

Atoms and Molecules

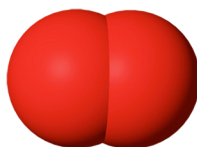
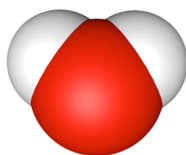
Side 1

DIRECTIONS: Build the 3 molecules as shown. Place them on their pictures.

LEGO Brick Models



Space-Filling Models



Atom Key

Carbon (C)



Oxygen (O)



Sulfur (S)



Fluorine (F)



Hydrogen (H)



Each LEGO® brick represents an atom. The key uses CPK standard chemistry colors.

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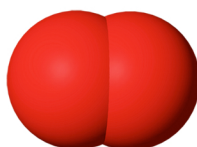
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Name That PFAS Molecule!

Side 2

DIRECTIONS: Use the numbered steps below to write the abbreviation for this PFAS molecule.

Write the abbreviation for the PFAS molecule at this station:

1 2 3

- 1 All these molecules have names that start with PF for perfluoro.
- 2 The next letter(s) is the number of carbons (black bricks). Count and choose one option:
10 = D decanoic/decane
9 = N nonanoic/nonane
8 = O octanoic/octane
7 = Hp heptanoic/heptane
6 = Hx hexanoic/hexane
- 3 The last letter is the kind of atoms in the “head.” Choose one option:
The last letter is A for acid if the oxygen atoms (red) are attached to a carbon atom (black)
The last letter is S for sulfonate if the oxygen atoms (red) are attached to a sulfur atom (yellow)

Now turn over the PFAS Layout Mat at this station to check your answer!

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