Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_

1-2. What **two chemicals** besides water are needed to make cold-process soap? Which is an organic molecule with covalent bonds and which is an inorganic compound with ionic bonds?

|  |  |
| --- | --- |
| **Inorganic ionic compound** | **Organic molecule** |
|  |  |

3. Consider **dissolving** the solid white powder in water…

a) Is this a **chemical or physical** process? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) Is the processes **endothermic or exotheric**? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c) **List evidence** observed to support your answer above.

4. Palm oil is solid at room temperature.

a) Is **melting** palm oil a **chemical or physical** process? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) Is **heating** the oils an **endo**thermic or **exo**thermic processes? \_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. When mixing the two liquids together, the resulting **chemical reaction** is called

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. What personal safety equipment must be used during this lab and why?

6. What does **“superfatting”** the soap mean?

7 – 9. State how long the soap needs to **“cure”** and state the two reasons why it needs to cure this long.

10. Some students added coffee grounds to their soap. Did this make a **homogeneous or a heterogeneous mixture**? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_