



Lesson plan 1 – 5: Chemistry preparation file
TERM 1

LESSON PLAN 6
PHYSICAL SCIENCES
PHYSICS GRADE 10

KNOWLEDGE AREA	WAVES, SOUND AND LIGHT	TOTAL TIME: 20 DAYS
Term	1	
Unit 1	TRANSVERSE PULSE Pulse, amplitude Superposition of pulses	
Date	/ /20__	
Resources	Doc Scientia Textbook and Workbook Physical Sciences Physics Book 1 Grade 10 P. 11 – 21	
Time	4 days	
Core knowledge	<p>Pulse, amplitude Define a pulse:</p> <ul style="list-style-type: none"> • Define a transverse pulse. • Amplitude • Define amplitude as maximum disturbance of a particle from its rest (equilibrium) position. • Know that for a transverse pulse, the particles of the medium move at right angles to the direction of propagation of the pulse. <p>Let learners observe the motion of a single pulse travelling along a long, soft spring or a heavy rope.</p> <p>Sometimes learners are taught about waves without ever learning about pulses. A pulse is a single disturbance. It has an amplitude and pulse length, but no frequency, since it only happens once.</p> <p>Superposition of pulses:</p> <ul style="list-style-type: none"> • Explain that superposition is the addition of the amplitudes of two pulses that occupy the same space at the same time. • Define constructive interference. • Define destructive interference. • Explain (using diagrams) how two pulses that reach the same point in the same medium, superpose constructively and destructively and then continue in the original direction of motion. • Apply the principle of superposition to pulses. <p>Use a ripple tank to demonstrate constructive and destructive interference of two pulses.</p>	





Activity/ Experiment/ Project	Practical activity 1 P. 13 – 14 Practical activity 2 P. 17 – 18		
Assessment methods	Class test	Control test	Project
	Experiment	Class work	Interview
Resources	Workbook, transparencies, mind maps Summary P. 20 Mind maps P. 21		
Homework	Exercise 1 P. 14 – 15 Exercise 2 P. 19		