

Weather Warm Ups



WEATHER WARM UPS WEEK 3

MONDAY

Match the scientist with their job description.

- __ 1. Atmospheric Scientist

__ 2. Climatologist

__ 3. Hydrologist

__ 4. Meteorologist
- A. Scientist who studies water.

B. Scientist who studies the atmosphere.

C. Scientist who studies Earth’s weather over time.

D. Scientist who studies the weather.

TUESDAY

Write what these weather instruments measure:

- Anemometer = _____
- Barometer = _____
- Rain Gauge = _____
- Sling Psychrometer = _____
- Thermometer = _____
- Wind Vane = _____

WEDNESDAY

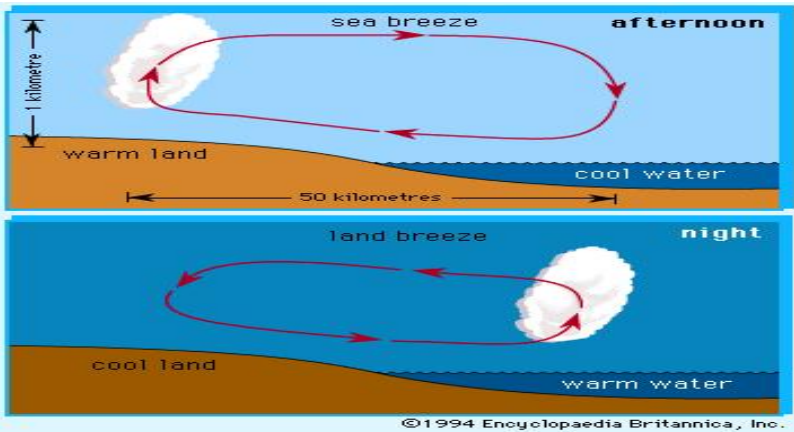
What is the percentage of land and water on Earth?

Land = ____% Water = ____%

Where is most of the water on Earth’s surface?

Explain why hurricanes form over warm water temperatures of 80°F (20 °C).

THURSDAY



Describe the pictures to the left.

WEATHER WARM UPS WEEK 4

MONDAY

Any type of solid or liquid water that falls to Earth?

- a. precipitation
- b. condensation
- c. evaporation
- d. transpiration

Which of the following can be described freezing ice pellets while falling through the cold air?

- a. rain
- b. freezing rain
- c. sleet
- d. hail

TUESDAY

Write the key words for each part of the water cycle.

Condensation =

Dew =

Evaporation =

Frost =

Ground Water =

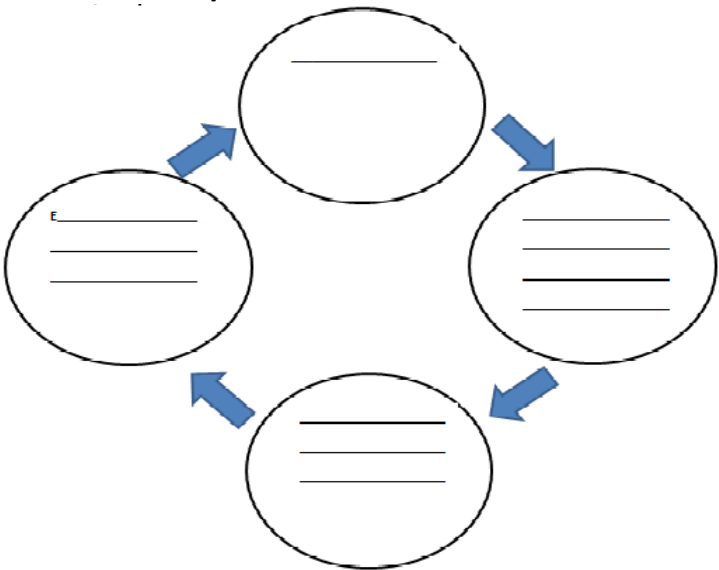
Precipitation =

Run-Off =

Surface Water =

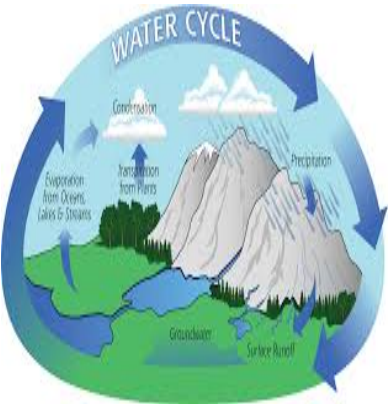
Transpiration =

WEDNESDAY (Put the water cycle in the correct order).



precipitation, run-off, surface water
condensation, dew, evaporation, frost,
ground water, transpiration

THURSDAY



- A. Condensation
- B. Dew
- C. Evaporation
- D. Frost
- E. Ground Water
- F. Precipitation
- G. Run-Off
- H. Surface Water
- I. Transpiration

- 1. Water vapor changes to water droplets.
- 2. Water vapor condenses onto a surface.
- 3. Water droplets fall in various forms.
- 4. Water sinks in the porous ground.
- 5. Water enters the atmosphere as water vapor.
- 6. Precipitation that falls back to sea level.
- 7. Water vapor that changes directly to ice crystals on a surface.
- 8. Plants release water vapor.
- 9. Water collects on top of surfaces and the ground.

WEATHER WARM UPS WEEK 5

MONDAY

How does the Gulf Stream affect climate (tell your shoulder partner and then write your answer below).

What three factors affect climate?

TUESDAY

Air pressure _____ as molecules of gas get _____ apart.

This gas makes of 78% of the atmosphere? _____

This gas makes up 21% of the atmosphere? _____

This gas makes up about 1% of the atmosphere? _____

WEDNESDAY

Is air a substance or just empty space explain your reasoning below?



Match the layers with their objects.

THURSDAY

- | | |
|---------------------|--|
| ___ 1. Exosphere | A. airplanes, people, & weather |
| ___ 2. Ionosphere | B. ozone layer |
| ___ 3. Mesosphere | C. meteors & coldest layer |
| ___ 4. Stratosphere | D. hottest layer |
| ___ 5. Thermosphere | E. Aurora Borealis (pretty lights or ions) |
| ___ 6. Troposphere | F. space ships, satellites, space station, & space |

WEATHER WARM UPS WEEK 6

MONDAY

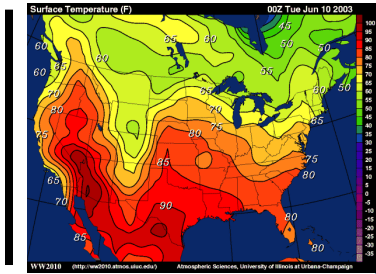
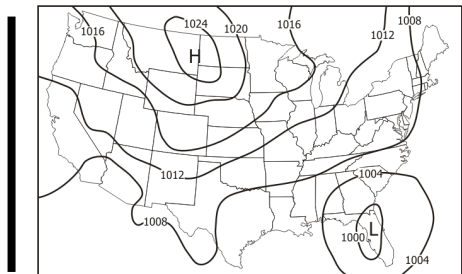
The _____ Current brings _____ ocean waters to the East Coast (South Carolina).

The _____ Current brings _____ ocean waters to the West Coast (California).

Current Tricks: _____

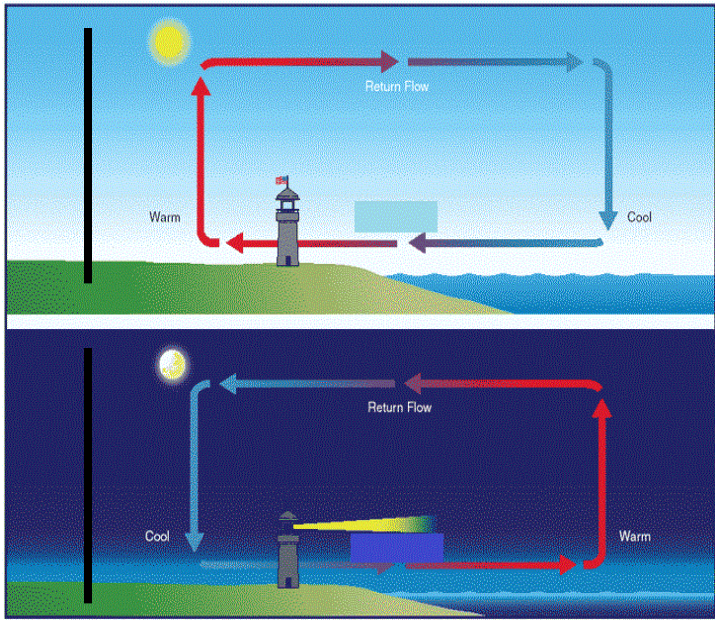
TUESDAY

Label which one is an isotherm map and a isobar map.



WEDNESDAY

Label Land and Sea Breeze.

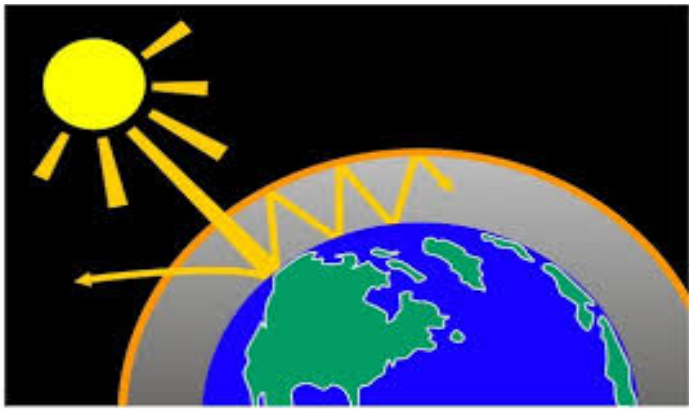


This is a picture of the _____ Effect

THURSDAY

The _____ drives the greenhouse effect. The heat transfer that is trapped is _____.

_____ % of the radiation is absorbed.



WEATHER WARM UPS WEEK 7: SCIENTIFIC ARGUMENTS, CLAIMS, EXPLANATIONS, DESIGNS

MONDAY-FILL IN SEP S.1A.7

C_____ and a_____ scientific
a_____ to support c_____,
explanations, or d_____ using
e_____ from observations, data, or
i_____ texts.

WEDNESDAY-MY EVIDENCE

Write one observation, data (graph)
or informational text that proves how
you claim that humans have impacted
the atmosphere?

TUESDAY-MY CLAIM

What is one thing that you have learned about how
humans impact the atmosphere?

THURSDAY-
MY REASONING

Based on your evidence above, give your reasoning behind your argument claiming that
humans have impacted the atmosphere. *Example: Based on my graph explaining carbon dioxide
released, I feel validated in my claim that humans added to the pollution adding to climate change over
time.*

WEATHER WARM UPS WEEK 8

MONDAY

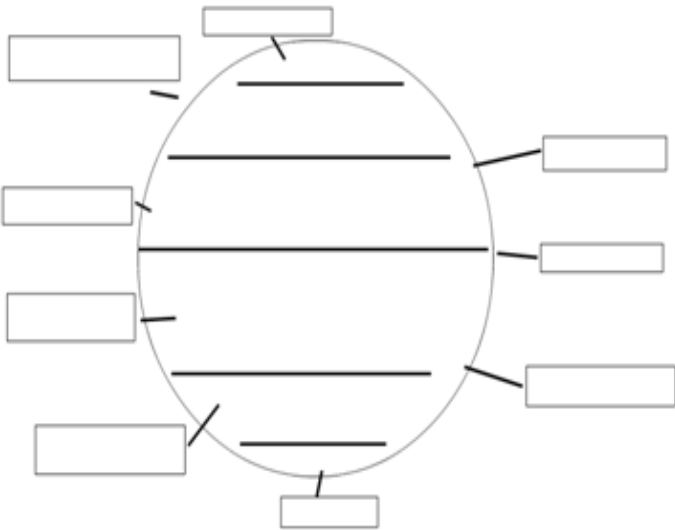
J _____ S _____: This is a column of air riding in the sky _____ the earth. It affects weather. Moves weather in U.S. from _____ to _____. T _____ W _____ move hurricanes from _____ to _____.

TUESDAY

Winds _____ and _____ because of the _____ causing Trade, Westerlies and Prevailing Winds, _____ Effect, Coriolis Effect!
Winds will blow from _____ to _____.

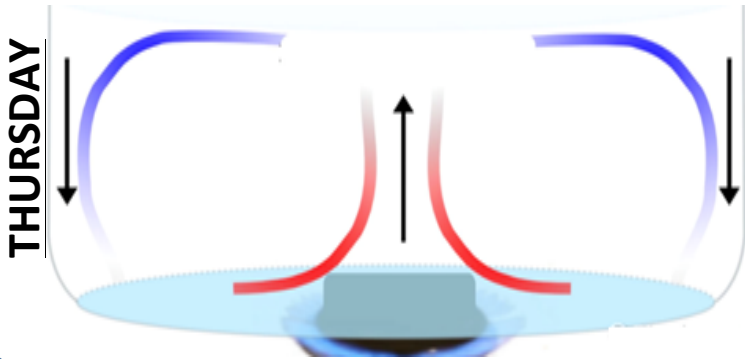
WEDNESDAY

Label the Global Winds.



Global winds are caused by the _____ of the _____.

Explain convection currents and label which current is low and high pressure.



Water
or Land

_____ holds heat longer.
_____ heats up faster.

WEATHER WARM UPS WEEK 9

TUESDAY

WEDNESDAY

MONDAY (Draw symbols and write the words).

Area where two air masses meet?

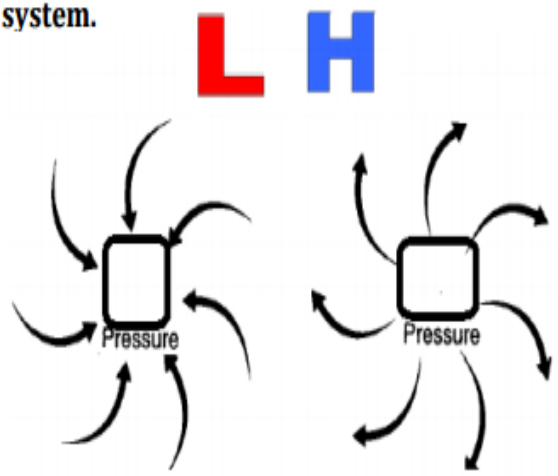
Area where warm air mass slides over a cold air mass?

Area where a cold air mass pushes under a warm air mass?

Area where a cold air mass is caught between two cold air masses?

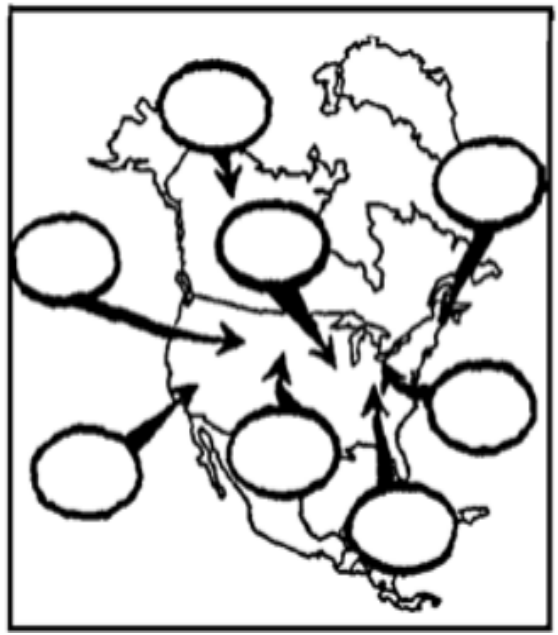
Area where warm air mass and cold air mass meet and stay for a while?

Place an "L" or an "H" in the center of the swirling arrows that explains that pressure system.



Winds around _____ pressure systems spiral inward counterclockwise. Winds around _____ pressure systems spiral outward clockwise.

Label the air masses with their abbreviations.



THURSDAY

A barometer measure _____ and it's units are _____ or _____.

A rising barometer is an _____ in air pressure. The weather associated with _____ air pressure is _____.

A falling barometer is a _____ in air pressure. The weather associated with _____ air pressure is _____.