

Name \_\_\_\_\_



## Clouds Cause-and-Effect Chains

Clouds do not appear out of nowhere. They form through a **series of steps** that begin with rising warm air and end with visible cloud masses in the sky. In this activity, you will complete cause-and-effect chains to show how this process happens.

**Complete the Chains:** Fill in the blanks to show how one step leads to the next. Use the word bank for help.

condensation

cooling

clouds

droplets

particles

rising

evaporation

water vapor

### Chain 1 - From Sunlight to Water Vapor

- The Sun heats Earth's surface → \_\_\_\_\_ occurs → liquid water changes into \_\_\_\_\_.

### Chain 2 - From Rising Air to Cooling

- Warm air is lighter than cool air → it begins \_\_\_\_\_ → as it goes higher, it undergoes \_\_\_\_\_.

### Chain 3 - From Cooling to Cloud Droplets

- Cooling air causes water vapor to stick to dust and salt \_\_\_\_\_ → \_\_\_\_\_ begins → tiny \_\_\_\_\_ form.

### Chain 4 - From Droplets to Clouds

- Billions of droplets gather together → they become visible as \_\_\_\_\_.

### Apply Your Knowledge

1. Why does warm air rise in the first place?
2. Why are particles in the air important for cloud formation?
3. If the air does not cool enough, what will happen to the water vapor?