**Tonicity Practice Problems – Answer Key**

1. B  
2. Iso, hypo, hyper  
3. B  
4. D  
5. B  
6. E

Diagram 1: equal, iso, both ways equally, stay the same size

Diagram 2: outside, hypotonic, inside the cell, swell --> lyse

Diagram 3: inside, hypertonic, out of the cell, shrivel

7. right side, hypertonic  
8. left side, hypotonic  
9. right  
10. water level shifted to the right side

11.

Diagram 1 Cell: 45% water - hypertonic, solution: 25% solute – hypotonic, arrow showing water entering

Diagram 2 Cell: 10% solute - hypotonic, solution: 63% water – hypertonic, arrow showing water exiting

Diagram 3 Cell: 50% water - isotonic, solution: 50% solute – isotonic, arrow showing equal amounts of water entering and exiting

12.

Diagram 1 flaccid, isotonic, equal arrows both ways

Diagram 2 turgid, hypotonic, water entering

Diagram 3 plasmolyzed, hypertonic, water exiting