THE WATER CYCLE · PART 4 OF 8 · AGES 11–16

Types of Precipitation

Eight ways water falls from the sky, using the official definitions meteorologists use around the world.

Rain

Drops of liquid water falling from a cloud. Raindrops are bigger than drizzle drops. The biggest, over about 4.5 mm, flatten into a parachute shape and break apart.

Drizzle

Very fine drops, usually under 0.5 mm across, falling close together from low, grey stratus cloud. They are so light they seem to float.

Snow

Ice crystals falling from a cloud, alone or stuck together as snowflakes. It reaches the ground as snow when the air stays at or below 0 °C all the way down.

Sleet

A word with two meanings. In the UK it means rain and snow falling together, or partly melted snow. In the US it means ice pellets.

Ice pellets

Small, clear balls of ice under 5 mm across. Snow partly melts in a warm layer of air, then refreezes in a deep freezing layer below. They bounce when they land.

Freezing rain

Rain that is colder than 0 °C but still liquid. It freezes the moment it hits roads, trees or power lines, coating them in clear, heavy ice called glaze.

Hail

Lumps of ice, generally 5 to 50 mm across, from thunderstorms. Strong updrafts lift drops into freezing air, and more water freezes onto them until they are too heavy.

Graupel (snow pellets)

Soft, white pellets up to about 5 mm across. They form when ice crystals collect cloud droplets that freeze onto them. They break up easily when they land.

Same snow, different landing

Winter precipitation usually starts as snow. Cold air all the way down gives snow. Partly melting then refreezing gives ice pellets. Melting completely then hitting a thin freezing layer at the ground gives freezing rain.

NEXT IN THE SERIES
5. Water Cycle Key Terms

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