

INTERFERENCE OF WAVES

NAME _____ DATE _____

PRE-TEST.

It is possible for two waves to cancel each other? Explain.

OBJECTIVE: To determine wave interference using different phases.

MATERIALS: Tuning fork, LabPro device(Pasco).

INTRODUCTION: Sound is created by a vibrating object producing the less interference. In order to produce this less amount of interference, different angle of phases are used to determine the loudness and soft sound.

PROCEDURE: Turn the LabPro(Pasco)

Go to Output.

Push \checkmark

Output Setting.

Push \checkmark

Select Phase

Push \checkmark

Waveform = Sine

Frequency = 400 Hz

Phase - / + to increase or decrease the phase value.

DATA TABLE:

LEFT OUTPUT	RIGHT OUTPUT	OUTPUT OF SOUND (SOFTER/LOUDER)
180	0	
180	90	
180	360	
90	0	
360	90	

QUESTIONS:

1. What phase do you hear loudest constructive interference?
2. What phase do you hear soft constructive interference?
3. What phase do you hear destructive interference?