

Name: _____

SOLAR CELLS ARRANGED IN SERIES

On the board, there are three solar cells (A, B, and C) arranged in a single path (known as a **series circuit**). Measure the voltage across each of the indicated points in this circuit:

$$V_A = V_{PQ} = \underline{\hspace{2cm}}$$

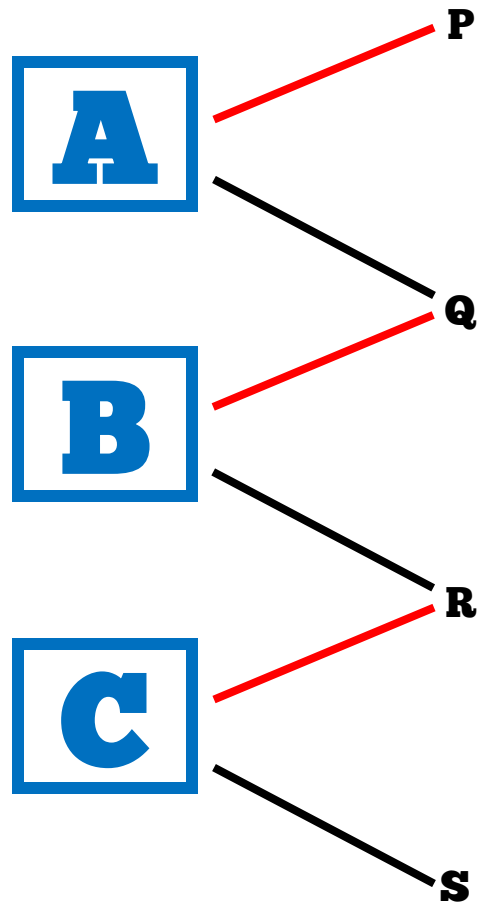
$$V_B = V_{QR} = \underline{\hspace{2cm}}$$

$$V_C = V_{RS} = \underline{\hspace{2cm}}$$

$$V_{AB} = V_{PR} = \underline{\hspace{2cm}}$$

$$V_{BC} = V_{QS} = \underline{\hspace{2cm}}$$

$$V_{AC} = V_{PS} = \underline{\hspace{2cm}}$$



If you added a fourth solar cell (D) in series with these three cells, how would you expect the reading of the total voltage (V_{AD}) to change?

Name: _____

SOLAR CELLS ARRANGED IN PARALLEL

On the board, there are three solar cells (A, B, and C) arranged in more than one path (known as a **parallel circuit**). Measure the voltage across each of the indicated points in this circuit:

$$V_A = V_{PQ} = \underline{\hspace{2cm}}$$

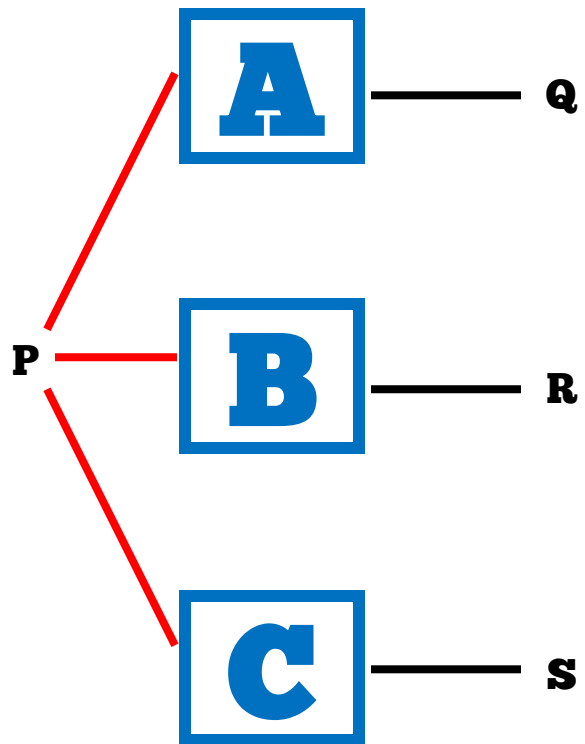
$$V_B = V_{PR} = \underline{\hspace{2cm}}$$

$$V_C = V_{PS} = \underline{\hspace{2cm}}$$

$$V_{AB} = V_{P(QR)} = \underline{\hspace{2cm}}$$

$$V_{BC} = V_{Q(RS)} = \underline{\hspace{2cm}}$$

$$V_{AC} = V_{P(QRS)} = \underline{\hspace{2cm}}$$



If you added a fourth solar cell (D) in series with these three cells, how would you expect the reading of the total voltage (V_{AD}) to change?
