

Build A Fuzzy Molecule Challenge

Introduction

Use pipe cleaners and pom poms to make models of common molecules.

Molecules are combinations of **atoms** which share **electrons** to form **covalent chemical bonds**. The compounds formed have different properties than the atoms they are made from.

Materials

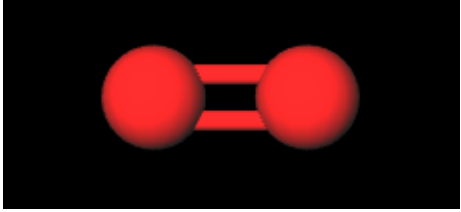
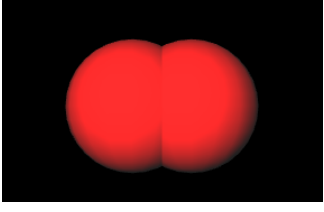
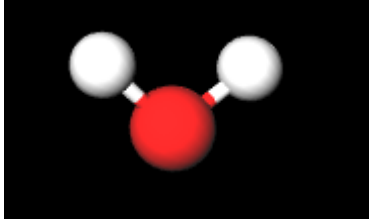
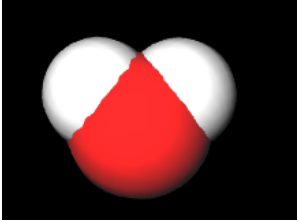
Pipecleaner and pom poms Amazon \$11.98

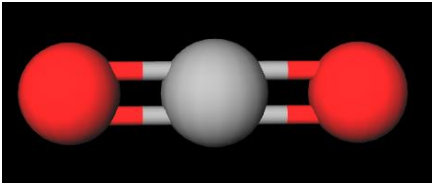
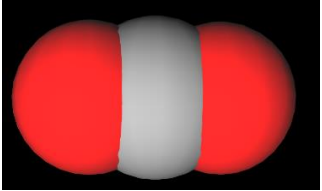
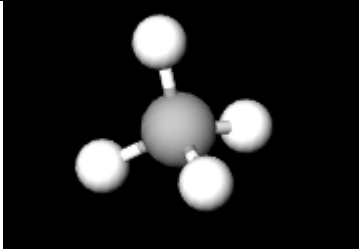
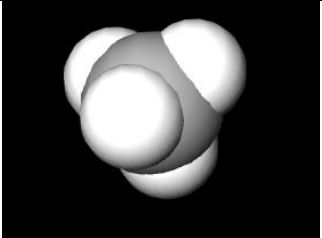
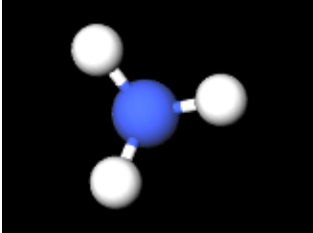

https://www.amazon.com/FEPITO-Cleaners-Including-Christmas-Decoration/dp/B07JNQL6BZ/ref=sr_1_3?dchild=1&keywords=pipes+cleaners+j+pom+pom&qid=1587506651&s=arts-crafts&sr=1-3-spell



Directions

- Balls represent **atoms**. In the diagrams below oxygen is red, hydrogen is white, carbon is gray, and nitrogen is blue.
- Colored Pom Poms are different kinds of atoms
- Pipe cleaners represent **bonds**
- Atoms have different numbers of **bonds** they can form
- Twist the pipe cleaners around the pom poms to make models of these molecules.
- Variation: use marshmallows and toothpicks to make your models.

Molecule	Formula	Ball and Stick View	Molecular View
Oxygen	O ₂		
Water	H ₂ O		

Carbon dioxide	CO ₂		
Methane	CH ₄		
Ammonia	NH ₃		
Graphite	C (n)	