**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ #\_\_\_\_\_\_**

**Slotted Notes – Sound**

**Sound is a type of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**

* Mechanical waves travel through \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* Mediums include \_\_\_\_\_\_\_\_\_, water and \_\_\_\_\_\_\_\_\_\_\_\_ materials.
* Sound is a wave that is produced by a \_\_\_\_\_\_\_\_\_\_\_object and travels through matter.
* Like all mechanical waves, sound waves travel through a medium.

**How Sound Waves are Produced**

* 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are required to start sound waves.
* 2. A vibrating object \_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_ on the medium.
* 3. Waves are sent out in \_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Sound Waves Vibrate Particles**

* Sound waves transfer the \_\_\_\_\_\_\_\_\_\_\_of \_\_\_\_\_\_\_\_\_\_\_\_\_ too small to see from one place to another.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are areas of \_\_\_\_\_\_\_\_\_\_ air pressure.
* Spaces between the compressions are areas of \_\_\_\_\_\_\_\_ air pressure.
* The high and low air pressure pushes and pulls on the surrounding air, which then pushes and pulls on the air around that.
* Sound waves \_\_\_\_\_\_\_\_\_\_ travel through a vacuum because there are \_\_\_\_\_ particles for sound to travel through.

**The Speed of Sound Depends on its \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

* Two main factors that affect the \_\_\_\_\_\_\_\_\_\_\_\_ of sound are: 1) \_\_\_\_\_\_\_\_\_of the medium and 2) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* Sound travels \_\_\_\_\_\_\_\_\_\_\_\_\_through \_\_\_\_\_\_\_\_\_\_\_ than gasses because they are more \_\_\_\_\_\_\_\_\_\_\_\_ (more particles) than gas.
* Sound travels fastest through a \_\_\_\_\_\_\_\_\_\_\_.
* Sound travels faster through a medium at a \_\_\_\_\_\_\_\_\_temperature than a lower temperature.