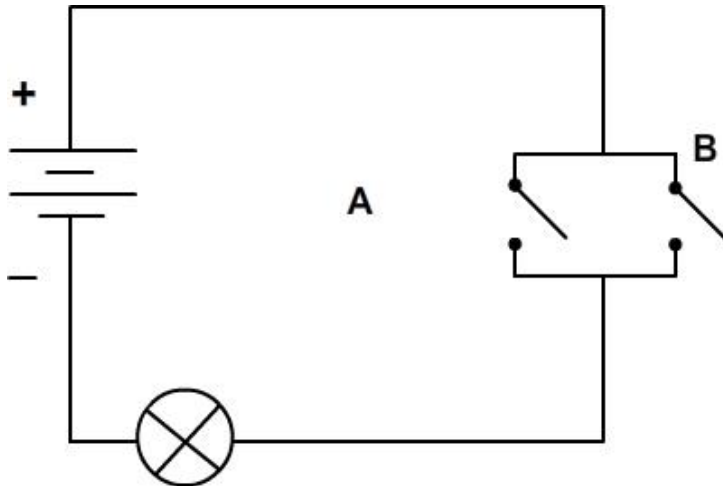


Grade 8 Technology Worksheet

Switches in parallel

1. Build the circuit below, using two switches connected in parallel to control one bulb:



- 1.1 Complete the table below: [8 marks]

Instructions	Bulb lights up	Bulb remains off
Switch A and B off		
Switch A on and B off		
Switch B on and A off		
Switch A and B on		

- 1.2 Briefly explain what you have observed. [3 marks]
 1.3 List four places where this type of switching is used. [4 marks]

Grade 8 Technology Worksheet

Group Assessment

Level	Description
Level 4	Thorough understanding <ul style="list-style-type: none"> • Consistently and actively worked towards task completion. • Collected materials and assembled quickly and effectively. • Collected required information for comparison quickly and effectively.
Level 3	Good understanding <ul style="list-style-type: none"> • Worked towards task completion with little prompting. • Collected materials. • Organised to collect required information.
Level 2	Satisfactory understanding <ul style="list-style-type: none"> • Worked towards task completion at own pace. • Contributed some materials. • Contributed information to comparison.
Level 1	Needs improvement <ul style="list-style-type: none"> • Very little involvement in completing task. • Limited contribution of materials. • Limited contribution to comparison.

[15 marks]

Grade 8 Technology Worksheet

Suggested Solutions

Question number	Possible marks	Answers			
1	8 marks	1.1			
			Instructions	Bulb lights up	Bulb remains off
		Switch A and B off			√
		Switch A on and B off	√		
		Switch B on and A off	√		
		Switch A and B on	√		
	3 marks	1.2 Switch A and B complete the circuit, thus causing the bulb to light up.			
	4 marks	1.3 interior lights of car, top of stairway and bottom of stairway, inside a garage and outside, opposite sides of a room			

[15 marks]

Group Assessment

Level	Description
Level 4	Thorough understanding <ul style="list-style-type: none"> Consistently and actively worked towards task completion. Collected materials and assembled quickly and effectively. Collected required information for comparison quickly and effectively.
Level 3	Good understanding <ul style="list-style-type: none"> Worked towards task completion with little prompting. Collected materials. Organised to collect required information.
Level 2	Satisfactory understanding <ul style="list-style-type: none"> Worked towards task completion at own pace. Contributed some materials. Contributed information to comparison.
Level 1	Needs improvement <ul style="list-style-type: none"> Very little involvement in completing task. Limited contribution of materials. Limited contribution to comparison.