45 A student connects a small solar panel to a 40 Ω resistor to make a simple circuit. The solar panel produces a voltage of 2 V.

a. Identify a different circuit component that could serve the same purpose as the solar panel in this circuit.

b. Calculate the current in the student's circuit. Show your calculations and include units in your answer.

c. Calculate the power produced by the student's circuit. Show your calculations and include units in your answer.

d. Describe one way the student can modify the circuit to increase the current through the resistor.