

## Sounds of Music Test

### Taken from the Southland Tournament in 2010

*(note that in the actual event that tests will likely be oral tests instead of written tests)*

Match the following terms to their sound related definitions:

- |                   |   |
|-------------------|---|
| ___1. Timbre      | A. Lowest frequency for an instrument           |
| ___2. Fundamental | B. Unit of frequency                            |
| ___3. Harmonic    | C. Perception of frequency by ear               |
| ___4. Hertz       | D. Effect of natural vibrations being amplified |
| ___5. Resonance   | E. Quality of sound                             |
| ___6. Pitch       | F. Whole number multiples of frequency          |
| ___7. Decibel     | G. Unit of loudness                             |

Sketch a portion of your wind instrument and what sound waves look like in this part of the instrument.

Does a musical string mathematically behave like an open-end pipe or a closed-end pipe?

Imagine you are marching and playing your instrument near a friend. Describe what would happen to the pitch of the instrument as perceived by the friend as you march towards the friend, when you are at the friend, and as you march away from the friend.

What happens to the pitch of an open-end pipe when you close off one end?

Describe how you can make the pitch go up on your percussion instrument.