**12 Steps to Produce and Detect Sound**  
  
STEP 1: Muscles push air up from your lungs.  
  
STEP 2: Air travels through the opening between vocal chords.  
  
STEP 3: The air causes the vocal chords to vibrate back and forth.  
  
Step 4: The vibrating vocal chords produce sound waves.  
  
Step 5: Particles in the air vibrate back and forth transferring the sound through the air.  
  
Step 6: The funnel shaped ear focuses the sound in the ear canal.

Step 7: A tiny tube called the ear canal transfers the sound into the middle ear.  
  
Step 8: In the middle ear, the sound waves cause the ear drum to vibrate.  
  
Step 9: Vibrations then travel through tiny bones in your inner ear called the hammer, anvil and stirrup.  
  
Step 10: The tiny hairs in the cochlea detect the sound vibrations.  
  
Step 11: The sound waves are sent to the brain as electrical signals.  
  
Step 12: The brain receives the signals and processes them as sound.