

DATE:

NAME:

CLASS:

CHAPTER 5**From One Cell to Many Cells****BLM 2-10**

Goal • Use this chart to help you complete Find Out Activity 5-1A, From One Cell to Many Cells.

What to Do

Calculate how many skin cells will result from just 1 cell that continually divides during a period of 30 days.

Day	Number of Cells	Day	Number of Cells	Day	Number of Cells
1		11		21	
2		12		22	
3		13		23	
4		14		24	
5		15		25	
6		16		26	
7		17		27	
8		18		28	
9		19		29	
10		20		30	

Assume that the cells divide once a day. Calculate how many cells will result in 30d, if the cells do not stop dividing at any time during the 30d period.

A mass of cells would become just visible to the eye at about 1 mm in width, which is about 250 000 cells. Calculate approximately on which day the cells would be visible.

1. On which day would the cell mass be visible? Explain.
2. If scientists can detect a tumour when it is about 1 cm in width, how many days would the cells have to divide for the tumour to reach this size?
3. What do you think would happen if all cells in the human body continually divided without stopping?
4. Look at the pattern in the number you entered in the chart. How could you quickly calculate the number of cells that would be present after a particular number of days had passed?