## Act 1

For a cubical box, we just saw that the  $5^{th}$  energy level is at 12 E<sub>0</sub>, with a degeneracy of 1 and quantum numbers (2,2,2).

- 1. What is the energy of the next energy level?

  - a. 13E<sub>0</sub> b. 14E<sub>0</sub> c. 15E<sub>0</sub>

- 2. What is the degeneracy of this energy level?
  - a. 2

- b. 4
- **c.** 6