Science 7 Chapter 4 Review: **name:_____** **date:_____**

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1. **What is a property?**

I*s a characteristic that may help to identify a substance. You can observe properties using your five senses, or you can determine properties using simple tests and measurements.*

2. **What are the 5 senses we use to observer matter?**

5 Senses we use to observe matter
Sight, touch, hearing, smell, and taste.

3. **Properly describe the 6 properties one can observe with our senses?**

colour	*Is it black, white, colourless, red, blue, greenish-yellow?*
taste	*Is it sweet, sour, bitter, salty, bitter?*
texture	*Is it coarse, fine, smooth, gritty?*
odour	*Is it odourless, spicy, sharp, burnt?*
lustre	*It is shiny, dull?*
clarity	*Is it clear, cloudy, opaque, translucent?*

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4. **What are the 3 states of matter?(3 marks)**
   Solid, liquid or gas
5. **What is the melting point of a substance?(2 marks)**
   Temperature at which the solid form of a substance changes to a liquid.

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6. **What is the freezing point of a substance?(2 marks)**
   Temperature at which the liquid form changes to a solid.
7. **What is the boiling point of a substance?(2 marks)**
   Temperature at which the liquid form of the substance changes to a gas.

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8. **A. What is plasma?**
   A gas that has electricity running through it.
   B. Why is it called a fourth state of matter?
   It is sometimes considered a fourth state of matter.
   C. Where is it mainly found?
   Found naturally occurring in stars, nebulas and even makes up our northern lights.
   D. Where can we find plasma used today?
   Fluorescent lights, neon signs, plasma balls...plasma is used to cut metal(this was much faster when cutting or welding metal), plasma TV displays.

E. What natural thing did the Inuit people of the north witness regarding plasma that is still viewed magically beautiful today?

The northern lights(aurora borealis) Inuit believed it was torches of spirits guiding souls to a land of happiness and plenty.

Pg. 100/101

9. **What is matter?(2 marks)**

   Anything that has mass and occupies space.
10. **When you purchase a bag of potato chips, what does the mass fully include?(2 marks)**

    You are purchasing potato chips, air and perhaps even the bag(hopefully not!)
11. **Large masses usually are measured in** *Kilograms(meaning 1000 grams).*
12. **Kilo means...***1000(thousand).*
13. **Very small masses use what measurements?**

    Milligrams
14. **Milli means...***One-thousandth.*
15. **A. How many milligrams are in 1 gram?**

    1,000 milligrams are in 1 gram.

    B. How many grams are in 1 kilogram?

    1,000 grams are in 1 kilogram.

    C. How many milligrams are in 1 kilogram?

    1,000,000(million milligrams are in 1 kilogram).

    D. How many millimeters are in 1 metre?

    1000 millimeters are in 1 metre.

    E. How many meters are in 1 kilometer?

    1000 meters make 1 kilometer.

    F. How many millimeters are in 1 kilometer?

    1,000,000 millimeters make up 1 kilometer.

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16. **What do you use to measure mass directly?**

    You use a balance or scale...which is also called "direct measurement".
17. **Volume is what?**

    The amount of space that is occupied by matter.

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18. **How do you calculate the volume of a rectangular solid such as the one on pg. 102?**

    One can measure the length, width and height of the object to achieve the volume.

    Volume=lengthXwidthXheight

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19. **Using a graduated cylinder, how do you measure the volume of an irregular solid?**

    Measure the volume of the cylinder that is half filled with water...add the irregular shape and also measure the volume...then subtract the two providing the mass of the irregular solid.

    (Water + irregular solid volume) - (water volume) = (irregular solid volume)

Pg. 107

20. **What is density, and how would you easily know what has a lower or higher density than water?(3 marks)**

    Mass per unit volume of a substance. Density = mass/volume

If the volume is the same, the substance with the highest mass is more dense. Also, in comparison to water, if a liquid sinks below water it is more dense, if it floats on top of water(such as oil), it is less dense.

21. **What two things must you know in order to calculate density?(2 marks)**

You must know the mass and volume of a substance to calculate density.