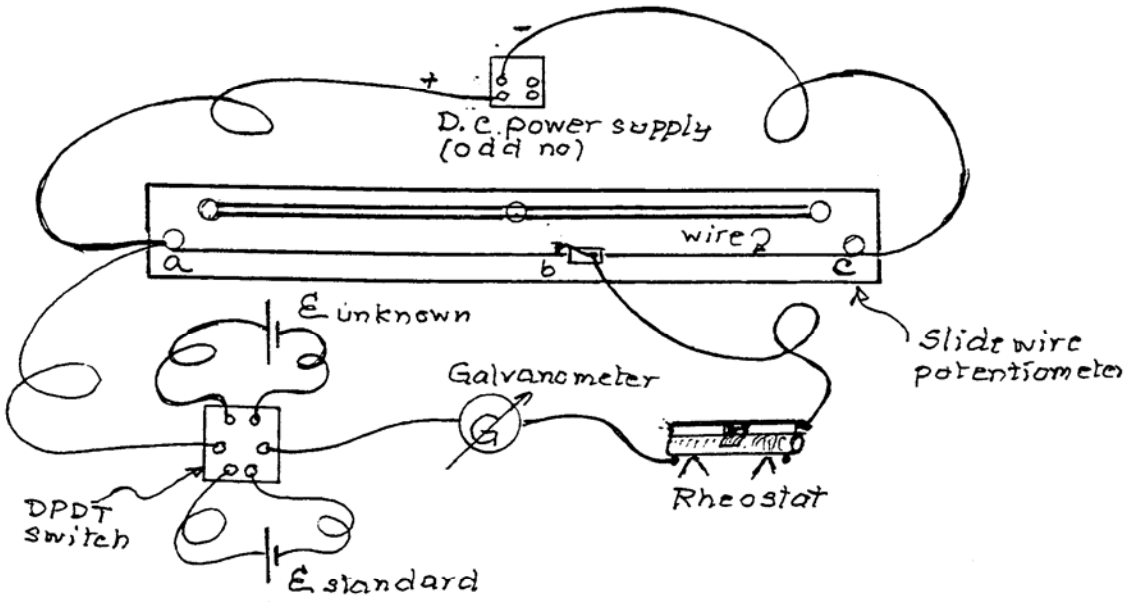
Experiment 3 Potentiometer
Date perform

Name
Partner's name




- Standard cell in circuit

$\mathcal{E}_s$ = ..... volts (Read from standard cell's tag).

$L_s$ = the length of the wire from a to b. = ab

$L_{s1}$ ..... m
$L_{s2}$ ..... m
$L_{s3}$ ..... m
$\Rightarrow$ average $L_s$
$\bar{L}_s$ = ..... m.

$k = \frac{\mathcal{E}_s}{\bar{L}_s}$ = ..... $\frac{\text{volts}}{\text{meter}}$

- Unknown cell in circuit

$L_u$ = ab

$L_{u1}$ = ..... m
$L_{u2}$ = ..... m
$L_{u3}$ = ..... m
$\Rightarrow$ average $L_u$
$\bar{L}_u$ = ..... m

$\mathcal{E}_u = k\bar{L}_u$ = .....

- $\mathcal{E}_u^v$ = ..... volt (measued $\mathcal{E}_u$ by voltmeter)
- % of difference $\frac{\mathcal{E}_u^v - \mathcal{E}_u}{\mathcal{E}_u} \times 100$ = ..... %

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