**Hypothesis – The rate of diffusion depends on the concentration of the substance that is diffusing**

**Apparatus**

* Agar cubes containing Universal indicator
* 100 cm3 glass beaker
* 0.2M Hydrochloric acid
* 0.4M Hydrochloric acid
* 0.6M Hydrochloric acid
* 0.8M Hydrochloric acid
* 1.0M Hydrochloric acid
* 50 ml measuring cylinder
* Stop clock
* Goggles
* Spatula
* Tweezers

**Sequence**

1. Using the tweezers or spatula, put one of the agar cubes into a beaker
2. Measure out 25 cm3 of 0.2M Hydrochloric acid solution – note down the concentration of the acid
3. Add the acid to the beaker, starting the stop clock at the same time
4. Time how long it takes for the agar jelly to change colour to red
5. Record the time in your results table
6. Repeat steps 1-5 using new agar cubes and the following concentrations of hydrochloric acid 0.4M, 0.6M, 0.8M and 1.0M

**The** **Variables**

Independent Variable =

Dependent Variable =

Control variables =



**Risk**

**Assessment**

Hazard –

Risk –

Control –

Hazard –

Risk –

Control –