

ATTACH and submit with homework for week 5/6

Name: _____ Date: _____ Period: _____

Global Winds Homework & Test Review

Week 7

Due: Friday March 6th

Vocabulary Word	Definition	Example/Application
Coriolis Effect	Earth's rotation causes winds to curve	Along with the heat imbalance on Earth, creates the three global winds
Jet Streams	Strong fast moving winds that blow about 10 km off the ground. Greatly affect the weather. Move west to east.	<div style="text-align: center;"> <p>Polar Jet Subtropical Jet Subtropical Jet Polar Jet</p> </div>
Polar Jet Streams	Separate the polar easterlies [cold] from prevailing westerlies [warm]	
Subtropical Jet Stream	Located where the trade winds [warmer] meet the prevailing westerlies [warm]	

Key Question from the Day

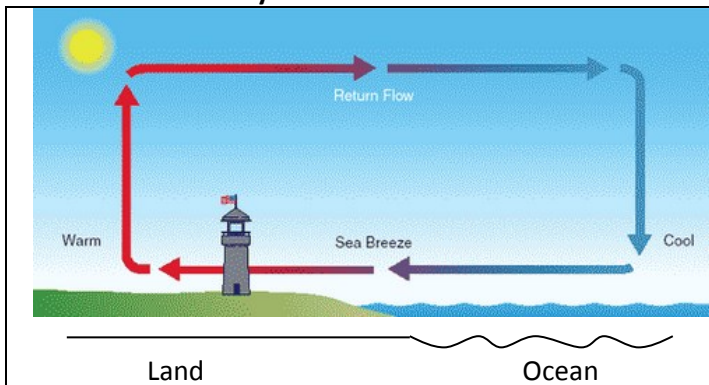
1. Describe the four steps about how the sun creates wind.

- 1) The sun's **radiation** heats Earth's surface unevenly
- 2) Air near Earth's surface warms by **conduction**
- 3) The warm air rises and cool air moves in to replace the rising warm air, known as **convection**
- 4) We feel the moving air as **wind**

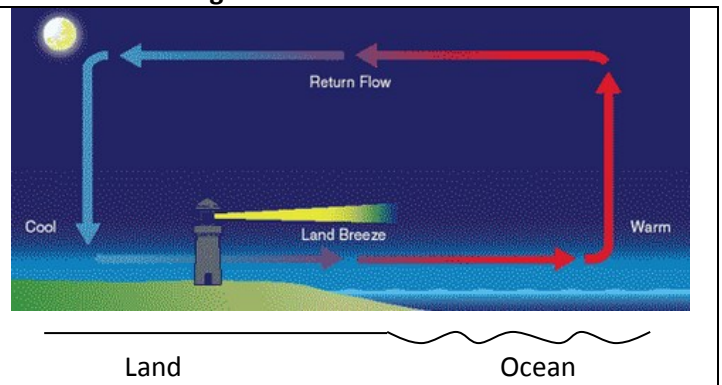
Diagram from the Day:

Land Breezes vs Sea Breezes – Draw in the proper direction of air flow. Label the air masses as warm or cool.

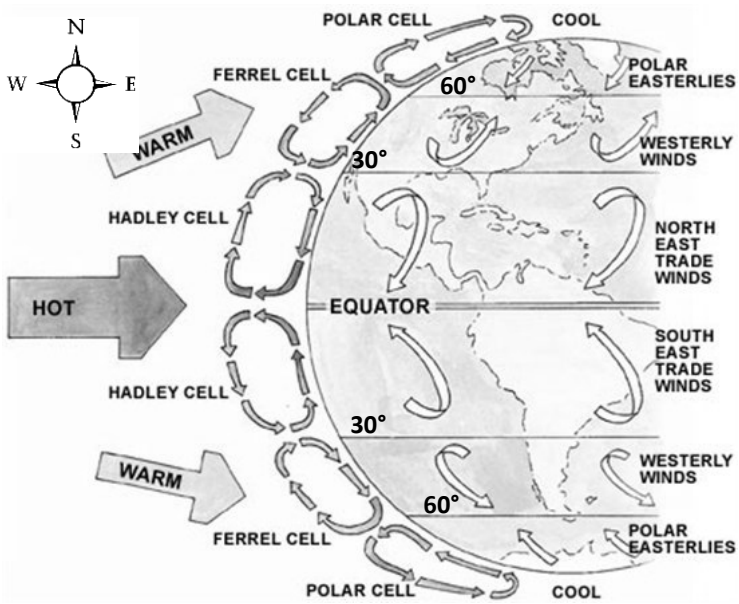
Day Time is a Sea Breeze



Night Time is a Land Breeze



Global Wind Patterns – Label the winds



Matching:

- | | | |
|------------------|-----------------------|---|
| ___ b ___ | Polar Easterlies | a. Influences most of North Carolina’s weather |
| ___ a ___ | Prevailing Westerlies | b. characterized by cold air |
| ___ c ___ | Trade Winds | c. Air sinks, warms, and moves toward the equator in a west direction |

Earth/Environmental Science Homework & Test Review

Week 7: XX
DUE DATE: Friday, XX

Vocabulary: Fill in the missing areas on the table below using your textbook, class activities and any other resources you find helpful.

Vocabulary Word	Definition	Example/Application
Coriolis Effect	Earth's rotation causes winds to curve	
Jet Streams	<i>Strong fast moving winds that blow about 10 km off the ground. Greatly affect the weather. Move west to east.</i>	<p style="text-align: center;"> Polar Jet Subtropical Jet Subtropical Jet Polar Jet </p>
Polar Jet Streams	Separate the polar easterlies [cold] from prevailing westerlies [warm]	
Subtropical Jet Stream	Located where the trade winds [warmer] meet the prevailing westerlies [warm]	

Key Questions from the Week: Answer the questions below pertaining to this week.

1. Describe the four steps describing how the sun creates wind.

- 1)
- 2)
- 3)
- 4)

2.

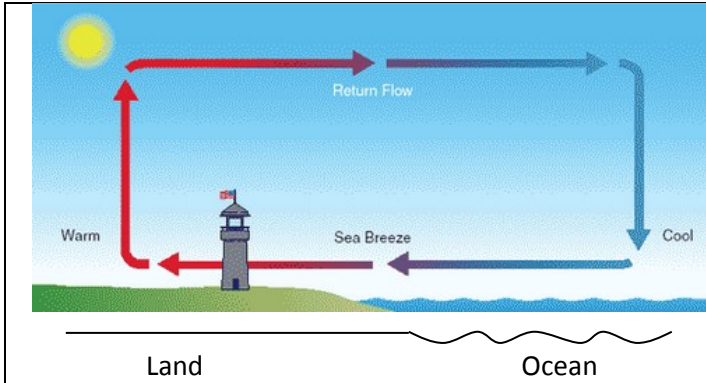
Matching Weather Instruments: Identify what each weather instrument measures by making the correct match

- | | |
|--------------------------|--|
| __h__ Wind Sock | a) measures temperature |
| __c__ Rain gauge | b) measures sunshine |
| __g__ Barometer | c) measures the amount of rainfall |
| __a__ Thermometer | d) measure direction and speed of wind |
| __d__ Anemometer | e) measures the size of hail that falls during a storm |
| __i__ Hygrometer | f) measures wet bulb and dry bulb to determine temperature, dewpoint and relative humidity |
| __f__ Sling Psychrometer | g) measure atmospheric pressure |
| __e__ Hail Pad | h) measure direction and speed of wind using fabric |
| | i) measures humidity |

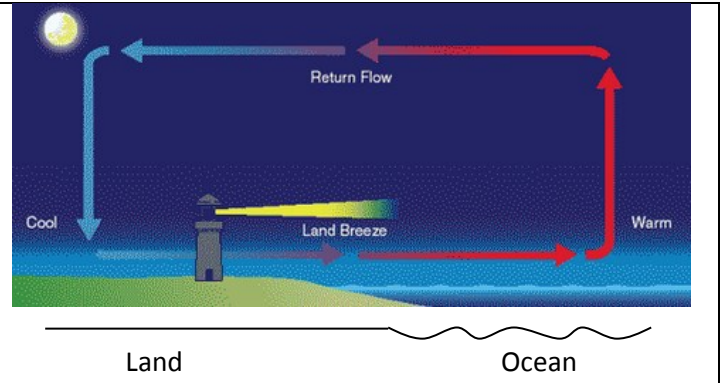
Diagrams for the Week:

Land Breezes vs Sea Breezes – Draw in the proper direction of air flow. Label the air masses as warm or cool.

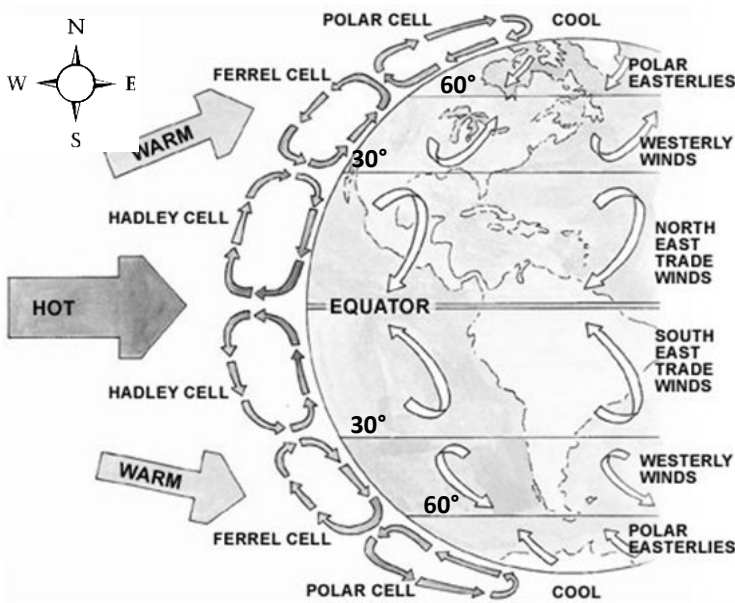
Day Time is a Sea Breeze



Night Time is a Land Breeze



Global Wind Patterns – Label the winds (6 boxes)



Concept Map: Relate this week's talk about the weather by completing the following concept map using the provided word bank. Each word is used only once.

Word Bank

- Hail
- Weather
- Precipitation
- Stratus
- Air masses
- Humidity
- Cirrus
- Cumulus
- Fronts
- Clouds
- Water

