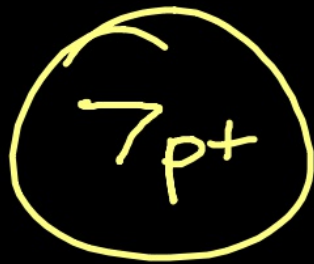


**Warm Up:**

**Give the Bohr atom and the ion formed for nitrogen, N.**



Bohr atom - not detailed enough :-)

Instead of circular orbits, electrons are in Orbitals which are also known as Clouds of probability.

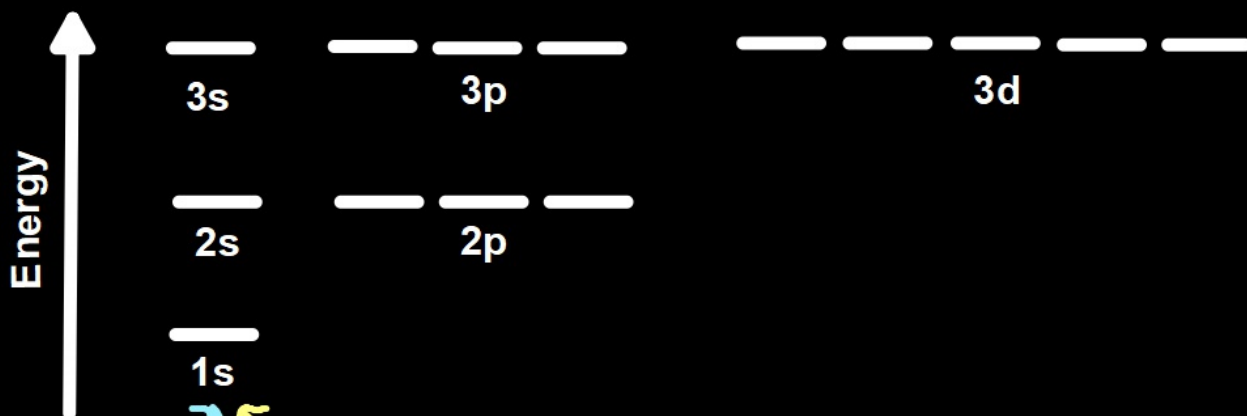
(Areas where the electron can be found.)

## Shapes of Orbitals

1. s (Holds 2 electrons): sphere
2. p (Holds 6 electrons): dumbbell
3. d (Holds 10 electrons)
4. f (Holds 14 electrons)

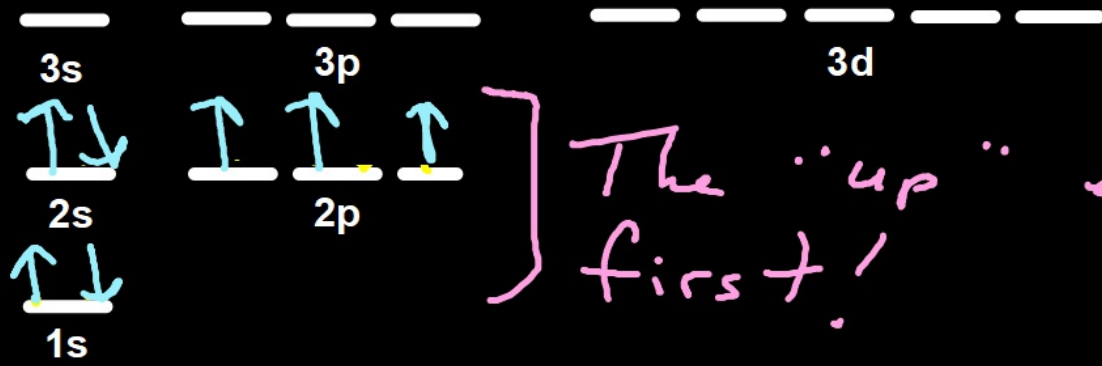
# Energy Diagram

Each dash holds 2 electrons,  
one ↑ and one ↓.



Lowest  
Energy

Always fills first!



The "up" electrons (:) first!

Nitrogen: 7 electrons

Give the electron configuration for:

O

Mg

Ar