## Physics Interactive Quiz : Waves

Name:

|  | \# | 1 | question | Answer | 0 | <--score |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \# | 1 | 20 | cm is the length of a closed tube that resonates with a certain tuning fork. If Vsound is $320 \mathrm{~m} / \mathrm{s}$, find the wavelength of the sound |  | 0 |  |
| \# | 2 | 20 | find the frequency of the sound |  | 0 |  |
| \# | 3 | 311 | $\mathrm{m} / \mathrm{s}$ is the velocity of sound on a mountaintop. Find the new length to make the tube resonate |  | 0 |  |
| \# | 4 | 4 | meters is the length of a spring on the floor. If a pulse takes 1.2 seconds to make a round trip, find the velocity of the pulse. |  | 0 |  |
| \# | 5 | 6 | seconds is the time a surfer times between "sets" of waves. What is the frequency of the waves? |  | 0 |  |
| \# | 6 | 6 | What is the period of the waves? |  | 0 |  |
| \# | 7 | 6 | If the distance between peaks is 18 meters, find the velocity the surfer will have to paddle to catch the wave |  | 0 |  |
| \# | 8 | 70 | hz is the resonant frequency of a certain speaker. What will the frequency of the third harmonic be? |  | 0 |  |
| \# | 9 | 70 | How long will the original waves be if Vsound is $320 \mathrm{~m} / \mathrm{s}$ ? |  | 0 |  |
| \# | 10 | 70 | How long would they be if the waves were underwater where Vsound is $1600 \mathrm{~m} / \mathrm{s}$ ? |  | 0 |  |

## Extra Credit:

