**Study Chapter 7.2 and 7.3 Pages 188-196**

1. What changes when the volume of an object increases while the mass stays the same?
2. Describe what happens during a physical change?
3. What property stays the same during both physical and chemical changes?
4. What clue indicates a chemical change?

**List 4 physical properties for the following:**

1. Pencil:
2. Paper Clip:
3. Shredded Wheat:
4. **Identify with a check mark if the following characteristics are either a physical change or a chemical change, 7 points.**

|  |  |  |
| --- | --- | --- |
| **Example:** | **Physical Change** | **Chemical Change** |
| Wind erosion of a rock |  |  |
| Food Digestion |  |  |
| Burning a match |  |  |
| Melting ice |  |  |
| Rusting car |  |  |
| Ripping paper |  |  |
| Rotting apples |  |  |

1. **Put an example in each box for the following substances 6 points:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Substance** | **Physical Property** | **Physical Change** | **Chemical Property** | **Chemical Change** |
| Water |  |  |  |  |
| Wood |  |  |  |  |
| Steel |  |  |  |  |
| Apple |  |  |  |  |

**Short answer questions:**

1. Using your science vocabulary, explain what happens when you burn a candle. ☺ (Hint: physical and chemical properties & physical and chemical changes)
2. Is change of state a physical change or a chemical change? How do you know?
3. What happens to sugar when you dissolve it in tea? How can you get the sugar back?
4. Describe 2 signs of a chemical change and give an example of each.
5. If you put the following items in a beaker full of water what will happen to them. Draw a picture to help illustrate.

 Banana with density of 0.7 g/ml

 Shampoo with density of 1.4 g/ml

 Wood with density 0.5 g/ml

1. Why are chemical changes not easily reversible?