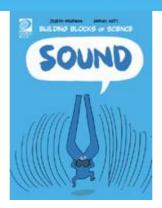
BUILDING BLOCKS OF SCIENCE!



Sound Activity Sheet

Ι.	True of Faise: Sound is a form of energy.	

2.	What are the vibrations in the air around an object called?
3.	True or False: Sound travels through vibrating air particles.
4.	How do humans hear sound?
	Put in order from 1 to 6 how sound reaches our brains.
	Sound waves enter the ear drum
	Sound waves cause the eardrum to vibrate
	The eardrum makes tiny bones in the ear move
	Tiny bones send sound to the cochlea
	In the cochlea sound makes tiny hairs bend
	Bending hairs cause nerves to send signals to the brain
5.	Why does sound travel faster through solids and liquids than through air?
6.	Why is there no sound in space?
7.	What are some ways people absorb sound?
8.	What is an echo?
9.	What types of animals use echo to navigate and hunt?
10.	How do humans use echolocation?

12. What is amplitude?				
13. Fill in the blanks:				
Loud sounds have amplitude.	. Soft sounds have a	mplitude.		
14. What makes sound high or low?				
15. Fill in the blanks:				
The an object vibrates, the _	its frequency.			
High pitched sounds have a	_ frequency than low pitched so	ounds.		
16. Give an example of a high pitched sound and a low pitched sound.				
17. How do hearing aids help people?				

11. Draw a picture of a sound wave.

ANSWERS:

- 1. True
- 2. Sound waves
- 3. True
- 4. (1) Sound waves enter the ear drum (2) Sound waves cause the eardrum to vibrate (3) The eardrum makes tiny bones in the ear move (4) Tiny bones send sound to the cochlea (5) In the cochlea sound makes tiny hairs bend (6) Bending hairs cause nerves to send signals to the brain
- 5. Particles in solids and liquids are closer together than particles in the air.
- 6. There is no air in outer space so there are no particles to vibrate.
- 7. Curtains, cushioned seats.
- 8. When sound reflects.
- 9. Bats, dolphins and whales.
- 10. Sonar systems help humans find objects under water. Ultrasound helps detect movement and is also used to look inside your body.
- 11. See page 18.
- 12. Amplitude is the amount of energy in a sound wave.
- 13. Loud sounds have <u>more</u> amplitude. Soft sounds have <u>less</u> amplitude.
- 14. Frequency
- 15. The <u>faster</u> an object vibrates, the <u>greater</u> its frequency.High pitched sounds have a <u>higher</u> frequency than low pitched sounds.
- 16. High pitched: a bird. Low pitched: Lion's roar
- 17. Hearing aids help people hear frequencies that they may have lost.