Fronts and Storms Study Guide

1. Why don’t hurricanes form in the winter months? The ocean water too cool to provide the energy needed for a hurricane.
2. What factor will increase the chances of a low pressure system developing into a hurricane? Warm ocean water (80 degrees or warmer)
3. Why do hurricanes lose energy as they move over land? Hurricanes receive their energy from warm ocean waters, so it will not have its energy source over land.
4. What months are included in a hurricane season? June - November
5. What is the center of a hurricane called? Eye
6. A storm that causes an area of low pressure beneath warm air is a Hurricane.
7. Rising warm air leads to Hurricanes.
8. What is a storm surge? A rapid rise in water level in a coastal area that occurs when a hurricane pushes a huge mass of ocean water, often leading to destruction.
9. What type of weather do warm fronts bring? Stratus Clouds and steady precipitation
10. Which weather pattern would be expected as an air mass travels north over the Pacific Ocean, from the tropics, and then eastward across the United States? Maritime Tropical
11. What is most likely going to cause high and low pressure systems? Uneven heating of the earth
12. What type of fronts form when a warm air mass pushes a cold air mass? Warm Front
13. What occurs when air masses first meet or when a cold or warm front stops moving? Stationary Front
14. What type of weather does a low pressure system bring? Storms
15. What type of weather does a high pressure system bring? Clear blue skies and fair weather
16. What type of air mass produces dry, cool air? Continental Polar
17. Why is a continental tropical air mass dry and warm? Forms over land near the equator
18. Review your fronts and pressure systems charts. Know symbols, similarities, and differences.
19. Surface winds in a high pressure system blow which direction? Clockwise and outward
20. Surface winds in a low pressure system blow which direction? Counterclockwise and inward