

Text Structure and Language Features: Example 2

Text Structure - Explanation

Note: There are many excellent educational sites on hurricanes, many with animations and additional resources. The search terms Hurricanes+educational are useful and will lead to the NASA site.

HOW DO HURRICANES AND TORNADOES OCCUR?

Statement of phenomenon

Hurricanes and tornadoes are very severe tropical cyclones with whirling masses of wind and torrential rain. Hurricanes are storms which usually last from five to ten days. A tornado covers a much smaller area than a hurricane, but may be more concentrated and violent.

Explanation sequence

All tropical cyclones begin as tropical depressions over warm ocean waters. The birth of a cyclone, or hurricane, usually takes four to eight days. As convection currents build up, the centripetal wind flow becomes stronger, the air flow becomes curved and the input of warm moist air increases, so energy is released. This results in further building up of humid air, with more energy being released, the speed of the winds increases, and a hurricane is born.

The effect of the Earth's rotation on moving bodies, including air currents, is called the Coriolis effect. This is what makes the column of air curve as it spins. At the centre or core of this column of moist air is the "eye" of the hurricane, where there is no wind, and it feels very calm. However, as the eye of the storm passes, the other side of this column hits whatever is around it, bringing the rest of the fierce winds and rain. Hurricanes may also cause tsunami, or tidal waves, and flash floods. In a hurricane, the wind speed is usually more than 118km an hour.

Background information

Hurricanes have caused devastating loss of life over the centuries during which they have been recorded. In 1737, a cyclone hit Calcutta, in India, killing about 300,000 people. This was the same number killed in Vietnam, by another cyclone in 1881. In 1900, 6000 people were killed in Galveston, Texas in the USA. Today hurricanes still cause loss of life, especially in poorer countries, but because weather satellites can track them as they develop, we are better prepared for them.

Language Features

Use of timeless present tense, typical of much scientific writing, e.g. covers, becomes

Use of word chains to build topic information, e.g. hurricane, released, increases

Use of relating verbs, e.g. Hurricanes are storms, At the centre of this column of moist air is the "eye" of the storm

Use of action verbs to build sequence of events, e.g. curve, spins, hits

Use of action verbs to create causal relation, e.g. results in, takes

Use of passive voice, e.g. is located

Use of general nouns, e.g. winds

Use of classifying adjectives, e.g. flash floods, tropical cyclones

Use of detailed noun groups, e.g. The effect of the Earth's rotation on moving bodies

Use of causal conjunctions, e.g. so energy is released

Use of time conjunctions, e.g. when, as

Use of adverbial phrases, e.g. in a hurricane, by another cyclone, in 1900

Use of compound and complex sentences