

Physics

Professional Learning Booklet 2024-2025





https://bit.ly/40isOtf





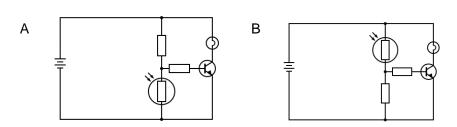
Contextual Strands
Which strand are you reading?
Notes



Session 1: Reflection
Notes:

Session 2:

Streetlight Circuit



Which circuit best represents a street-light system?	
144, 0	
Why?	

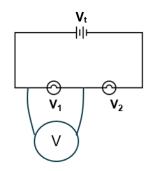


Series Circuit Investigation

Build this circuit

Use a multi-meter to take the relevant measurements Complete the table

	Vt	V ₁	V ₂
2 MES blubs			
MES + LED			
What do you notice?			



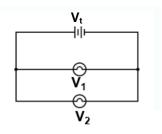
Parallel Circuit Investigation

Build this circuit

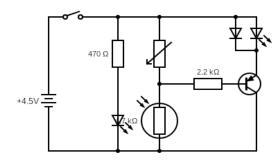
Use a multi-meter to take the relevant measurements

Complete the table

	Vt	V ₁	V ₂
2 MES blubs			
MES + LED			
What do you notice?			



Sensor Board Investigation



Build this circuit

Move your hand over the LDR

What do you notice?

Vary the resistance in the variable resistor

What do you notice?

Measure the voltage across the LED output...

- When the LDR is in the dark (V_{dark})
- When the LDR is in the light (V_{light})

	V dark	Vlight
Output voltage		
What do you notice?		

What other outputs could be used

What other sensors would be used

What function could some of those circuits serve?



Session 2: reflection	
Notes:	



SC Physics

Consider the pros and cons of each of these themed approaches

Pros
Cons

2.3 Wave Behaviour (optics)	Pros
2.2 Travelling Waves as (waves intro)	
2.6 Principle of Superposition (Young etc.)	
2.4 Electromagnetic Energy(em spectrum)	Cons
2.5 Sound Energy	
2.6 Principle of Superposition (stn waves)	
2.7 Wave Effects (Doppler Effect)	

Cons

2.3 Wave Behaviour (optics)	Pros
2.2 Travelling Waves as (waves intro)	
2.6 Principle of Superposition (Young etc.)	_
2.4 Electromagnetic Energy(em spectrum)	Cons
4.2 Photoelectric emission(wave-particle)	



Skeleton Plan

5 th yr	Term 1	Term 2	Term 3	
assessment				
Work for AAC				
Oth	T 4	T 0	T 0	
6 th yr	Term 1	Term 2	Term 3	
6 th yr	Term 1	Term 2	Term 3	
6 th yr	Term 1	Term 2	Term 3	
6 th yr	Term 1	Term 2	Term 3	
6 th yr	Term 1	Term 2	Term 3	
6 th yr	Term 1	Term 2	Term 3	
6 th yr	Term 1	Term 2	Term 3	
6 th yr	Term 1	Term 2	Term 3	
6 th yr	Term 1	Term 2	Term 3	
	Term 1	Term 2	Term 3	
6 th yr	Term 1	Term 2	Term 3	
assessment	Term 1	Term 2	Term 3	
	Term 1	Term 2	Term 3	

5th yr Physics

Unit of Learning, Autumn 2025

Strand	topic	Activities	Practical	time	Assessment

Session 3: reflection					
Session 3: reflection What have you learned?					
What questions remain?					

