**Solutions Chem:**

**Shapes of Molecules (BEG): Quiz 2a**

/5

Answer the following:

1. PBr3

|  |  |
| --- | --- |
|  | **Electron Dot (Lewis) Structure** |
| File:Phosphorus-tribromide-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) |
| CH4 |  |  |  |  |

Answers:

1. PBr3

|  |  |
| --- | --- |
|  | **Electron Dot (Lewis) Structure** |
| File:Phosphorus-tribromide-3D-balls.png |  |



What is the geometry of this molecule? trigonal pyramidal



Are the bonds Non-Polar, Polar, or Ionic? En = 0.7 ; Polar

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Molecule | 3D Structure | Bonding Pairs | Lone Pairs on Central Atom | Shape (name) |
| CH4 |  | 4 | 0 | Tetrahedral |

