Investigate the Effect of Temperature on Enzyme Action - *Gas Production by Yeast/Glucose Mixture at Different Temperatures*

# Apparatus and Materials:

Syringes

Plasticine

Boiling tubes

Boiling tube rack

Thermometers

Glucose

Yeast

Water

Electric kettle

Beakers

# Instructions:

Working in Groups of 3. Carry out the following instructions carefully.

1. Prepare glucose/yeast mixture
2. Insert 2 cm3 glucose/yeast mixture solution in syringe. Include 1 cm3 air, afterwards, so yeast/glucose solution can settle below the air.
3. Wrap enough plasticine around plunger of the syringe so that syringe can sink to the bottom of the boiling tube. (This will probably be around one strip or less)
4. Fill boiling tube (**⅔**) with room temperature water.
5. Carefully place the syringe in the boiling tube and immediately start timer. Count the number of bubbles evolved from syringe for 10 mins.
6. Repeat steps 2-5 using temperatures of 300C, 500C, 800C and 1000C (boiling water).

# Useful Link

<http://urbancaliber.hubpages.com/hub/Temperatures-Effect-on-the-Fermentation-of-Yeast>