## CLASS-09 PHYSICAL SCIENCE

**LESSON PLAN** 

**CHAPTER: 10 – SOUND** 

PERIOD NUMBER	CONCEPTS / TEACHING POINTS	PAGES IN TEXT BOOK		TEACHING	TEACHING LEARNING	EVALUATION
		FROM	то	PROCEDURE	MATERIAL MATERIAL	EVALUATION
1.	Sound is a form of energy	160		Activity	Stand, Plastic tube, Balloon, Rubber band, Laser light source, Small mirror	What is sound ?
	History of sound	162	163	Conversation	Photos, Video clips of scientists like Hertz, Galileo, Bacon, Pythagoras,	How can sound be produced? How sound propagate in air?
2.	Production of sound Tuning fork	163	igni	Activity	Stand, Tuning fork, Rubber hammer, Glass plate, Steel wire	How sound produced? What is the shape of tuning fork? Which part of our body vibrate when we speak?
3.	Travel of sound  Propagation of sound	164	165	Conversation Activity	Chart, video clip, Spiral Spring roll	What is compression? Which is transferred when a wave moved?

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4.	Types of waves			Activity	Chart, video clip, Spiral Spring roll, Long rope	What is a longitudinal wave ?
	Sound waves are longitudinal	165	166	Activity		What is crest ?
5.	Characteristics of sound waves			Conversation	- Chart, Video clips, About Hertz video clip	The distance between successive crest and trough is called?
	Wave length – amplitude - frequency	166	169	Conversation		What is amplitude?  Which indicates the number of vibrations per second?
6.	Speed of sound wave	169	170 igni	Conversation	Chart, Video clips	What is the speed of light in vacuum ?
	Problems – solutions			Conversation		What is the formula for speed of wave ?
	Sonic boom			Conversation		What is sonic boom?
7.	Musical sounds	170	172	Conversation	Chart, Video clips	Is Tiger's sound pitch is greater than the Parrot's sound pitch?
	Pitch – loudness - quality			Conversation		What do you know about decibel?

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8.	Reflection of sound	172	173	Activity	Apparatus for Reflection of sound (Or)	Is sound reflects?
						What is reflection?
					Card board, 2 Hallow	Where do we observe the
					plastic tubes of 1 m	reflection of sound?
9.	Echo			Conversation	Chart, Video clips	What is meant by echo?
	Problems - solutions	173	174	Conversation		Why is an echo weaker than
						the original sound?
						A boy shouted from 132 m
						from a building. He heard
						echo after 0.8 seconds. Find
				TEPHA		the speed of sound ?
10.	Reverberation	174	* 175	Conversation Conversation ephysics.weebly.com	Chart, Video clips	Name one instrument that
	Reverberation					works on echo?
	Echo – reverberation - relation					What is reverberation ?
						How can we avoid echoes?
11.	Range of hearing		177	Conversation	Chart, Video clips	What are the uses of ultra
	Ultra sonic waves	175		Conversation		sounds?
	Ultra sounds - uses	1,5		Conversation		Which animals produce ultra sounds?
12.	SONAR		178	Conversation	Chart, Video clips	SONAR means?
		177				In which machine SONAR technology is used ?

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