Rule of 4 Link Sheet: Communicating what we know about: A Pattern of Cells Reproducing **INFORMATION TABLE** Some cells reproduce every 40 Time in # of Cells minutes at the rate shown in the minutes picture below. 40 80 2 cells at 8 cells at **GRAPH COMMUNICATE** A. Use your table or graph to determine how many cells would be present at 160 minutes. Explain/show how you determined your answer. B. Write an equation that can be used to represent the relationship between time (x) measured in minutes and number of cells present (y). (FCAT 2006 Florida Released Test Grade 10 Item 39)

Some cells reproduce every 40 minutes at the rate shown in the picture below.

2 cells at 0 minutes

8 cells at 40 minutes

32 cells at 80 minutes

How many cells would there be at 160 minutes?

	\bigcirc	\bigcirc	\bigcirc	
\odot	\odot	\odot	\odot	\odot
0	0	0	0	0
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
(5)	(5)	(5)	(5)	(5)
6	6	6	6	6
7	7	7	7	7
8	8	8	8	(8)
9	9	(9)	(9)	(9)