



# Instruction sheet



## Making an Aluminium - Air battery

- 1) Start with a 5cm x 5 cm piece of Aluminium foil.
- 2) Take a piece of filter paper or paper towel slightly larger than the foil.
- 3) Soak the filter paper in salt water.
- 4) Place the soaked filter paper on top of the foil.
- 5) Put a teaspoon of charcoal on top of the filter paper.
- 6) Place one stripped end of a wire on top so that it makes maximum contact with the charcoal. The other end of the wire should be sticking out.
- 7) Fold the two edges of the foil over, wrapping the wire inside the charcoal, filter paper and foil (don't short circuit your battery by letting the inside end of the wire touch the foil).
- 8) Attach the exposed wire end to one terminal of the multimeter and any part of the foil to the other terminal using alligator clips. Turn the multimeter to 2V.
- 9) Measure the voltage.

### **Bonus activity**

- 1) Working with others at your station, connect 4 or 5 batteries together by connecting the alligator clip of one battery to the little wire of another battery.
- 2) Put a LED in the circuit by connecting the little wire from the battery chain to the long leg of the LED, and connect the other end of the battery to the short leg of the LED and see if it lights up. If it does not light up, try reversing your electrodes.

