

# **Lower Sec - Electrical Systems**

### Circuit Constructions

#### **Activity**

Students are to explore assigned PhET simulations activity either on the SLS or PhET app. Students are to create a short 60 sec video demonstrate: 1. An electric circuits (and explain the electrical components involved) 2. Explain how the arrangement of circuits components affects resistance.

#### **Objectives**

- Students can explain what is meant by current, potential difference and resistance of an electrical system, stating their units.
- Students can interpret circuit diagrams and manipulate given simulation containing electrical sources, switches, lamps, resistor (fixed and variable) ammeters and voltmeters.
- Students can explain how arrangement of the components of an electrical system affects the outputs of the system.

#### **Extensions**

- Teacher to create clips project with guided questions for students to demonstrate their understanding while manipulating the simulations.
- Students can screen record without the voice first, then import it to clips for voice over.
- Instead of using the PhET app, teacher can embed the source via SLS, and collect the finished video (should not be longer than 2 mins) via the SLS Free Response.

## Have a go

Open ( ), select Control Centre. Under Customise Controls, add Screen Recording by tapping



Swipe down from the top right corner of the screen to access Control Centre. Long press the ( ). Turn on the microphone. Press Start Recording.



Swipe down Control Centre to stop recording. Go to Photos 🐝 to edit the start and end befeore submitting to Teacher.

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