

## Absolute Dating Activity - Geology 12

An actual date is given to an event. See pages 84 – 88. Geologists have found that a natural process occurs at a constant rate and accumulates its own record: It is the radioactive decay of elements that are present in many rocks.

Isotopes are: \_\_\_\_\_

Examples:

The following activity illustrates how an element decays over time.

- Use 80 M & M's to complete the data table below.
- An "M" facing up is "stable;" an "M" facing down is still radioactive.
- Graph the class results

Toss (Represents number of half lives)	Number of radioactive nuclei remaining after toss	Prediction of radioactive nuclei before next toss	Class results	
			Unstable Parent	Stable Daughter
0				
1				
2				
3				
4				
5				
6				
7				

Questions:

- 1) Read page 85, explain half life. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- 2) On your graph draw the stable daughter curve.
- 3) How closely does the class average data represent a typical decay curve (see page 86) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- 4) What is radiometric dating? \_\_\_\_\_  
\_\_\_\_\_  
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