



# SINGLE DISPLACEMENT REACTION

Student ..... Class ..... Date .....

## **MATERIALS**

An iron nail, copper sulfate, a beaker, water, a hot plate.

## **PROCEDURE**

Pour water into the beaker, for half of its capacity, and add half teaspoon of copper sulfate.

Heat up the solution using the hot plate: this is the best way to dissolve the copper sulfate dust in water.

Put the nail into the beaker.

We need a couple of days to observe what happened.

## **OBSERVATIONS (after a couple of days)**

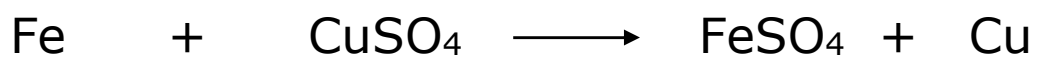
Tick the correct answers (more than one is correct):

- the solution has changed its colour turning into white.
- the solution hasn't changed its colour.
- the solution has changed its colour turning into yellow/brown.
- there is a brown coating on the iron nail dipped in the solution.

*Draw a picture about this first step.*

## CONCLUSIONS

From the surface of the nail the iron goes into the solution and the copper, which is in the solution, replaces the iron on the nail surface, forming a thin layer.



iron + copper sulfate  $\longrightarrow$  iron sulfate + copper.

*Draw a picture about this final step.*