

SNOW DAY ASSIGNMENTS

WINTER 2016

6th Grade Science

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NOTE: Make sure your name is on all work and the day of the work(snowday 1, snowday 2, snowday 3, etc.). Each day of work will count 10 points toward the final grade of 100. All assignments can be found on my website page on the school web site.

OVERVIEW:

The snow day work will consist of two(2) main parts. PART I will relate to work completed just before the beginning of Christmas break. It is related to the unit about Atoms, Elements, & the Periodic Table. PART II will relate to topics covered in January about Forces, Motion, and their Interactions.

PART I:

Standards Addressed:

1. MS-PS1-1: Develop models to describe the atomic composition of simple molecules and extended structures.
2. WHST.6-8.8: Gather relevant information from sources and use the information effectively.

Day 1:

1. Study the requirements for the activity: "Adopt-An-Element".
2. Begin work on the "Fact Sheet" using the information from either of your Element Information Sheets.

Day 2:

1. Complete the "Fact Sheet" for your element.
2. Study the rubric for grading "Adopt-An-Element".
3. Begin creating an advertisement for your chosen element.

Day 3:

Complete the advertisement for your element, based on the rubric for scoring.

PART II:

Standards Addressed:

1. MS-PS2-1: Apply Newton's 3rd Law of Motion to design a solution to a problem involving the motion of two colliding objects.
2. RST.6-8.1: Cite specific textual evidence to support analysis of science and technical texts.

Day 4:

1. Read the material on "Work and Simple Machines".
2. Answer questions 1-7 found in the margins on each page.

Day 5:

1. Complete the exercise classifying all the parts of a bicycle into six simple machines.
2. Draw a series of illustrations to show how work, in the scientific sense, is done by each of the six simple machines.

Day 6:

1. Explain how a bicycle illustrates each of the following scientific principles: application of force, friction acting against motion, acceleration, velocity, and transfer of energy.
2. Complete a list of safety rules that you think could prevent bicycle injuries.
3. Do you think that a bicycle rider should be required to pass an operator's test? Summarize your ideas in a one/half page report.

Day 7:

1. List as many different examples of simple machines as you can think of that are found in the home.
2. Classify each of these items from your list according to one of the six types of simple machines that it best represents: **lever, inclined plane, wedge, screw, wheel, and pulley.**
3. Determine which simple machine is most like you and give reasons for your choice.

Day 8:

1. Write a short story using one the following titles:
 - a. The Livesaving Machine
 - b. Finding the World's Largest Incline Plane
 - c. A Machine that Raced against Time
 - d. The Bully Pulley
 - e. Reinventing the Wheel
 - f. The Wedge That Came Between Us
2. Pretend that you are the manager of a complaint department in either a machine shop, an appliance store, or an automobile plant. Make a list of complaints you might receive from your customers and a possible resolution for each one.

Day 9: PRODUCT

Design a pamphlet and write a complete commercial for a bicycle shop.

Day 10: ASSESSMENT

1. Complete the Review Questions for "After You Read".
2. Complete Tasks One, Two, and Three, about "The Sport of Cycling"