

Name \_\_\_\_\_

## The Nose and Mouth: Your Breathing Buddies

### Open-Ended Response Answer Key

1. I would explain that breathing through the nose in cold and dry conditions helps filter out irritants, add moisture to the air to prevent irritation of the respiratory tract, and warm the air for smoother breathing. This reduces the risk of respiratory discomfort and infection.
2. The sense of smell and breathing are connected because the nose houses special cells responsible for detecting scents. These cells are part of the respiratory system and are positioned in the nasal passages. When you breathe, the air carrying scents passes over these cells, allowing you to smell and breathe through the same passages.
3. A real-life scenario could be running a marathon. During intense physical activity, the body requires more oxygen, so it naturally switches to mouth breathing to allow for faster and larger air intake. The body adapts by increasing the breathing rate and using the mouth to meet the oxygen demand.
4. Understanding the roles of the nose and mouth in breathing is crucial for maintaining respiratory health. Practical steps to keep the respiratory system healthy include practicing good hygiene, such as washing hands and avoiding touching the face to reduce the risk of respiratory infections, avoiding smoking and exposure to secondhand smoke, and maintaining overall good health through regular exercise and a balanced diet. Additionally, staying hydrated and managing allergies can also help maintain healthy breathing.

