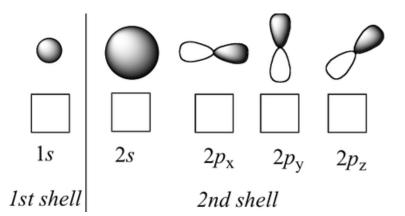
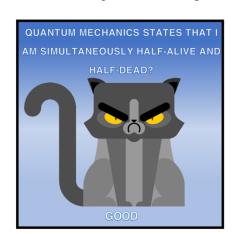
## **CONCEPT: WAVE FUNCTION**

Quantum Mechanics states that electrons behave both as particles and as \_\_\_\_\_\_.

- The Heisenberg Uncertainty Principle states that we cannot simultaneously know an electron's speed and \_\_\_\_\_\_
  - □ Equations called wave functions correspond to the energy state of a given electron \_\_\_\_\_
  - □ The relative probability of finding an electron can be derived from the wave function \_\_\_\_\_
  - □ The 3-D plot of the \_\_\_\_\_ is called an atomic \_\_\_\_\_: where the chance of finding electrons is **high**.





As with any type of wave, wave functions have the ability to \_\_\_\_\_\_ with each other upon meeting.

• This can occur either *constructively* or *destructively* 

