Egg Osmosis Demo Name _____ Block _____ Date _____

Describe what happened to each egg's volume:

A. in the distilled water: _____

B. in the corn syrup: _____

Explain why this change happened by describing the direction of osmosis of water for each egg (into or out of the egg) and explaining why water is diffusing like this:

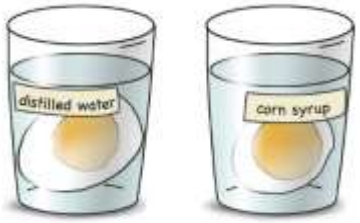
A. in the distilled water: _____

   a. Why? _____

B. in the corn syrup: _____

   a. Why? _____

In the diagrams below, label each solution surrounding each egg as *hypertonic*, *hypotonic,* or *isotonic*:



Egg Osmosis Demo Name _____ Block _____ Date _____

Describe what happened to each egg's volume:

C. in the distilled water: _____

D. in the corn syrup: _____

Explain why this change happened by describing the direction of osmosis of water for each egg (into or out of the egg) and explaining why water is diffusing like this:

C. in the distilled water: _____

   a. Why? _____

D. in the corn syrup: _____

   a. Why? _____

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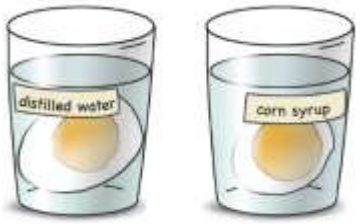

Sugar Cube Demo

Which “cell” has the larger surface area to volume ratio - the 1x1x1 cube, or the 2x2x2 cube?

Which “cell” dissolves faster (because diffusion happens faster)?

If these were real cells, which one would be more efficient at performing life processes and maintaining homeostasis?

How does changing the shape of the larger cell from 2x2x2 to 1x1x8 affect its surface area to volume ratio?

How does this affect the speed at which it diffuses (dissolves)?

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