| Name: | Class:   | Date: |
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## H.W. - Unit 4 Study Guide

Study Guide is due Tuesday, February 2<sup>nd</sup>. You must visit <u>www.MrAscience.com</u> to answer most of the questions!

## **Topics:**

1. Gravity

3. Tides

5. Eclipses

7. Book for Columbus

2. Sun, Earth, Moon

4. Moon Phases

6. Lunar Craters

| January 4:                    | January 5:                               | January 6:                           | January 7:                   | January 8:                    |
|-------------------------------|--|--------------------------------------|------------------------------|-------------------------------|
| Gravity Notes                 | Gravity Drop Lab<br>Day #1               | Gravity Drop Lab<br>Day #2           | Sun, Earth,<br>Moon Models   | Astronomy Myths               |
| H.W. None                     | H.W. Finish Post-Lab                     | H.W. Finish Post-Lab                 | H.W. None                    | H.W. None                     |
| January 11:                   | January 12:                              | January 13:                          | January 14:                  | January 15:                   |
| Tides                         | Moon Phases                              | Eclipses                             | Spring and<br>Neap Tides     | Letters<br>to the Past        |
| H.W. None                     | H.W. None                                | H.W. Skywatch                        | H.W. None                    | H.W. Checkpoint Quiz          |
| January 13:                   | January 19:                              | January 20:                          | January 21:                  | January 22:                   |
| MLK Day                       | Review Carousel<br>(Miss D + E - Chorus) | Crater Debate:<br>Reading Paraphrase | Crater Debate:<br>Design Lab | Crater Debate:<br>Perform Lab |
|                               | H.W. None                                | H.W. None                            | H.W. None                    | H.W. None                     |
| January 25:                   | January 26:                              | January 27:                          | January 28:                  | January 29:                   |
| Crater Debate:<br>Perform Lab | A Book for<br>Columbus                   | A Book for<br>Columbus               | A Book for<br>Columbus       | B.F.C. Quiz                   |
| H.W. Finish Lab Report        | H.W. None                                | H.W. None                            | H.W. Finish Books            | H.W. Study Guide (due 2/2)    |
| February 1:                   | February 2:                              |                                      |                              |                               |
| Review Day                    | Unit 4 Test                              |                                      |                              |                               |
| H.W. Finish Study Guide       | H.W. None                                | 41                                   |                              |                               |

## Day-by-Day Recap:

Go to www.MrAscience.com and visit the entry for each day. After reading it, answer the questions to the right.

| January 4 <sup>th</sup> :<br>Gravity Notes            | Rank the six planets on Erica's worksheet in order from having the <b>most gravity</b> to having the <b>least gravity</b> .   |
|---|---|
| <u>January 5<sup>th</sup>:</u><br>Gravity Drop Day #1 | On the first day of the Gravity Drop lab, how was the fall of the metal marble different from that of the plastic marble?   |
| <u>January 6<sup>th</sup>:</u><br>Gravity Drop Day #2 | On Day 2 of the Gravity Drop lab, we graphed Top Speed vs. Time of Fall. What was the slope of the line supposed to be?  Why didn't our results come out perfectly? |
| January 7 <sup>th</sup> : Sun, Earth, Moon Models     | "But the true scale of our solar system defies common wisdom.  In reality, if the sun were shrunk to the size of a softball"  |
| <u>January 8<sup>th</sup>:</u><br>Astronomy Myths     | Of the nine myths, which one was your favorite?   |

| <u>January 11<sup>th</sup>:</u><br>Tides          | In the fancy animation that Mr. A spent way too much time making, Massachusetts appears to have high tides when           |
|---|---|
| <u>January 12<sup>th</sup>:</u><br>Moon Phases    | Rewatch the video posted on the website. Name the three members of Orange Cluster who can be seen/heard during the video. |
| <u>January 13<sup>th</sup>:</u><br>Eclipses       | Watch the NASA video on eclipses. What type of eclipse was visible on August 11 <sup>th</sup> , 1999?                     |
| January 14 <sup>th</sup> :<br>Spring & Neap Tides | According to Mr. A's animation, what are the definitions of spring tides and neap tides?                                  |
| January 15 <sup>th</sup> : Letters to the Past    | Go back to your favorite myth (from Jan. 8 <sup>th</sup> ) and explain why that myth is incorrect.                        |

| <u>January 19<sup>th</sup>:</u><br>Review Carousel                  | Click on the PDF link and review the eight Review Carousel questions.  |
|---|--|
| January 20 <sup>th</sup> : The Crater Debate                        | Summarize Dr. Green and Dr. Shoemaker's theories.  |
| January 21-23 <sup>rd</sup> :<br>Design Your Own<br>Craters Lab     | Summarize the conclusions you and your partner made after you finished your Craters Lab.                                       |
| January 26 <sup>th</sup> -29 <sup>th</sup> :<br>A Book for Columbus | Go back through your B.F.C. Quiz (Page 416) and do a quick Take-5 below. Correct any of the first five questions you got wrong |
| <u>February</u> 1 <sup>st</sup> :<br>Review Day                     | Of the seven topics listed on the front page, which one do you need to study the most tonight?                                 |