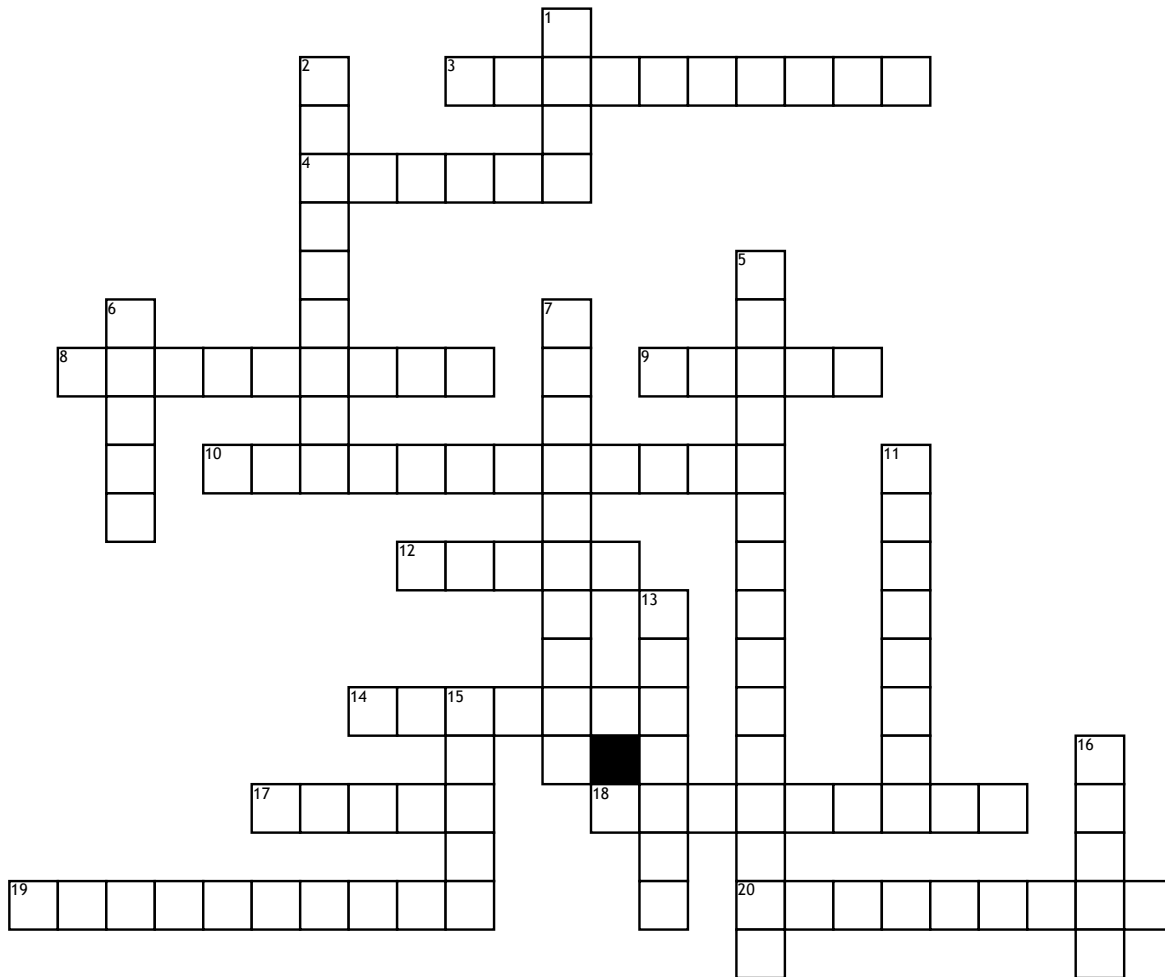# Respiration

Across

3. device that measures the volume of air expelled or inspired (used to measure lung volume)

4. number of thoracic vertebrae

8. contraction of this muscle pulls the lungs downward and expands them to draw in air through the bronchial passageway (this is the primary inspiratory muscle)

9. the % of normal respiration cycle taken up by inhalation (during speech inhalation makes up 10%)

10. this structure that allows for the legs to attach to the vertebral column is made up of ileum- sacrum- pubic bone- and ischium

12. _____ volume is the volume of air exchanged during one cycle of respiration (one inhale and exhale)

14. air sacs in the lungs- there are about 300 million of these in mature lungs and they are the point at which oxygen and carbon dioxide are transferred to and from the bloodstream

17. _____ respiration -the involuntary act of breathing

18. given a gas of constant temperature, increasing the volume of the chamber in which the gas is contained will cause a decrease in pressure, and vice versa

19. ____pressure is the pressure beneath the level of the vocal folds

20. device that measures respiratory pressure

Down

1. number of massive lumbar vertebrae and sacral vertebrae three, number of fused coccygeal vertebrae (or 4)

2. _____ pressure is the respiratory pressure in the oral cavity

5. made up of 5 divisions: cervical, thoracic, lumbar, sacral, and coccygeal

6. the % of normal respiration cycle taken up by exhalation (during speech exhalation makes up 90%)

7. the entry of liquid or solid materials into the lungs (though it can also mean the removal of materials from the lungs which is more commonly referred to as suctioning)

11. _____girdle includes the scapula and clavicle which attach to the sternum

13. _____and transverse processes provide the points of attachment for numerous muscles to the vertebral column

15. _____capacity is the capacity of air available for speech

16. number of cervical vertebrae