		Date:	Period:
Surface Area to Volu			Week #:
Directions: Think abo	out the scenarios in questions 1-3	and predict the ar	nswer to eac <mark>h question.</mark>
	of ice cream and a scoop of ice c think will melt faster? Explain yo	our answer.	other on the kitchen counter.
vs.	9	4	
	f your drink quickly. Should you he drink? Explain your answer.	place one large ic	e cube in the drink, or many
vs.			
cake pan, you decid	nd follow the directions for make to make cupcakes. If you follo the result when the cupcakes co	w the cake directi	ons to bake for 45 minutes, what
John C			
would vs.			
	nnotate the passage below. Then		
Directions: Read and and are cells have microscopic taste. These processes ue to the fact that at so e cell membrane must	lives that involve growing, dives that involve growing, divergence influenced by surface are some point it would get too large to be great enough to provide numbers healthy. If the cell did not keep	answer the question iding, acquiring to to complete the strients to the organization.	ons below. nourishment, and excreting tionships. A cell has a size limite processes. The surface area of anelles within the cell's volume
Directions: Read and are cells have microscopic taste. These processes are to the fact that at some cell membrane must order to keep the cell schange materials and	lives that involve growing, dives that involve growing, divergence influenced by surface are some point it would get too large to be great enough to provide numbers healthy. If the cell did not keep	answer the question iding, acquiring to to complete these trients to the organization, it works	ons below. nourishment, and excreting tionships. A cell has a size limit to processes. The surface area of anelles within the cell's volume
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Directions: Read and are dells have microscopic faste. These processes ue to the fact that at so e cell membrane must order to keep the cell schange materials and (RST. 9-10.2.) What of the control of	lives that involve growing, divergence are influenced by surface are ome point it would get too large to be great enough to provide number healthy. If the cell did not keet the cell would die.	answer the question iding, acquiring to a to volume relate to complete these trients to the organ properties ratio, it would by their size?	nourishment, and excreting tionships. A cell has a size limit to processes. The surface area of anelles within the cell's volume ould soon be unable to efficient

Directions: Examine Figure 1 and Figure 2 to complete the calculations in Figure 3. Nontemain	Name:							
Newsurement Equation	Directions: Examine F	igure 1 a	and Figure 2 to 0	complete the calc	ulations in Fig	rure 3.	410	
Figure 1 Figure 1 Figure 1 Figure 2 Figure 3 6. What happened to the surface area as the size of the cube increased? The surface area to volume ratio as the size of the cube increased? Surface area to volume ratio as the size of the cube increased? Surface area to volume ratio as the size of the cube increased? Figure A represents the most efficient cell. Therefore, similar to Figure A, all cells need to have a surface area to volume ratio. According to the calculations, Cube A had a surface area to volume ratio of, which was greater than the larger cubes. The data shows that the larger the cube, the the surface area to volume ratio. There is a maximum possible cell size, above which, the needs of the cell exceeds its capabilities. Directions: Review your responses to questions 1-3. Explain why each of the following statements are new. You must include the phrase "surface area to volume ratio" in each response. The scoop of ice cream will melt faster than the gallon of ice cream.		Equation - L x W x (# of sides) - L x W x H		Α Ε		c and b		
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Figure Side Cem²) Cem²) Cem²) Cem²) Cem²) A B C D Figure 3 G. What happened to the surface area as the size of the cube increased?	Fi	gure 1						
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