

## HW10a: Questions from Tuesday the 2<sup>nd</sup>'s Class

1. For an electric guitar, what's the name of (or describe) how the "pickups" translate the string's oscillations into electrical oscillations.
2. What frequency are each of the strings in Standard E, A, D, G, B, E tuning?
3. For a hollow-bodied, acoustic guitar, the face plate and back vibrate in response to the strings' vibrations, but so does the air within the hollow cavity. Both effect the timbre of the instrument. Like drum heads, the body's front and back have only specific frequencies for which they strongly vibrate. As for the air within the cavity, it too has specific frequencies at which it easily resonates. You experimented with something similar early in the semester; a \_\_\_\_\_ resonator.
4. With the violin, starting with the bow dragging across the string and setting the string vibrating, trace the path the energy takes. The bow sets vibrating the string, the string sets vibrating the... until finally the sound is radiating through the air to your ear – fill in the dots.
5. The sound post plays at least two important roles in the violin; what are they?