**Cloud Reference Sheet:**

**Name: Date: Period:**

To form a cloud you need:

1. Small solid particulates (condensation nuclei)
2. Water vapor
3. Air cooled to dew point or below



Once at the dew point, water vapor condenses on the condensation nuclei

Causes of Cooling:

 Dew Point = 50°

 *Adiabatic Cooling Lifting Advective Cooling*

*Warm Air Rises, expands, and cools A mountain range or cold front Moist air travels over cold land*

 *lifts the moist air up, cooling it or water*

Cumulonimbus cloud formation

50°

Warm Air

60°

Cold Air

Fog

70°

Cold Front

 Cooler Water

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| **Cloud Type** | **Shape** | **Altitude** |
| Stratus | Flat bottomed | Low |
| Cumulus | Puffy, billowy | Low to Medium |
| Cirrus | Wispy | High |

**Cloud Reference Sheet:**

**Name: Date: Period:**

To form a cloud you need:

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



Causes of Cooling:

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 *Adiabatic Cooling Lifting Advection Cooling*

50°

60°

70°

 Cooler Water

|  |  |  |
| --- | --- | --- |
| **Cloud Type** | **Shape** | **Altitude** |
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1. What three things are necessary to form a cloud?

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1. What things can make up a condensation nuceli?

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1. What is the difference between adiabatic and advective cooling?

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1. What two things do we use to classify clouds?

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1. What two processes of lifting lead to cloud formation? Describe both.

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1. If clouds are condensed water vapor, why doesn’t every cloud bring rain with it?

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1. How is the dew point related to cloud formation?

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1. At what relative humidity do clouds form?

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