LAB: As Time Goes By

Last Name _____, First_____ Per ___

Question*: How can you make a model of geologic time?*

Materials

Worksheet with 2000 asterisks, calculator
One ream of paper (teacher will demo)

Procedure

Part 1 Table A

1. Examine Table A on the next page. On a separate sheet of paper, figure how long ago these historic events happened and write the answers in the columns on Table A.

2. Obtain a worksheet with 2,000 asterisks printed on it. Each asterisks represents one year. The first asterisks at the top represents one year ago.

3. Starting from the asterisks, highlight or circle the asterisks that represents how many years ago each event in Table A occurred.

4. **Label each circled asterisks to indicate the event.**

5. Obtain a ream of copy paper. There are 500 sheets in a ream. If each sheet had 2,000 asterisks on it, there would be a total of 1 million asterisks. Therefore, each ream would represent 1 million years.

Part 2 Table B

6. Examine Table B on the next page. Determine how much paper in reams or sheets would be needed to represent the events in geologic time found in Table B. (*Hint:* Recall that each ream represents 1 million years.)

7. Measure the thickness ream of the paper. Use the thickness to calculate how thick a stack of paper would need to be to represent how long ago each geologic event occurred. (*Hint:* Use this thickness of the ream of paper by the number of reams.) Enter your results in Table B.

Lab: As Time Goes By *(continued)*

Table A: Historic Events		
Event	**Date**	**# of Years Ago**
You are born		
One of your parents is born		
First space shuttle sent into space	1981	
Neil Armstrong first walk on the moon	1969	
WWII ends	1918	
Civil War ends	1865	
Declaration of Independence is signed	1776	
Columbus Crosses Atlantic Ocean	1492	
Leif Erickson Visits North America	1000	

Table B: Geologic Events			
Event	**# of Years Ago**	**Reams of Sheets of Paper**	**Height of paper stack**
Last ice age	10,000		
Whales Evolve	50 million		
Pangaea begins to break up	225 million		
First vertebrates develop	530 million		
Multicellular organisms (algae) develop	1 billion		
Single-celled organisms develop	3.5 billion		
Oldest known rocks form	4 billion		
Earth forms	4.6 billion		

LAB :As Time Goes By *continued*

Last Name _____, First _____ per ___

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