

LAB 2: ONE PATH OR TWO?

DAYS 3-5

NAME: _____

PARTNER: _____

PERIOD / DATE: _____

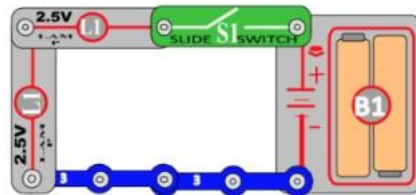
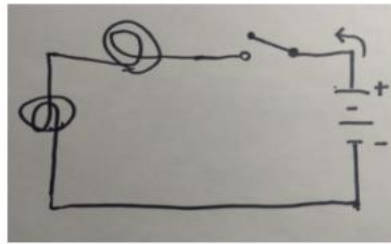
OBJECTIVE

Compare series and parallel path structures using the same two lamps.

DEMONSTRATION OF LEARNING

Use a failure test to justify a reliability decision.

DAY 3 • SERIES: ONE PATH

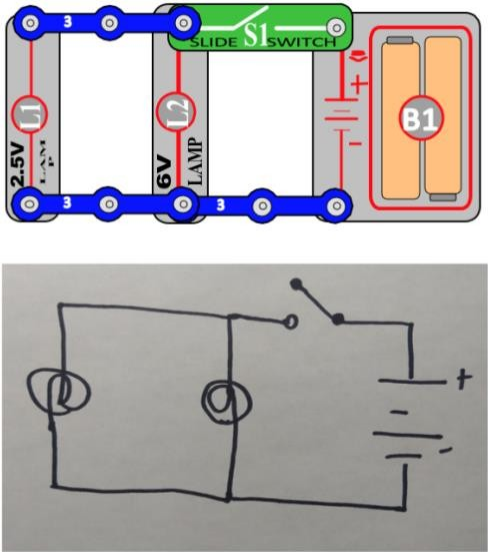


Series build: two lamps share one path. Diagram and classroom build from the VILS/ASU lesson.

Prediction: If one lamp is removed, _____.

TEST	OBSERVATION	WHAT THE PATH EXPLAINS
Both lamps installed		
Lamp 1 removed		
One connection opened		
In series, removing one lamp caused _____ because _____.		

DAY 4 • PARALLEL: MORE THAN ONE PATH



Parallel build: each lamp has a branch. Diagram from the VILS/ASU lesson.

TEST	OBSERVATION	WHAT THE BRANCH EXPLAINS
Both lamps installed		
Lamp 1 removed		
One branch opened		

DAY 5 • RELIABILITY CHALLENGE

Design a two-light system where one lamp can be removed while the other stays on. Draw or photograph the final build, then let a partner trace it and run the failure test.

DRAW / ATTACH YOUR CIRCUIT	PARTNER FAILURE TEST
	Removed: _____
	Other lamp: On / Off
	Partner initials: _____
	Evidence: _____

I chose series / parallel because when we removed _____, _____.
