Chapter 3: Section 3-2 (Low-Pressure Systems Can Become Storms)

Near the equator, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ provides the energy that can turn a low-pressure center into a violent storm.

A tropical storm is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that starts near the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and has winds that blow at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

A hurricane is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ with winds blowing at speeds of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Hurricanes are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ when they form over the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Formation of Hurricanes**

In the eastern United States, hurricanes most often strike between \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Tropical storms and hurricanes generally move \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

As soon as a hurricane moves over \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, it loses its source of energy.

At the center of a hurricane is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 10-30mi in diameter, called the \_\_\_\_\_\_.

The storm’s center is calm because \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Just around the eye, the air moves very quickly around and upward, forming a tall ring of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ called the eye wall. This ring produces \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Effects of Hurricanes**

These storms can cause damage and dangerous condition. Hurricanes can lift cars, uproot trees, and tear the roofs off buildings.

When a hurricane moves into a coastal area, it often pushes a huge mass of ocean water called a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ helps people know when to prepare for a hurricane.

**Winter Storms can Produce Snow and Ice**

The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ alerts people to dangerous weather. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ means that the dangerous conditions are already present or will affect an area shortly.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are blinding snowstorms with winds of at least \_\_\_\_\_\_\_\_\_\_mph and low temperatures usually \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Some of the heaviest snows fall in the areas of just east and south of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Cold air form the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ gains moisture and warmth as it passes over the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Over cold land, the air cools again and releases \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ as snow.

Chapter 3: Section 3-3 (Vertical Air Motion Can Cause Severe Storms)

**Thunderstorms Form From Rising Moist Air**

Air around lightning is briefly heated to a temperature hotter than the surface of the \_\_\_\_\_\_\_\_\_\_\_\_\_. This fast heating produces a sharp wave of air that travels away from the lightning. When the wave reaches you, you hear as a crack of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a storm with lightning and thunder.

 their energy from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Rising humid air forms a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ cloud. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ releases energy when it condenses into cloud droplets. This energy increases the air motion. The cloud continues building up into the tall \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ cloud of a thunderstorm. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ form in the \_\_\_\_\_\_\_ temperatures near the top of the cloud. As the ice particles grow large, they begin to fall and pull cold air down with them. This strong downdraft brings \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ can spread out and block more \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ from moving \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ into the cloud. The storm slows and ends.

Thunderstorms can form at a \_\_\_\_\_\_\_\_\_\_ or within an \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Effects of Thunderstorms**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** can be strong enough to wash away people, cars and even houses.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ from a thunderstorm can be very strong. They can blow in bursts that exceed \_\_\_\_\_\_\_\_\_mph.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ causes nearly $1 billion in damage to property and crops in the US every year.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ can kill or seriously injure any person it hits.

**Tornadoes form in severe thunderstorms**

A \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a violently rotating column of air stretching from a cloud to the ground. A tornado can become visible when \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ appear below the cloud in the center of the rotating column. More tornadoes occur in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ than anywhere else in the world.

**Effects of Tornadoes**

A typical path of a tornado along the ground may be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ wide and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ long.

About \_\_\_\_\_\_\_\_percent of all tornadoes are violent enough to lift or completely demolish sturdy buildings.

A tornado moves along with its \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. It travels at the same pace and weaves a path that is impossible to predict. The National Weather Service issues a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ when the weather conditions might produce tornadoes. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is issued when a tornado has been detected.