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Tonicity and Osmosis Worksheet Biology 101
Mary Severinghaus
10 Extra Credit Points

Name:	
Section:	
Date Due: _	

Ising the key below and the information	n given, answer the questions.	
key:	Part I. Fill in the blanks:	
solute particle •	A is a	fluid in which a substance is dissolved.
cell membrane		substance dissolved in a solvent.
cell wall =====		combination of solute and solvent.
in all solutions, the solvent is H₂O		20 diffuses across a membrane is called
	. The process by which ri	20 annuals deliber a membrane is carred
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Part II. Look at the solutions illust	trated below and fill in the bla	ake
1. Solution B is to solution A. This is because solution B has a greater		
concentration of in it	than does solution A. Solution C	has no solutes dissolved in it, therefore it
is to both So	lutions A and B.	
As the relative concentration	n of solutes in two solutions incr	eases, of necessity the relative
concentration of water in the same to	vo solutions	Solution A has a lower concentration of
than does Solution C; Solu	tion A is also hypertonic to Solu	tion C.
If you wanted to make Solut	tion A isotonic to Solution B, you	ı could add water to Solution or you
could add solute to Solution If	you took all three solutions, put	them into a large container and mixed
them thoroughly, then redistributed t	the solution among the three con	tainers, Solution A would be
to Solution B. So	lution A would also be	to Solution C , and Solution C
would be to So		
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