

**Year 8 Physical & chemical changes Assessment** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Form: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Total Mark: \_\_\_\_\_\_\_\_\_\_\_/ 30**

**Answer all of the following questions:**

1. a) A physical change occurs when \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) A chemical change occurs when \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(2 marks)

2. (A) Identify each of the following as a Physical or Chemical change.

Put a **P** next **to Physical Changes**  Put a **C** next **to Chemical Changes**

1. A piece of wood burns to form ash \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Water evaporates into steam \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. A piece of cork is cut in half \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. A bicycle chain rusts \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Food is digested in the stomach \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. A popsicle melts \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. A tire inflated with air \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. Milk sours \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. Turning brownie mix to brownies \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. Hydrochloric acid reacts with zinc \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(5 marks)

(B) Choose **2** of the above examples and **explain** why you choose chemical or physical.

**Please choose one of each type of change.**

Physical change explanation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(2 marks)

Chemical change explanation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(2 marks)

3. Identify three signs that a chemical change has occurred.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(3 marks)

4. Read each scenario. Decide whether a physical or chemical change has occurred and give evidence for your decision.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Scenario** | **Physical or Chemical Change?** | **Evidence….**  **1 piece – ½ mark**  **2 pieces – 1 mark** |
| 1 | Your friend decides to toast a piece of  bread, but leaves it in the toaster too long.  The bread is black and the kitchen is full of smoke. |  |  |
| 2 | You blow to dry your wet hair. |  |  |
| 3 | You forgot to dry the bread knife when you washed it and reddish brown spots appeared on it. |  |  |
| 4 | A straight piece of wire is coiled to form a spring. |  |  |
| 5 | In baking biscuits and other quick breads, the baking powder reacts to release carbon dioxide bubbles. The carbon dioxide bubbles cause the dough to rise. |  |  |
| 6 | Food colour is dropped into water to give it colour. |  |  |
| 7 | You take out your best silver spoons and notice that they are very dull and have some black spots. |  |  |
| 8 | In a fireworks show, the fireworks explode giving off heat and light. |  |  |

(16 marks)

