



# Sound Review Sheet

Name \_\_\_\_\_

Assessment is on \_\_\_\_\_

Match the term to its meaning.

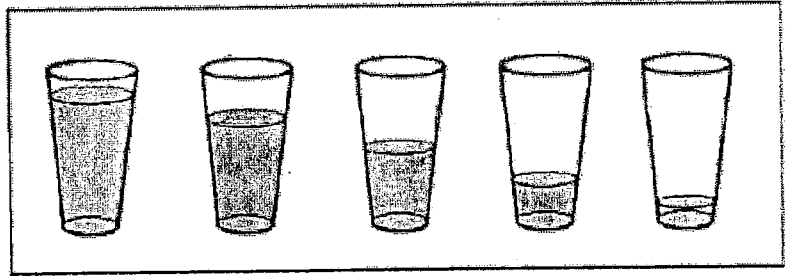
- |                   |                                   |
|-------------------|-----------------------------------|
| 1. ____ pitch     | A. rate of vibration (speed)      |
| 2. ____ waves     | B. the way sound is transmitted   |
| 3. ____ volume    | C. highness or lowness of sound   |
| 4. ____ frequency | D. loudness or quietness of sound |

5. Read each characteristic. Write E if it relates to echo and A if it relates to absorb.

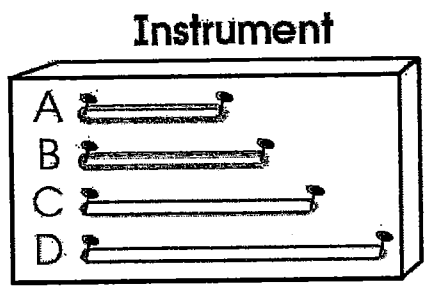
- |                                     |                                   |
|-------------------------------------|-----------------------------------|
| a. ____ soaking in sound            | f. ____ hard, smooth materials    |
| b. ____ light bouncing off a mirror | g. ____ bouncing sound            |
| c. ____ pillow                      | h. ____ auditorium full of people |
| d. ____ reflecting sound            | i. ____ empty auditorium          |
| e. ____ soft, fluffy materials      |                                   |

6. A teacher fills five glasses with different amounts of water. The teacher lightly taps each glass, and \_\_\_\_\_ is made by the \_\_\_\_\_. The rate of vibration of each glass varies depending on the amount of \_\_\_\_\_ in the glass. Which property of the sound varies from glass to glass?

7. Label the pitch of each glass.



8. Students pluck the rubber bands on the instrument. Label the highest and lowest pitched rubber bands.



**Key**

Nail

Thick Rubber Band

Thin Rubber Band

9. Match the relationship between pitch and frequency. Then match the ways to change the pitch of a sound

Higher pitch

Lower pitch

High pitch

High pitch

High pitch

High pitch

Low pitch

Low pitch

Low pitch

Low pitch

A. increase frequency (faster)

B. decrease frequency (slower)

C. short

D. thick

E. tight

F. long

G. loose

H. thin

I. vibrate quickly

J. vibrate slowly

10. A student plays his trumpet on the stage of an empty auditorium. He hears the sound echo back to the stage. When the auditorium is full of people, he does not hear an echo. The sound echoes in the empty auditorium because vibrations \_\_\_\_\_ off the \_\_\_\_\_ and \_\_\_\_\_.

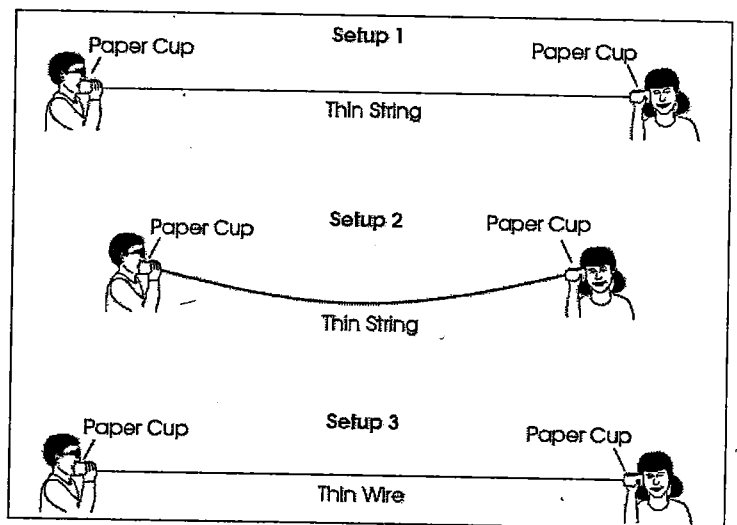
In the full auditorium, sound gets \_\_\_\_\_ by the \_\_\_\_\_ and \_\_\_\_\_.

11. Two students want to find out what affects the sounds heard through model telephones. They investigate the tightness of the material connecting the cups.

The first three setups are shown. They use the same length of string or wire in each setup. The boys repeat the same sounds at the same volume each time.

The sound was heard in setup 1

because \_\_\_\_\_



They record results of the three setups in the table below.

Model Telephone Investigation

Setup	Description of Sound Heard
1	Sound is Muffled
2	No Sound is Heard
3	Sound is Clear

12. The variable that changed between setup 1 and setup 2 is

\_\_\_\_\_.

13. The variable that changed between setup 1 and setup 3 is

\_\_\_\_\_.

14. Explain what happened to the sound energy in setup 2.

\_\_\_\_\_.

15. The sound was clearer in setup 3 than in setup 1 because

\_\_\_\_\_ is a better transmitter of \_\_\_\_\_.

Match the word to its description.

16. vibrations

A. best/fastest transmitter of sound

17. 300,000,000 m/s

B. worst/slowest transmitter of sound

18. 343 meters per second

C. speed of sound in air

19. gas

D. speed of light through air

20. solid

E. cause of sound

21. A teacher shows a student the following data about the speed of sound in air and water.

Speed of Sound  
in Air

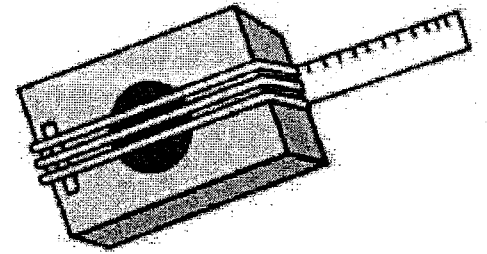
Temperature	Speed (meters/second)
40°C	356
20°C	343
0°C	331

Speed of Sound  
in Water

Temperature	Speed (meters/second)
40°C	1,526
20°C	1,491
0°C	1,403

Based on the tables, the student can conclude that sound travels faster in \_\_\_\_\_ than \_\_\_\_\_. Also  
Sound travels faster when the \_\_\_\_\_.

22. A teacher makes a model guitar by using an open box for the guitar body and rubber bands for the strings. Students observe that the pitch of the sound produced by each rubber band depends on how tight the rubber band is. The tightness can change the



\_\_\_\_\_ because it makes the rubber band vibrate \_\_\_\_\_ or \_\_\_\_\_.

Sample	Amount of Water	Vibrations per Second
Glass A		500
Glass B		600
Glass C		700

23. A student investigates the pitch of sound with identical water glasses containing different amounts of water. The table shows the vibration rate of each sound. Add water lines to fill each glass to play the correct pitch.

24. A student taps each glass with a spoon and observes that each produces a sound with a different pitch. This happens because the amount of \_\_\_\_\_ in the glass affects the \_\_\_\_\_. Label the pitch of each glass.

25. Students are observing the highest pitches that instruments can reach. Students arrange the instruments in a line to show the fastest to slowest vibration rate. Create a graph to match the students' observations. The higher the instrument's pitch, the higher the mark on the graph.

Speed of vibration

fastest vibration rate
slowest vibration rate

