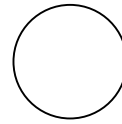


Conductivity and ions in solution

Insert the paper into a clear plastic folder. Wear eye protection.

1) Fill circle A with tap water and observe the red LED in the conductivity indicator.

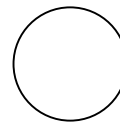


Circle A

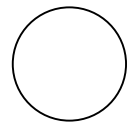
2) Place a few grains of salt in the black rectangle to the right. Do not get any in the circles.



3) Fill circles B and C with pure (distilled or deionised) water. Insert the electrodes and observe the red LED.



Circle B



Circle C

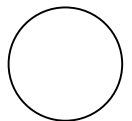
4) Insert the electrodes into Circle B and see if the LED lights up.

5) Using the flat end of the splint, push 1 to 3 crystals into the puddle.

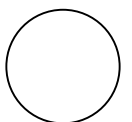
6) Insert the electrodes into Circle C, hold it still for 30 s and see if the LED lights up.

Extension activities

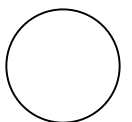
Fill the circle with distilled water. Add a few grains of refined sugar (sucrose). Insert the electrodes and observe the red LED.



Fill the circle with distilled water. Add a few grains of soft brown sugar. Insert the electrodes and observe the red LED.



Fill the circle with distilled water. Add a few crystals of potassium manganate(VII) from the side. As the purple colour diffuses, insert the electrodes into the drop and observe.



Fill the circle with distilled water and universal indicator. Insert the electrodes into the drop and observe.

