

LAB 1: COMPLETE PATH + MATERIAL TEST

DAYS 1-2

NAME: _____

PARTNER: _____

PERIOD / DATE: _____

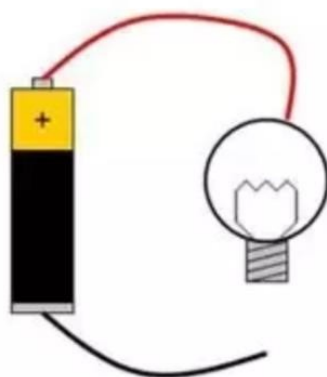
OBJECTIVE

Trace a complete circuit and test one variable at a time.

DEMONSTRATION OF LEARNING

Label the path and support conductor/insulator claims with lamp evidence.

DAY 1 • FOLLOW THE PATH



Concept diagram from the VILS/ASU circuit lesson. Your Snap Circuits build also needs a switch/control.

PART	JOB	OUR COMPONENT
Power source	Provides electrical energy	
Path / conductor	Carries current	
Control	Opens or closes the path	
Load / output	Uses energy to do a job	

Open / closed evidence

When the switch was closed, the lamp _____ because _____.

When we opened one connection, the lamp _____ because _____.

- ☐ Switch off before changing the build
- ☐ Never connect battery terminals directly
- ☐ Battery disconnected before return

DAY 2 • FAIR MATERIAL TEST

Keep the circuit, gap, and battery the same. Change one dry material at a time. Repeat a weak or flickering result.

MATERIAL	LAMP RESULT	CLAIM	EVIDENCE / NOTE
1.	On / Off / Flicker	Conductor / Insulator	
2.	On / Off / Flicker	Conductor / Insulator	
3.	On / Off / Flicker	Conductor / Insulator	
4.	On / Off / Flicker	Conductor / Insulator	
5.	On / Off / Flicker	Conductor / Insulator	
6.	On / Off / Flicker	Conductor / Insulator	

Troubleshooting record

- ☐ Power off
- ☐ Compared every connection to the diagram
- ☐ Checked every snap
- ☐ Checked component direction
- ☐ Asked for a second set of eyes
- ☐ Powered on and tested

The problem was _____. We changed _____. The result was _____.

Claim: _____ is a conductor / insulator because the lamp _____.
