**Solutions Chem:**

**Shapes of Molecules (BEG): Quiz 3c**

/5

Answer the following:

1. CF4

|  |  |
| --- | --- |
|  | **Electron Dot (Lewis) Structure** |
| File:Methane-CRC-MW-3D-balls.png |  |

What is the geometry of this molecule? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Are the bonds Non-Polar, Polar, or Ionic? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Complete the table below:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Molecule | 3D Structure | Bonding Pairs | Lone Pairs on Central Atom | Shape (name) |
| SF6 |  |  |  |  |

Answers:

1. CF4

|  |  |
| --- | --- |
|  | **Electron Dot (Lewis) Structure** |
| File:Methane-CRC-MW-3D-balls.png |  |

What is the geometry of this molecule? tetrahedral



Are the bonds Non-Polar, Polar, or Ionic? En = 1.5 ; Polar

1. Complete the table below: (1/2 mark each)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Molecule | 3D Structure | Bonding Pairs | Lone Pairs on Central Atom | Shape (name) |
| SF6 |  | 6 | 0 | Octahedral |