

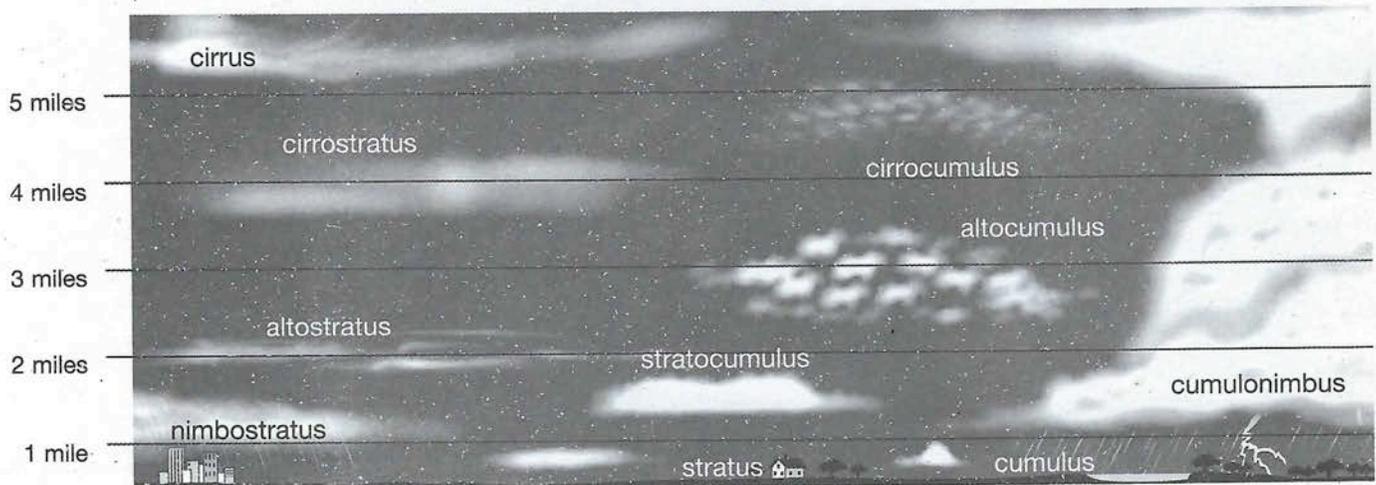
A **cloud** is a mass of condensed **water vapor** (gaseous water) suspended in the air. Clouds form when water vapor rises and cools. When this happens, the water vapor **condenses** (turns into liquid water) and is seen as a cloud.

Here is a small-scale example of how this condensation happens: When animals breathe, their breath is invisible. However, if the weather is very cold, the moisture in the breath condenses into droplets that turn into tiny clouds that are visible.

Clouds can be categorized by shape: **stratus** (layered), **cumulus** (thick and puffy like cotton balls), and **cirrus** (light and feather-like). Stratus clouds are thin clouds that usually

produce a drizzling rain. They often cover the sky, and when they are close to the ground, they form fog. Cumulus clouds are a sign of fair (good) weather, and they form on warm days. They seldom produce rain. Cirrus clouds are also fair-weather clouds, but they usually indicate a weather change. They are made of extremely cold water or ice crystals and are found high in the air.

In 1803, Luke Howard identified ten types of clouds, all based on the three categories of stratus, cumulus, and cirrus. Those ten types of clouds are: nimbostratus, stratus, cumulonimbus, cumulus, stratocumulus, altocumulus, altostratus, cirrocumulus, cirrostratus, and cirrus.



## Answer the Following

1. Why can we see our breath when the weather is cold? \_\_\_\_\_  
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2. What are the three types of clouds? \_\_\_\_\_
3. Which cloud is most likely to cause rain? \_\_\_\_\_
4. Choose two of Howard's ten types of clouds. What can you guess about them? (Hint: nimbus = rain cloud; alto = high.) \_\_\_\_\_  
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