NAME:			

NOTE: To answer the questions in this homework you need to <u>review Classworks</u> #8 through #10 (all about sound waves). Always show your work where appropriate!

- 1. Refer to Slide #2 of Classwork #8. What kind of wave is sound?
- 2. Refer to Slide #5 of Classwork #8. How many <u>vibrations per second</u> does the *lowest pitch typically audible by humans* have?
- 3. Refer to Slides ##2-3 of Classwork #9:
  - a. What is the <u>difference in the intensity of sound (in db</u>) between a *normal* conversation and a loud rock concert?
  - b. What is the corresponding sound energy difference?
- 4. Sound waves <u>travel FASTEST in which</u> of the following: *helium, ice, olive oil*? Explain your answer!
- 5. Which of the two spaces is more likely to have an echo: a hall with hardwood floors and wood panel walls and no windows, or a carpeted room with large windows covered in thick drapes? Explain your answer!