

Name _____ # _____

Weather Study Guide

1. Complete the charts.

CLOUDS	When do we see them?	What kind of weather can we expect?
cirrus		
cumulus		
stratus		
cumulonimbus		

WINDS	What is it?	How does it affect our weather?
Prevailing westerlies		
Jet stream		

PRESSURE	What will the sky look like?	What's the trick to remember it?
High		
Low		

2. How do clouds affect the temperature during the day?

How would they affect it at night?

3. What is fog?

4. What is a synonym for fair weather?

5. If a barometer is showing decreasing numbers every hour, what can a meteorologist predict?

What if the numbers are increasing?

6. Why does wind occur?

7. Why do land and water not heat at the same rates?

8. What causes wind to blow more or less strongly?

9. What causes wind to curve on earth?

10. What is humidity?

11. What is usually the warmest part of the day?

12. Where do hurricanes form?

13. Describe a sea breeze and why it blows the way it does.

Name --- Answers --- # -----

Weather Study Guide

1. Complete the charts.

CLOUDS	When do we see them?	What kind of weather can we expect?
cirrus	sunny/nice/fair	Right then it's nice, but it might change in a day or 2
cumulus	sunny/nice/fair	Fair w/ possibility of light rain
stratus	gloomy/cloudy days	Steady rain or snow
cumulonimbus	Stormy days	Lightning, thunder, hail, heavy rain

WINDS	What is it?	How does it affect our weather?
Prevailing westerlies	Winds that move from west to east across the US	It moves it from west to east
Jet stream	Current of fast moving air high above the earth	Temperature changes - if we are to the north of it, it's cold

PRESSURE	What will the sky look like?	What's the trick to remember it?
High	clear	happy
Low	cloudy	lousy

2. How do clouds affect the temperature during the day? **The clouds are blocking the sun and temps are cooler.**

How would they affect it at night? **They trap the heat, causing warmer temperatures.**

3. What is fog?

Clouds close to the ground.

4. What is a synonym for fair weather?

Sunny, clear, happy, not many clouds

5. If a barometer is showing decreasing numbers every hour, what can a meteorologist predict? **It's going to rain.**

What if the numbers are increasing? **It's going to be sunny.**

6. Why does wind occur?

Uneven heating of the earth

7. Why do land and water not heat at the same rates?

Water reflects some heat, so it absorbs less than land. Land absorbs more heat than water.

8. What causes wind to blow more or less strongly?

Changes in air pressure

9. What causes wind to curve on earth?

Coriolis effect - the earth's rotation & uneven heating of the earth

10. What is humidity?

Water vapor in the air

11. What is usually the warmest part of the day?

Afternoon

12. Where do hurricanes form?

Over warm ocean water

13. Describe a sea breeze and why it blows the way it does.

A breeze that blows from the ocean to the land because the air over land rises and cool air from the water rushes in.

