**Term 1 Exam Review**

* 1. **Fill in the blanks below about the states of matter:**

All substances are made of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ which cannot be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ by the naked eye because they are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

* 1. Name the three states of matter:\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_

* 1. Fill in the following table summarizing the 6 changes of state

|  |  |  |
| --- | --- | --- |
| **Start Phase** | **End Phase** | **Change of State** |
| **Gas** | **Liquid** | **Condensation** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |



* 1. Fill in the diagram below

* 1. Complete the following table

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Solid** | **Liquid** | **Gas** |
| Shape(definite or not?)   |   |   |   |
| Volume (definite or not?)  |   |   |   |
| Forces/bonds  (strong or weak?)  |   |   |   |
| Movement    |   |   |   |
| Drawing  (Particle model)    |   |   |   |

1. Give the definition for the following terms:
	* 1. Mass
		2. Volume
		3. Density
		4. Temperature
		5. Solubility

1. Fill in the table below for Mass, Volume and Density

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Regular Solid** | **Irregular****Solid** | **Liquid** | **Equipment** | **Unit** |
| **Method to determine****Mass** | **weigh** |  |  | **Scale (balance)** | **g** |
| **Method to determine****Volume** |  | **Water displacement** |  |  |  |
| **Method to determine****Density** |  |  |  | **None (need to calculate)** |  |

1. Define characteristic (CP) and non-characteristic properties (NCP).

  CP definition: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 NCP definition: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. List examples of characteristic properties (CP) and non-characteristic properties (NCP).

CP: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

NCP:
\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Jade wants to measure the volume of a piece of quartz from her mineral collection. She pours 20 mL of water in a graduated cylinder. She gently slides in her piece of quartz. The figure below shows the results obtained. What is the volume of quartz? Show your work. (Don’t forget units!)



1. Solve the density of the marble with a weight of 14 g and 28mL. Show your calculations below. (Don’t forget units!)

1. How does the volume of an object affect the density if the mass stays the same?

**The Earth’s Internal Structure**

We can divide the Earth’s internal structure into three distinct layers:

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_

**The Earth’s Internal Layers**

|  |  |
| --- | --- |
| **Crust**  | The Earth’s crust is \_\_\_\_\_\_\_\_\_\_\_\_. Its thickness varies: -Between \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ beneath the oceans -Between \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ beneath the continents  |
| **Mantle**  | Upper Mantle  | * Can be up to 670 km thick.
* Is a \_\_\_\_\_\_\_\_\_\_\_\_. Composed of partially melted rock.
* Causes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (plate tectonics) due to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Convection:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
 |
| Lower Mantle  | * This layer is \_\_\_\_\_\_\_\_\_\_\_\_\_ despite its high temperature because the \_\_\_\_\_\_\_\_\_\_\_\_ is very high.
* It is composed mainly of \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_
 |
| **Core**  | Outer Core  | * The outer core is \_\_\_\_\_\_\_\_\_
* This layer gives rise to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
 |
| Inner Core  | Despite its VERY \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, the inner part of the core is \_\_\_\_\_\_\_\_\_ because of the enormous \_\_\_\_\_\_\_\_\_\_\_\_ holding the core’s particles together.  |

**Relief & Soil**

* + 1. What factors affect relief?
		2. The Earth’s relief is constantly changing because of underground forces.

True or False (circle the correct answer)

3. How can humans contribute to the transformation of relief? (give 3 examples)

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4. What are the 3 components that make up soil?

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