SCIENCE 2022/2023 HOMEWORK #19

	PLEASE SUBMIT YOUR WORK THROUGH GOOGLE CLASSROOM
1.	To answer the questions in this homework you need to <u>review Lectures 18 and 1</u> (all about sound waves). Always show your work where appropriate!
2.	Refer to Slide #2 of Lecture 18. What <u>kind</u> of wave is sound?
3.	Refer to Slide #5 of Lecture 18. How many <u>vibrations per second</u> does the <i>lowest pitch typically audible by humans</i> have?
4.	Refer to Slides ##2-3 of Lecture 19: a. What is the <u>difference in the intensity of sound (in db</u>) between a <i>normal conversation and a loud rock concert</i> ?
	b. What is the corresponding sound energy difference?
5.	How long will it take for a sound wave to travel 1 mile (about 1.6 km) in the air?
6.	Suppose you could yell "Hello!" underwater . At least how far away an

underwater mountain must be to produce a clear echo?