Saltwater Circuit
What is a saltwater circuit?

- It’s an electric circuit that uses saltwater as one of its circuit elements.
  - When you mix water and salt, the salt dissolves. Salt turns into sodium ions and chloride ions.
  - When you apply a electric voltage, the circuit conducts electricity if enough sodium ions and chlorine ions are present in the water.
Basic Circuit

- **Electric circuit**: A chain of connected circuit elements

- **Closed circuit**: All circuit elements are connected and electric current flows through the circuit.

- **Open circuit**: At least one break in the circuit. Not all elements are connected. Electric current does not flow in the circuit.
Saltwater Circuit

Electrodes touching: The circuit is closed.

Electrodes not touching: The circuit is open.

Electrodes in saltwater: The circuit is closed.

Electrodes in water: The circuit is open.
Your Objective:

Answer the following question:

- How does the quantity of salt in a saltwater circuit effect the current flowing through the saltwater circuit?
The end
References

Image sources

Diagrams by Juan Ramirez Jr.,
ITL Program, College of Engineering, University of Colorado at Boulder, 2009

Battery image from Microsoft clipart
Light bulb image from Microsoft clipart
Wave image from Microsoft clipart

Photos by Juan Ramirez Jr.,
ITL Program, College of Engineering, University of Colorado at Boulder, 2009