

Name: _____

Date: _____

Mod: _____

Review Sheet Chapter 1A

1. What do the following metric prefixes mean?

- Milli (m) $\frac{1}{1000}$
- Kilo (k) 1000
- Centi (c) $\frac{1}{100}$
- Deci (d) $\frac{1}{10}$
- Hecta (h) 100
- Dekka (dk) 10

2. What metric unit is used for volume? *Liter*

3. What metric unit is used for mass? *Gram*

4. What metric unit is used for length? *Meter*

5. What metric unit is used for temperature? *Celsius*

6. If I measure the distance across the room and find it is 21.5 m, what would the distance be in cm?

$$\frac{1m}{100cm} = \frac{21.5m}{x} \quad x = 2150 \text{ cm}$$

In km?

$$\frac{1000m}{1km} = \frac{21.5m}{x} \quad x = .0215 \text{ km}$$

7. If I determined the mass of a penny is 100.5 g, what would the mass be in mg?

$$\frac{1g}{1000g} = \frac{100.5g}{x} \quad x = 100,500 \text{ mg}$$

8. Charcoal was responsible for removal of what from our foul water sample?

odor + color

9. What three methods were used to purify our "foul water"?

① oil/water separation ② filtration ③ charcoal adsorption

10. How is distilled water different from tap water?

distilled H_2O is only H_2O . Tap water contains impurities and dissolved minerals

11. For each item select the best answer

- Is the thickness of a dime closer to 1 mm or 1 cm?
- Is the diameter of a pencil closer to 7 mm or 7 cm?
- Is the volume of a can of Coke closer to 355 mL or 355 kL?
- Is the mass of a paperclip closer to 1 g or 1 kg?

12. Describe some implications if there were a lack of water

- In your family
- In your town
- In your region of the country
- In the entire country

13. What are the steps of the water cycle? (in detail)

evaporation to clouds - condensation - precipitation -
ground water / surface water

14. Where are large amounts of groundwater stored?

aquifers

15. Where is the majority of the Earth's water supply found?

oceans

16. What is a problem with this?

it's salt water / not drinkable

17. Where is the smallest volume of Earth's water supply found?

Rivers, lakes streams

18. How is each of the three phases of matter involved in the water cycle?

water exists in all three phases as it passes through the water cycle.

19. The total supply of water in the world has been the same for billions of years. Explain why?

No new water is created. It only changes state as it passes through the water cycle

20. What is:

- The change from solid to liquid called?

melting

- Give one example of this phase change.

ice melting

- The change from a gas to a liquid called?

condensation

- Give one example of this phase change.

dew on the grass in the morning

- The change from liquid to solid called?

freezing

- Give one example of this phase change.

making ice cubes

- The change from liquid to gas called?

evaporation

- Give one example of this phase change.

water evaporating from the oceans

- The change from solid to gas called?

sublimation

- Give one example of this phase change.

dry ice

$$A \quad \frac{1 \text{ Kg}}{1000 \text{ g}} = \frac{x \text{ Kg}}{3400 \text{ g}} \quad x = 3.4 \text{ Kg}$$

$$B. \quad \frac{1 \text{ Km}}{1000 \text{ m}} = \frac{2.75 \text{ Km}}{x \text{ m}} \quad x = 2750 \text{ m}$$

$$C. \quad \frac{1 \text{ g}}{100 \text{ cg}} = \frac{x \text{ g}}{345 \text{ cg}} \quad x = 3.45 \text{ g}$$

$$D. \quad \frac{1 \text{ L}}{10 \text{ dL}} = \frac{0.58 \text{ L}}{x \text{ dL}} \quad x = 5.8 \text{ dL}$$

$$E \quad \frac{1 \text{ g}}{1000 \text{ mg}} = \frac{x \text{ g}}{9420 \text{ mg}} \quad x = 9.42 \text{ g}$$