ACADEMIC PHYSICS

Sound

1. I can recognize that a sound wave is a longitudinal wave.
2. I can explain that sound is a mechanical wave and thus requires a medium.
3. I can describe the relationship between the velocity, frequency, wavelength, and temperature of sound waves.
4. I can solve problems involving frequency, velocity, wavelength and temperature.
5. I can explain the effect of frequency (wavelength) on the pitch of sound.
6. I can describe sympathetic vibrations or resonance.
7. I can explain the Doppler Effect and how it changes the pitch of a sound.
8. I can describe the relationship between pitch, loudness, and intensity.

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| ACTIVITY | TIME ALLOTMENT |
| Outside Reading Reference: Chapter 15. | HW |
| Wavelength of Sound Waves (Resonance) Lab | 2 |
| **HW – BOOK:** p. 368; 2-5, 7, 8, 14-18, 24, 30, 33 | HW |
| **HW -** Sound Problems (w/ resonance) | 1 |
| **CW –** Sound Concepts Worksheet | 1 |
| **HW -** Speed of Sound Problem Sheet | HW |
| Review | 1 |
| **TEST** | 1 |
| TOTAL | 6 |

Pg. 368

24. 2058 m

30. 1.45e3 m/s

33. 3.56e-4 m