Science Fables

The Air that Loved to Climb

Story Quiz

This quiz follows Ava and Liam as they discover why warm air rises and cool air sinks.

1. What did Ava notice floating above the trees?

A. A large kite
B. A hot air balloon
C. A helicopter
D. A cloud

2. What happens to air particles when the air becomes warmer?

A. They stop moving
B. They move slower and closer together
C. They move faster and spread farther apart
D. They disappear

3. Why does cool air sink?

A. Cool air is more dense
B. Cool air is brighter
C. Cool air moves faster
D. Cool air has no particles

4. What happens when warm air rises?

A. The air stops moving
B. Cooler air moves in to take its place
C. All the clouds disappear
D. The ground becomes warmer

5. Why did the hot air balloon rise?

A. The wind pushed it downward
B. The basket was empty
C. The air inside was warmer and lighter than the cooler air outside
D. The balloon was filled with cool water

Answer Key

1. B — A hot air balloon

Ava noticed a hot air balloon floating above the trees.

2. C — They move faster and spread farther apart

When air becomes warmer, its particles move faster and spread farther apart.

3. A — Cool air is more dense

Cool air is more dense, so it sinks.

4. B — Cooler air moves in to take its place

When warm air rises, cooler air moves in to take its place.

5. C — The air inside was warmer and lighter than the cooler air outside

The balloon rose because the air inside was warmer and lighter than the cooler air outside.