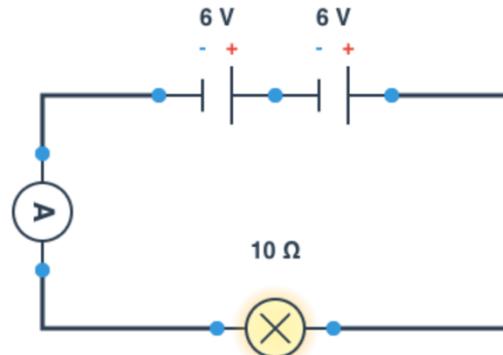
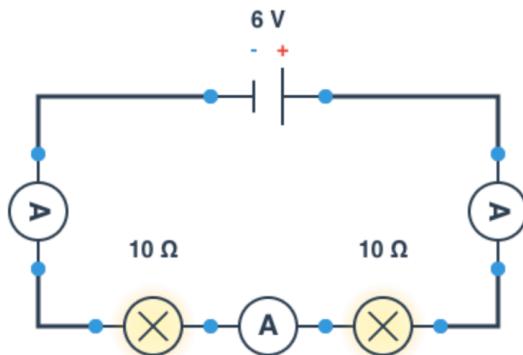
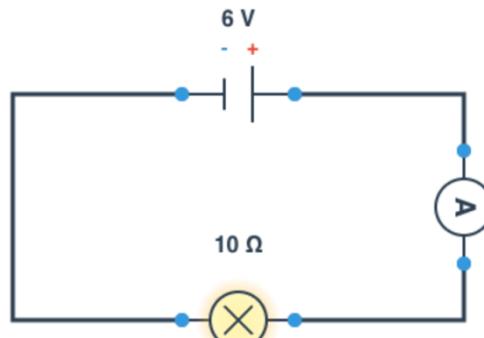
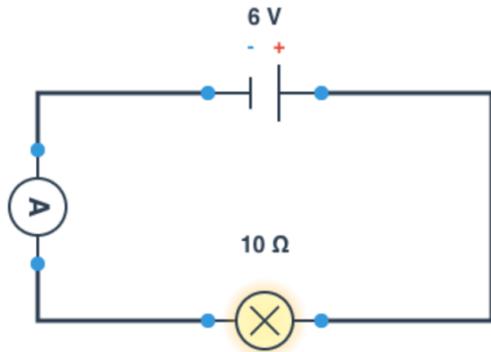


## Simple Circuits

*Aim:* You are investigating current and voltage in series and parallel circuits

### Part 1: Current in series circuits

Build these circuits and write down the ammeter readings

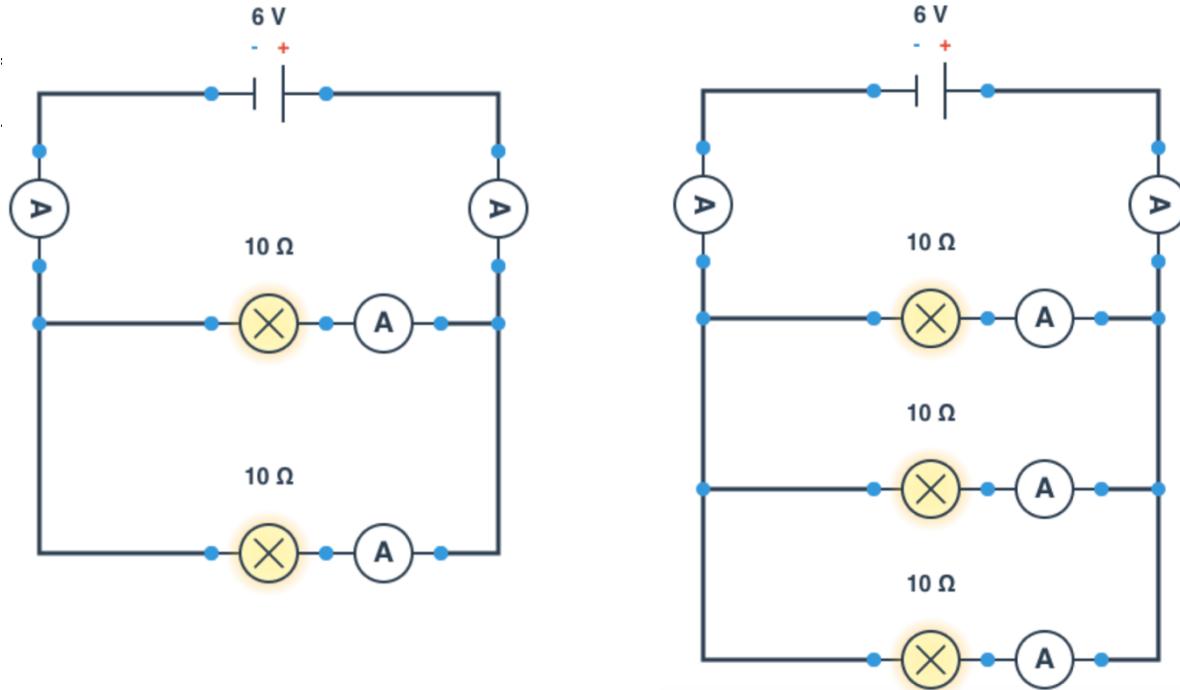


What do you notice about the current around a series circuit?

What makes the current decrease?

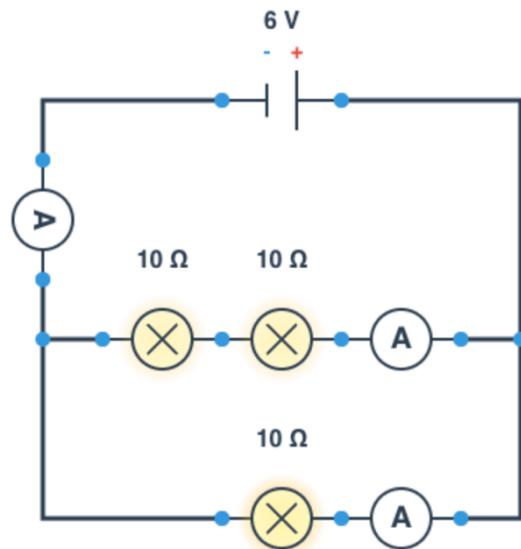
What makes the current increase?

## Part 2: Current in parallel circuits

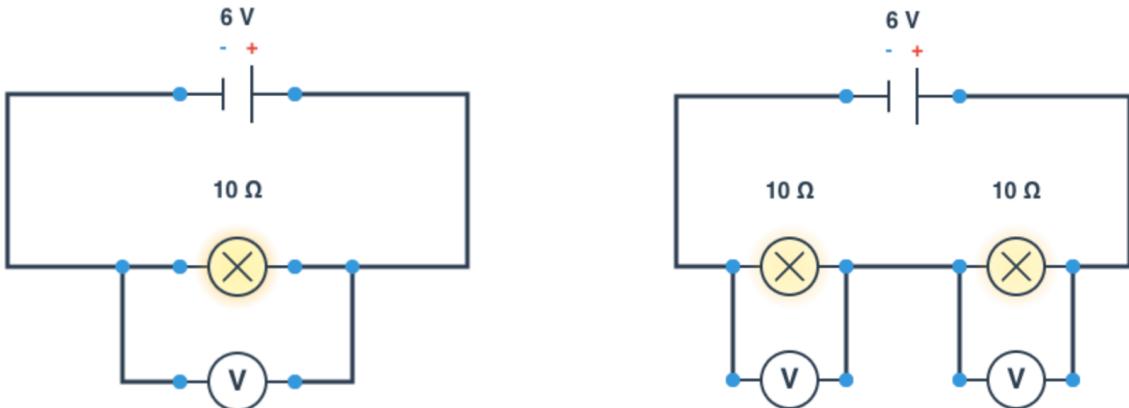


What do you notice about current in parallel circuits?

Create a circuit that is both series and parallel and make some predictions about the current



### Part 3: Voltage in series circuits

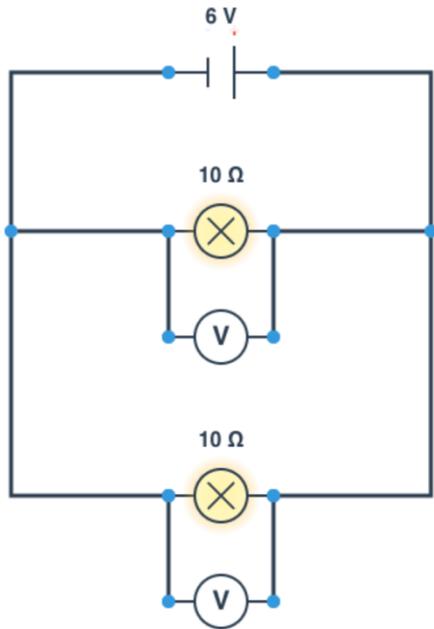


What do you notice about voltage in a series circuit?

Try changing the resistance value of one of the lamps in the second circuit.

How does this affect the voltage across both lamps?

### Part 4: Voltage in parallel circuits



What is different about the voltage in parallel circuits?

How is this possible? Does this violate conservation of energy?