

# Osmosis and Diffusion Review:

## Water Movement

1. Be able to calculate percent change given:

- Percent change = (After soaking measurement - Before soaking measurement / Before soaking) x 100

**% change in height** \_\_\_\_\_ **%**

\_\_\_\_\_ = ( \_\_\_\_\_ - \_\_\_\_\_ / \_\_\_\_\_ ) x 100

	Before	After
Height	5.25mm	15.2mm
Width	2.30mm	12.3mm
Mass	5.35g	15g

2. What effect, if any, does soaking a Gummy Bear in water have on the size of the candy?

Explain scientifically what happened: include in your answer – Osmosis, Passive, Diffusion, and Concentration Gradient

3. What is the difference between osmosis and diffusion?

4. Why did the man stranded on the desert island do the double dragon? (explain the process)

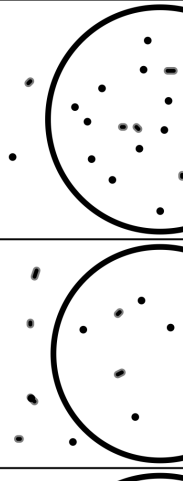
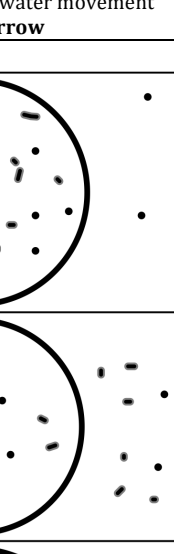

5. Give 2 examples of diffusion:

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6. What is the difference between passive and active transport and what do they have to do with the concentration gradient?

7. What is concentration gradient?

8. Be able to do the ISO, HYPER and HYPOTonic cell worksheet:

What the cell looks like - Add the direction of water movement with an <b>arrow</b>	Draw what the cell will look like	Name the solution on the outside of the cell
		
		
		

9. How do cells that take up water in a hypotonic environment not explode? (*hint think of the organelle we watched a video on*)

## Cells

10. Prokaryote vs Eukaryote – What is the difference?

Which came first? How do you know?

11. How are plant cells different than animal cells?

12. What is an organelle?

13. What is the function of each organelle

Organelle	Function
Cell Wall	
Nucleus	
Cytoplasm	
Ribosomes	
Mitochondria	What does the structure of mitochondria have to do with its function?
Chromosomes	
Lysosome	
Vacuoles	
Chloroplast	

14. What describe the structure and function of the cell membrane: (Include what it is made of)

## Cell Size

15. Why do cells stay so small? (Explain using the words: diffusion, Surface area, Volume, SA:V, Waste and Food)

## 7 Characteristics of Life

16. Review your old review sheet and quiz