The Scenario

Form a human circle with each person holding hands with their neighbours. At one point in the circle, ask two people to release hands and place an index finger on one metal strip on the ball. You will have completed an electrical circuit! The ball will emit wonderful warbling sounds and flash an eerie red colour!

Open-Ended Inquiry Questions

- Can you rearrange yourselves to show... – a series circuit? – a parallel circuit?
- What is the maximum number of people that can be in the circle?
- What is really happening? (senior)

Process Skill(s)

Observing, predicting, hypothesizing, planning, demonstrating, comparing, contrasting, defending

Instructions

This is a wonderful activity to introduce the concept of electricity in class and using students as parts of an electrical circuit. NB: ensure that the two students touch the electrodes with their forefinger only, if they inadvertently touch other fingers with each other then the ‘circuit’ is short-circuited. One big circle is a ‘series’ circuit. Ask them to form a ‘parallel’ circuit. Unless the students are very young, they will eventually figure out how to form a ‘parallel’ circuit. Use ‘wait’ time. If necessary, let them disperse and research what a parallel circuit means and have them reassemble when they are ready. Next steps: explore conductive vs non-conductive materials. More information: http://goo.gl/WBbYo

Curriculum Connections

A great way of introducing current electricity. By engaging students as part of the circuit they never forget the difference between series and parallel circuits.