

## Catastrophic Events Review Bingo from Study Guide – Lessons 1-7 Answer Key



Tornado

**Forms from thunderstorms over dry land when warm, moist air from the Gulf of Mexico collides with cool, dry Canadian air.**

Tornado Alley

**Most form in this area which is in the central plains of the United States; located between the Rocky Mountains and the Mississippi River.**

*Follow up questions:* Where do most tornadoes occur? **Tornado Alley**

Where is tornado Alley? **Student should locate on map**

Why do most tornadoes form there? **Warm moist air from south (Gulf of Mexico) meets cool, dry air from north and west (Canada)**

A hurricane

**A massive rotating storms that forms over warm tropical water.**

Weather

**The state of the atmosphere at a particular time and place. Moisture, temperature, wind speed and atmospheric pressure are important elements of this thing.**

*Follow up question:* student example of when you would Google weather

In what layer of the atmosphere does all weather take place? **Troposphere**

Climate

**You are going to visit Spain in 7 months and you want to do some research on what the weather is like in Spain when you get there. What should you Google?**

Day time

**At this time of the day, the sand at the beach is hotter than the ocean.**

*Follow up question:* Why is the sand hotter during the day? **Sand heats faster than water**

Night time

**At this time of the day, the sand at the beach is cooler than the ocean.**

*Follow up question:* Why is the ocean warmer at night? **Water holds onto its heat energy for a long time**

Rises

**Gas and liquids do this when they are warmer than the surrounding air / gas.**

*Follow up question:* Why do air / liquids rise? **They are less dense**

Sinks

**Gas and liquids do this when they are cooler than the surrounding air / gas.**

*Follow up question:* Why do air / liquids sink? **They are more dense**

Air mass

**Large body of air with the same temperature and humidity (moisture)**

Conduction

**This type of heat transfer occurs when your walking barefoot on hot pavement and your foot gets hot.**

Convection

**This happens when the part of a liquid or gas that is warmer rises. As this happens, cooler liquid or gas sinks taking the place of the warm part.**

Radiation

**This processor is how the Sun's energy travels through space to heat our surfaces.**

Warm and moist

**Conditions of the air mass that forms over Gulf of Mexico**

**Follow up question: All air masses that form over water have this in common. They are moist when they form over water**

Cool and dry

**Conditions of the air mass that forms over Canada**

**Follow up question: All air masses that form over land have this in common. They are dry when they form over land**

Sun

**The main source of heat energy on Earth**

Water Cycle

**The movement of water through the environment**

Evaporation

**Water absorbs energy from the sun and changes from a liquid to a gas**

Condensation

**Water vapor rises and cools; this process occurs to produce clouds**

Low Pressure

**The weather system that produces clouds leading to unsettled weather and possibly precipitation**

**Follow up question: What is air pressure? Weight of air pushing down**

Clouds

**Warm moist air rises and cools to form this**

Convection Current

**Circulation of air or water that forms from uneven heating**

*Follow up question:* Can you think of an example of a convection current? **Land breeze, sea breeze, westerlies, gulf stream, etc.**

Westerlies

**Causes our weather to move across the US from west to east**

*Follow up question:* What is the name of the other global wind that causes our weather to move across the US from west to east? **Jet Stream**

Sea Breeze

**Occurs during the day at the beach when the warm air above the land rises and is replaced by cooler air from the ocean**

Land Breeze

**Occurs during the night at the beach when the warm air above the ocean rises and is replaced by cooler air from the land**

High pressure

**Weather factor - clear skies and sun**

*Follow up questions:* What is the symbol for high pressure? **H**

What is the symbol for low pressure? **L**

What is the weather like at a low pressure system? **Cloudy and / or stormy**

Weather Front

**The boundary that forms when 2 different air masses meet**

*Follow up questions:* When a cold front passes, what happens to temperatures?

**Temperatures get cooler**

What is the symbol for a cold front? **Student will draw on board**

What is the symbol for a warm front? **Student will draw on board**

What is the weather like at a front? **Cloudy and / or stormy**

Surface currents

**Winds like the westerlies affect the way ocean water moves**

*Follow up questions:* What is the name of the warm ocean current that is affected by the westerlies? **The Gulf Stream**

How does the Gulf Stream, a warm ocean current affect the weather in areas near the warm ocean current? **The Gulf Stream brings warmer temperatures to areas near it**

What factors affect deep ocean currents? **Uneven heating, Earth's rotation, salinity, temperature of water, land masses acting as barriers**