

Conductor or Insulator?

Predict and test

Some materials let electricity flow (conductors — mostly metals); others block it (insulators — plastic, wood, rubber).

Keep the test fair: use the **same circuit and same contact** every time. A dark globe from a loose connection is not an insulator result — check your circuit is properly joined.

Predict first, then test each material in your circuit. The globe is your **indicator**: if it lights, the material is a conductor.

Material	My prediction	Globe lit? (Y/N)
Metal spoon		
Plastic ruler		
Wooden pencil		
Aluminium foil		
Rubber band		

Sort, and compare series vs parallel

In a series circuit there is one loop — break it and everything goes out. In a parallel circuit each globe has its own branch, so the others keep working. (That's why homes are wired in parallel!)

1. Sort your materials based on your results.

Material	Conductor or insulator?
Metal spoon	
Plastic ruler	
Wooden pencil	
Aluminium foil	
Rubber band	

2. Write one sentence each describing the difference between a **series** and a **parallel** circuit.

Exit ticket

Name **one conductor** and **one insulator**, and one place at home where each is useful — for example, copper wire and its plastic coating.

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