3. Mix 50 mL of water with a drop of red food coloring in the other cup. This less-dense mixture represents a warm air mass.
4. Carefully pour the red water into one side of your divided beaker and the blue saltwater into the other side. As you look through the side of the beaker, quickly remove the barrier.

WHAT DO YOU THINK?

- What happened when the two liquids met?
- To what extent did the liquids mix together?

CHALLENGE How are the liquids like air masses?

SKILL FOCUS
Inferring

MATERIALS
- 500 mL beaker
- stiff cardboard
- scissors
- 2 cups
- small beaker for measuring
- salt
- water
- food coloring

TIME
25 minutes

Exit Card:

How does a warm front form?

Best Answer:

A warm front forms when a warm air mass pushes a cold air mass. The warm air rises slowly over the cold air and condenses into flat clouds.