Explore Hurricanes!

phenomenal science

Anyone who has ever lived through a **hurricane** knows that they are the biggest, baddest storm nature can dish out. A large **hurricane** can grow to be *600 miles* across and packs the power of *many* nuclear bombs. These super-storms unleash high winds and rain on states like Florida and Louisiana year after year.

In contrast to the tremendous power they have when they arrive on American shores, **hurricanes** start in a simple way. A normal thunderstorm in North Africa will blow out into the Atlantic ocean, near the earth's equator. Once the storm is over the water, it will begin to gain *more* power. The water around the equator collects a lot of solar energy, which adds to the storm's power. Hot air rises up the center of the thunderstorm, cooling off as it makes contact with a colder atmosphere and dumping moisture. **All that energy only adds to the storm.**

This exchange of hot air and moisture creates a giant column of air. As the storm picks up more energy, a rotation will form, causing the storm to start spinning faster and faster, picking up wind speeds. **As soon as the winds begin to blow at 75 mph or more, a hurricane is born.**

How does a hurricane move from the Atlantic ocean to North America? Over the summer, trade winds blow from Africa to the United States. These winds *push* newly-formed **hurricanes** across the Atlantic, helping the storm build up power. By the time the storm reaches the United States, its winds will have reached speeds of 100 mph or *more*.

Once a storm hits the US, the storm can *"come undone"* or the winds can shift and blow the **hurricane** harmlessly up the coast. In worst-case scenarios, the storm will hit land and cause massive damage to land and property. The storm's strong winds are capable of ripping out trees from the ground, and producing 1-2 feet of rainwater in less than a day. Over the course of one season, a **hurricane** will often leave some towns flooded and devastated.

Historical Hurricanes

1900 — Galveston Hurricane
This hurricane hit Texas with winds of 145 mph. It is estimated about 6,000 - 12,000 people were killed.

1969 — Hurricane Camille
The 2nd of three category 5 hurricanes to make landfall in the US during the 20th century. This storm is also the first named after a person.

1992 — Hurricane Andrew
This storm caused $26.5 billion in damages across Florida and Louisiana.

2005 — Hurricane Katrina
One of the deadliest hurricanes in US history, Katrina killed over 1,000 people and cost $81 billion in damages.

Safety Tips

1. Help your family put together a disaster kit.
2. Keep records of your valuables.
3. Plan an evacuation route with your family.
4. Keep an emergency radio.
5. During a storm, stay clear of electrical wires.
6. Research ways to secure and prepare your home.
7. If major flooding occurs, try staying above the water.

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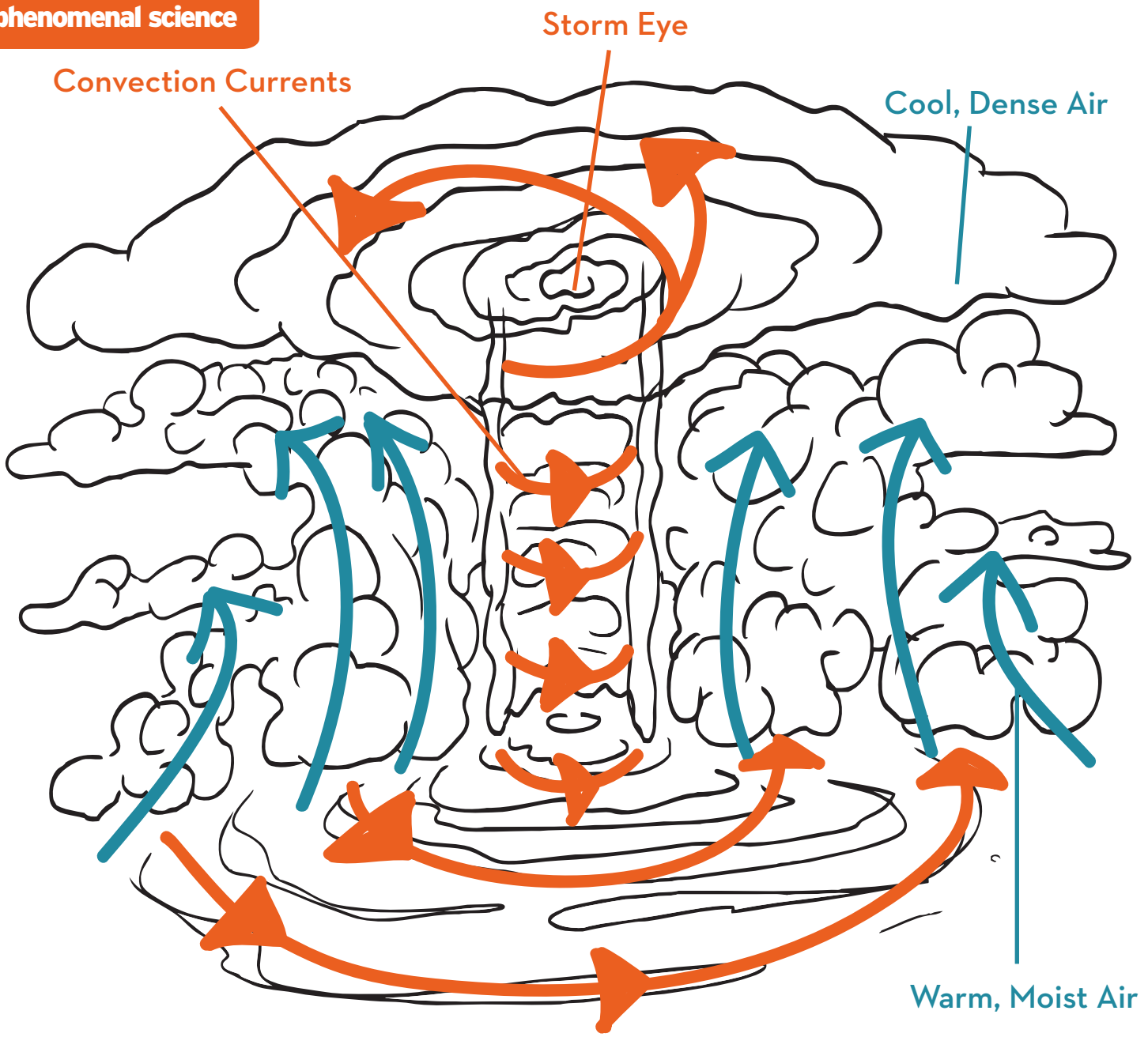

After reading the article on hurricanes, please answer the following questions:

Where do North American hurricanes originate? _____

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What was the first US Hurricane named after a person? _____

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How does a hurricane move across the Atlantic ocean? _____

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