Sound Production

The parts of the body that control breathing (respiration)

The parts of the body that create sounds (phonation)

The parts of the body that amplify and add depth to sound (resonance)
To have a powerful and stable voice, we must have a powerful and stable airflow.

We achieve this by strengthening the muscles involved in the breathing process.

- Start with good posture to allow these muscles to function at their best.
- Understand which muscles are used in breathing.
- Practice using those muscles – exercise them!
Standing Posture:

- Notice how the body “lines” up on an invisible axis.
- The skull and pelvis (hips) are the heaviest bones and need to be centered on this “axis.”
- The muscles help to line up the bones properly.
Which bodies are out of alignment? Why?
Correct Body Alignment:

- Body balanced with feet under shoulders
- Weight on the balls of the feet
- Don’t lock your knees!
- Shoulders relaxed
- Arms and hands relaxed
- Stand tall (crown of head should be “highest point”)
Sitting Posture:

- Head is balanced over the thick bones in the lower spine
- Head is balanced over the hips
- Knees are parallel to floor with one foot slightly behind the other.
What’s wrong with the alignment in these pictures?

- **B** – The weight of the head is over the back of the spine; back muscles get stiff from trying to hold it up.
- **C** – The weight of the head pulls you down onto lungs and abdomen.
- **D** – The weight of your head is over the top of your spine and gets no support from the core.
Breathing:

- The lungs are “passive” – they don’t have muscles.
- The diaphragm “contracts” creating a vacuum in the lungs that draws in the air.
- As the lungs fill with air, they push out on the ribs and down on the stomach.
- Shoulders MUST stay relaxed to avoid creating tension.
As the diaphragm “relaxes,” air is pushed out of the lungs.

The ribs contract naturally as the air is pushed out.

The abdominal muscles work with the diaphragm to control how fast the air is pushed out.

We must not let the shoulders push the ribs onto the lungs as we exhale.