
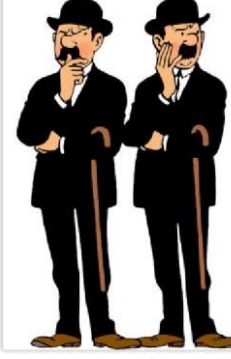







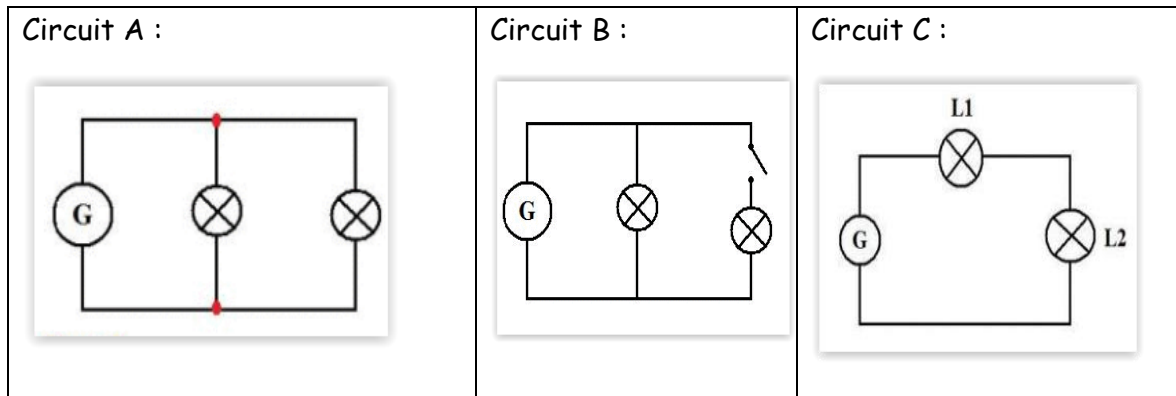
## Activity E3/E4 : Serie or parallel ?

Goals : Learn how two kinds of circuits work

### The Castafiore Emerald

		<p>Thompson : Don't worry Miss Castafiore we will find your jewels !          Thomson : I would say even more , Don't worry Miss Jewel , we will find your Castafiore !          Tintin :Hurry up , take your car ,the robber may not be so far !</p>	
		<p>On the road again .....</p> <p>Thompson : Stop Thomson , the left car headlight is broken !!          Thomson : Yes , but the right one is ok !          Thompson : ??          Thomson : ??          Thompson : Is it normal ?</p>	
 <p>Calculus : The two lamps , the switch and the generator are plugged in series ....</p>	 <p>Haddock Captain :          No, billions of billions blue blistering barnacles !!!          The two lamps are connected in parallel !</p>	 <p>Tintin : Perhaps Captain , but you must put the switch before the two lamps , in order to control them at the same time !</p>	 <p>The Thompsons :          Ok guys , we'll call a class in Sagebien secondary school , they are electricity geniuses ! They can help us !          Thanks !</p>

Mission 1 : match those circuits to each character



Mission 2 : Create Calculus 's circuit and call the teacher

What happens when the switch is open ?

What happens if a lamp is broken ?

Mission 3 : Create Haddock's circuit and call the teacher

What happens when the switch is open ?

What happens if a lamp is broken ?

Mission 4 : Create Tintin's circuit and call the teacher

What happens when the switch is open ?

What happens if a lamp is broken ?

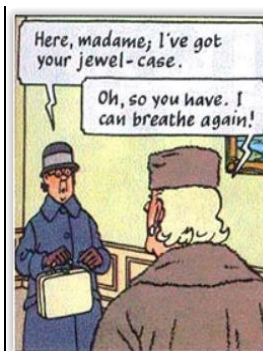
Mission 5 : In your opinion which circuit is the good one for the Thompsons 'car ?

Justify

Mission 6 : In an electric car , the battery is also linked to a motor and the motor is independent from the lamps .

Draw the new circuit diagram.

In the meantime .....



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