Virtual troubleshooting

Use the simulator only. Record a prediction before measuring, then explain what the reading means.

Name: _____ Date: _____

Exercise 6 / Fuse and parallel path

Use the de-energized virtual fuse bench. Compare resistance before and after isolation.

Virtual measurement	Prediction	Observed reading	Interpretation
Mounted fuse C			
Isolated fuse C			

Why did the mounted measurement differ from the isolated one?

Exercise 8 / Dedicated series test gap

In the virtual lab only, use the designated gap to compare shunts. The simulator blocks all other current placements.

Virtual configuration	Prediction	Observed reading	Interpretation
100 Ω load / mA input			
100 Ω load / 10A input			
24 Ω load / 10A input			

Why are the 100 Ω readings slightly different after converting to the same units?

Fault detective & load

Use two distinct voltage readings, including a measurement across the suspected component, before choosing a fault.

Name: _____ Date: _____

Exercise 9 / Hidden series fault

Red / black points	Predicted healthy result	Observed reading	What changed?

Suspected fault and evidence (explain why both measurements support it):

Exercise 11 / Voltage under load

Virtual condition / points	Prediction	Observed reading	Interpretation
Load off: N2 / N0			
Load on: N3 / N4			
Load on: N1 / N2			

Why can a high-resistance connection look normal with the load off?