

CHANGING TIDES

Earth Science

NAME _____
DATE _____ HR _____

Analysis: *TIDE RANGE is the difference between the high tide and low tide on any given day.*

1. According to the graph, the largest tide range occurred on September _____. Show your calculation →
This **large** tide difference is caused by a (circle one): SPRING TIDE NEAP TIDE

What 2 possible phases could the Moon have been in around this tide? _____ or _____

2. The smallest tide range occurred on September _____. Show your calculation →
This small tide difference is caused by a (circle one): SPRING TIDE NEAP TIDE

What 2 possible phases could the Moon have been in around this tide? _____ or _____

3. Using your answers above, approximately how many days pass between one spring tide and one neap tide? _____
4. On the days between spring and neap tides, _____ high and low tides are observed.
5. Study the Moon phase chart from the Detroit Free Press. Fill in the type of tide expected at each date.



Mar 19	Mar 25	Apr 2	Apr 10

March 19th = _____ March 25th = _____
 April 2nd = _____ April 10th = _____

<http://freep.weather.gannettonline.com/apps/pbcs.dll/section?Category=WEATHER01&City=Detroit&State=MI>

6. According to the moon phase chart, the days of March 20th – 24th will have high tides getting (higher, lower) and the low tides getting (higher, lower), resulting in a (larger, smaller) tide range.

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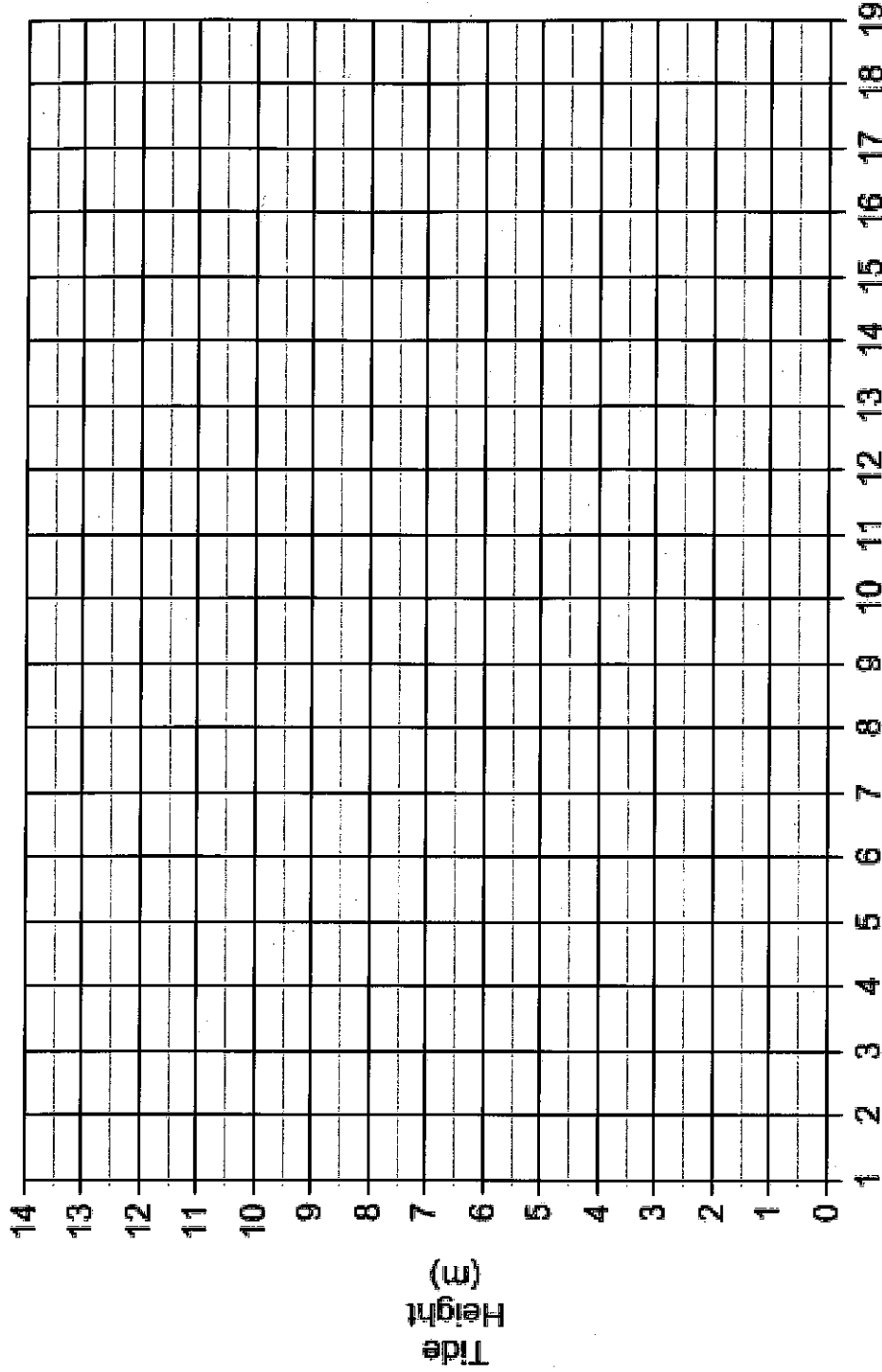
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Instructions: Plot data set #1 in one color/pattern on the graph, and then data set #2 in a different color/pattern. Afterwards, answer the analysis questions on the back.

Bay Of Fundy, Canada (Sept 2010)

Date	Set #1 (m)	Set #2 (m)
9/1	3.0	11.3
9/2	3.2	11.2
9/3	3.1	11.3
9/4	2.8	11.7
9/5	2.2	12.2
9/6	1.5	12.2
9/7	0.8	12.9
9/8	0.3	13.4
9/9	0.1	13.8
9/10	0.0	14.0
9/11	0.0	13.9
9/12	0.3	13.6
9/13	0.8	13.0
9/14	1.5	12.4
9/15	2.2	11.7
9/16	2.7	11.2
9/17	3.1	10.9
9/18	3.1	10.9
9/19	2.9	11.1

Tide Heights at Bay of Fundy, Canada (Sept 2010)



Key (Color):
 Set #1 =
 Set #2 =