

Name _____

Molecule Magic: How Shapes Matter in Chemistry

Open-Ended Response Questions

1. Imagine a molecule with three bonding pairs and one lone pair. Draw the molecule's shape and explain how the lone pair affects its overall structure.
2. Discuss a real-life scenario where understanding molecule shape is critical, such as in the development of a new drug or the study of environmental pollutants.
3. Investigate and explain the relationship between a molecule's shape and its physical properties, providing examples.
4. Consider a molecule with four bonding pairs and no lone pairs. Explain how the arrangement of atoms in this molecule influences its chemical reactivity compared to a molecule with a different shape.

