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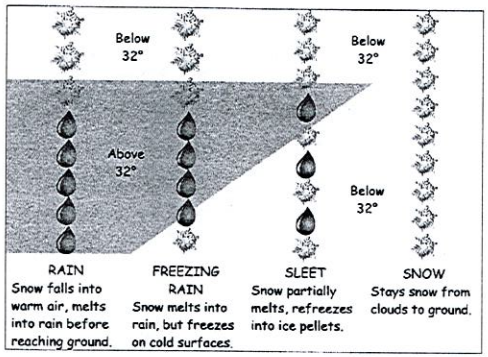
Precipitation Types

1. Define precipitation.
Liquid or solid water that falls to Earth surface as part of the water cycle

2. What tools are used to measure precipitation?
liquid – *rain gauge*

frozen – *long ruler*

"Temperatures and Precipitation"



For each type of precipitation, describe how it forms.

Rain/Drizzle	• *Most common type* • *Starts as liquid or crystal (melts as it falls)* • *Drizzle is rain in very small drops*
Freezing Rain	• *Rain that doesn't freeze until it hits the ground* • *Ground must be colder than the air* • *Forms layer of ice over ground and other surfaces* • *Can bring down trees and power lines*
Hail	• *Ice rotates up and down in clouds = grows in size* • *Most often occurs in warm weather* • *Lumps or balls of ice that fall* • *Occurs during thunderstorms* • *Can weigh over a pound* • *Very damaging*
Sleet	• *Rain that freezes before it hits the ground* • *Passes through cold air* • *Forms small pellets of ice*
Snow	• *Ice crystals that form and grow in clouds* • *Clumps form when snow falls through moist air* • *Snow is powdery when it falls through dry air* • *Stays frozen from beginning to end*

1. What is the major factor in determining the type of precipitation that will fall?
The temperature of the air determines if water will fall as liquid (rain) or as solid (sleet/snow/hail).

2. Which type of precipitation stays frozen?
Snow and hail freeze in the clouds and then remain frozen until after they have landed on the ground.

3. How is freezing rain different from rain/drizzle?
Freezing rain falls just like rain and drizzle. However, if the ground is cold (below 32 F), the rain will freeze and form a layer of ice; it is called freezing rain.

4. Under what conditions could you have frozen precipitation in the summer?
Hail occurs during some thunderstorms. Ice pellets are tossed up and down in the clouds by strong winds. As this is happening, layers of ice are added to the pellets and they become larger balls of ice. The hail falls when it becomes too heavy.