Blue's Clues: Oxygenation and Ventilation

Objective statement: Oxygenation and ventilation are important yet different physiologic processes that often get simplified when discussing their analysis. However, the veterinary technician must have a solid foundation in them to be able to provide high level nursing care such as anesthesia or ventilator management. This webinar will focus on each process and it's physiologic basics, monitoring tools and clinical relevance in order to enhance the veterinary technician's knowledge of both subjects.

Quiz:

1- PaO_2 stands for, and represents?
   - **a. Partial pressure of arterial oxygen, the amount of oxygen creating pressure, measured in mmHg, exerting pressure within an artery**
   - b. Partial pressure of venous oxygen, the amount of oxygen creating pressure, measured in mmHg, exerting pressure within an vein
   - c. Partial pressure of arterial carbon dioxide, the amount of oxygen creating pressure, measured in mmHg, exerting pressure within an artery
   - d. Partial pressure of venous carbon dioxide, the amount of oxygen creating pressure, measured in mmHg, exerting pressure within an artery

2- There are two major options to measure CO_2 levels in the body. They are:
   - a. $ETCO_2$ and HCO_3
   - **b. $ETCO_2$ and Pa/vCO_2**
   - c. $PaCO_2$ and SpO_2
   - d. SpO_2 and $ETCO_2$

3- Oxygenation is a _____ process whereas ventilation is an _____ process:
   - a. Passive, passive
   - b. Active, active
   - **c. Passive, active**
   - d. Active, passive

4- Tidal volume represents, and is calculated by:
   - **a. The volume of a normal inhalation/exhalation cycle, 10-15 ml/kg**
   - b. The volume of maximal inhalation, 10-15ml/kg/min
   - c. The volume of the entire lung, RR x 10-15ml/kg
   - d. The volume remaining in the lung after exhalation, 10-15ml/kg

5- FRC stands for, and represents?
   - a. Functional residual capability, the amount of air after a maximal exhalation
   - **b. Functional residual capacity, the amount of air remaining after a normal exhalation**
   - c. Functional respiratory capacitor, the amount of air during a maximal inhalation

None of the above