**DECOMPOSITION reactions practice**

Heating copper carbonate powder

**Observations:** *When a green powder is heated in a Bunsen flame the powder appears to “boil” and a colourless gas is given off. A black solid remains at the bottom of the test-tube.*

1. (i) Write a word equation for this reaction

(ii) Write a balanced chemical equation for this reaction, **including physical states.**

1. Describe all observations and link them to the chemical species responsible
2. (i) Name the type of chemical reaction \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(ii) Justify your choice of reaction type by linking the observed changes to the “definition” of the

type of reaction.

1. Explain how you would identify the non-solid products produced in this reaction.

Repeat your answers using iron (II) hydroxide powder.

**Observations:** *When a green powder is heated in a Bunsen flame the powder appears to “boil” and a colourless liquid condenses at the top of the test-tube. A red solid remains at the bottom of the test-tube.*

Repeat your answers using sodium bicarbonate powder.

**Observations:** *When a white powder is heated in a Bunsen flame the powder appears to “boil” and a colourless liquid condenses at the top of the test-tube. A white solid remains at the bottom of the test-tube.*