Developed with funds provided by the National Science Foundation

Some items on this assessment were drawn from existing databases of items, such as released items from the TIMSS.

Name _____ Date _____

For each question, circle or write in the best answer.

1. Hearing the teacher's voice across the room shows that sound
   a) can be loud
   b) travels
   c) uses energy

2. We speak by making our vocal chords
   a) open
   b) stretch
   c) vibrate

3. Saying that a sound is "high" tells about the sound's
   a) height
   b) pitch
   c) volume

4. Saying that a sound is "soft" tells about the sound's
   a) pitch
   b) touch
   c) volume

5. Which tuning fork would vibrate more quickly when struck?

6. A violinist makes the sound of a string lower by

   a) loosening it

   b) lowering it

   c) tightening it

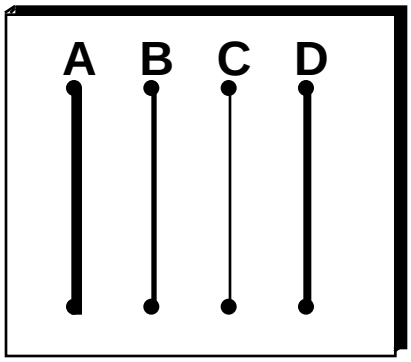
7. Put the letters in order so that the rubberbands are from highest to lowest pitch.

highest A B C D

A B C D

A B C D

lowest A B C D



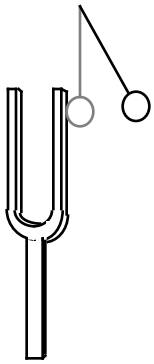
8. Grains of sand on a drum bounce when the drum is struck. The height of the bounce tells what about the sound?

a) amount of energy

b) pitch

c) volume

9. A ping pong ball on a string will bounce if it is placed next to a tuning fork that has been struck. The height of the bounce tells what about the sound?

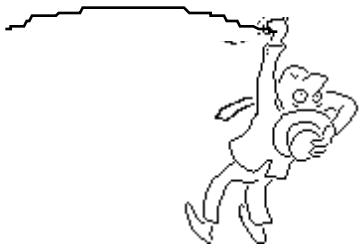


a) amount of energy

b) pitch

c) volume

10. To raise the pitch of a sound when swinging a rope, swing the rope



a) more smoothly

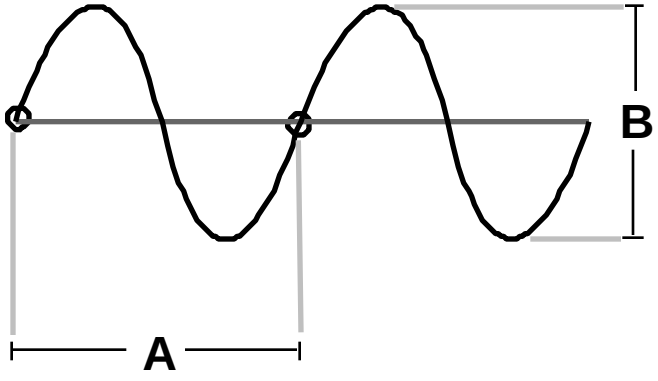
b) more slowly

c) more quickly

11. In this picture from an oscilloscope, which dimension provides information about the pitch of the sound?

a) A

b) B

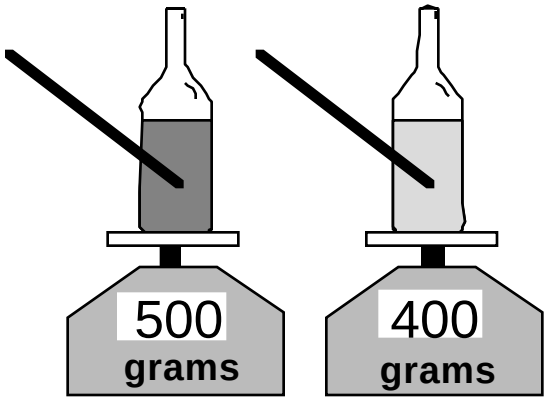


12. Which bottle would make a higher pitch when tapped?

a) bottle weighing 500 grams

b) bottle weighing 400 grams

c) both would be the same



13. In which bottle would the air vibrate more quickly when blown across?

a) bottle weighing 500 grams

b) bottle weighing 400 grams

c) both would be the same