**Units 12-1 and 12-2 Notes**

How does water get into the atmosphere?

What is humidity?

12-1 Water Vapor

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- water in the form of a gas.
* Water vapor \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the form of water/ice- clouds/fog.
* About \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of water vapor is in the \_\_\_\_\_\_\_\_\_\_\_\_.

12-1 Evaporation

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_= changing of a \_\_\_\_\_\_\_\_\_\_\_\_\_ to a \_\_\_\_\_\_\_\_\_\_\_---water vapor in air.
* As water is evaporated from \_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_, winds carry water vapor all over the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

12-1 Heat/Evaporation

* Molecules in a \_\_\_\_\_\_\_\_\_\_\_\_= always \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* When \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is applied, some escape off the \_\_\_\_\_\_\_\_\_\_\_\_ and become part of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and form a \_\_\_\_\_\_\_\_\_\_\_\_\_ = evaporation.
* Substances being \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ have these liquid \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to escape faster and faster, and these change into \_\_\_\_\_\_\_\_\_\_\_\_\_\_ molecules faster and faster = hotter= faster evaporation.

12-1 Living Things/Water Vapor

* Living things add \_\_\_\_\_\_\_\_\_\_\_\_ to the air.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ add moisture to the air.
* Plants give off water through tiny \_\_\_\_\_\_\_\_\_\_\_ in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (stomata). This process is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* 12-1 Lesson Summary
* Water is in the air as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Evaporation= \_\_\_\_\_\_\_\_\_\_\_\_\_ to a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* Most of water in the air is evaporated from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* All \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ things add water to the air- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

12-1 Class work

* Complete Checking Concepts and Thinking Critically on p. 279.

12-2 Humidity

* Humidity- amount of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the air.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ humidity- lots of water vapor.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ humidity- little water vapor.

12-2 Capacity

* Capacity- amount of material something can \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- at its \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ level.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ air can hold \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ water vapor than cold air.
* Warm air has \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ capacity.

12-2 Saturated Air

* Saturated- filled to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* Air is saturated when it holds \_\_\_\_\_\_\_\_\_\_\_ the water \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ it can at a certain \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* As temp. goes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, the capacity of air for holding \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ goes up.
* When temp. cools \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, the capacity \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and water vapor comes back out- dew, fog, clouds, etc.

12-2 Specific Humidity

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ humidity- the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ amount of water vapor that is in the air.
* Specific humidity is the number of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of water vapor in 1 kilogram of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.- an ACTUAL COUNT.
* Specific humidity is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ affected by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or air \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ changes.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the amount of water vapor in the air.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the amount something can hold.
* Capacity is affected by temperature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

12-2 Lesson Summary

* To be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is to be filled to capacity.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the exact number of water vapor molecules in the air.

Class Work

* Complete the Checking Concepts and Thinking Critically sections on p. 281. Read the “Meteorologist” section.