

8th Grade Assignment Sheet

Date: 5/10/13

POD A

Communications

Book

Yes

No

Donahy:

Seat, Edit, wk. 15
Seat 15

read "Always to Remember"
p. 316-322 & do
Voc. W4

History

Book

Yes

No

Hook:

- Review Thunder Rolling in the Mountains
• AR test Monday
- Study for Ch 19 test on Monday -
use chpt. worksheets

Mathematics

Book

Yes

No

Meek:

Algebra 1

Finish Quiz / Review

Pre-Algebra

Finish Quiz / Review

Science

Book

Yes

No

Most:

Read Sec 16.2.
Sec. 16.2 WS

Chapter 16 Thermal Energy and Heat

Section 16.2 Heat and Thermodynamics

(pages 479–483)

This section discusses three kinds of thermal energy transfer and introduces the first, second, and third laws of thermodynamics.

Reading Strategy (page 479)

Build Vocabulary As you read this section, add definitions and examples to complete the table. For more information on this Reading Strategy, see the **Reading and Study Skills** in the **Skills and Reference Handbook** at the end of your textbook.

Transfer of Thermal Energy	
Definitions	Examples
Conduction: transfer of thermal energy with no net transfer of matter	Frying pan handle heats up
Convection:	
Radiation:	

Conduction (pages 479–480)

- The transfer of thermal energy with no overall transfer of matter is called _____.
- Why is conduction slower in gases than in liquids and solids? _____

- Is the following sentence true or false? Conduction is faster in metals than in other solids because metals have free electrons that transfer thermal energy. _____
- Circle the letter of each sentence that is true about conduction.
 - Thermal energy is transferred without transfer of matter.
 - Matter is transferred great distances during conduction.
 - Conduction can occur between materials that are not touching.
 - In most solids, conduction takes place as particles vibrate in place.
- Complete the table about conduction.

Conduction		
Type of Material	Quality of Conduction	Two Examples
	Conducts thermal energy well	Copper;
Thermal insulator		Wood;

Chapter 16 Thermal Energy and Heat

Convection (pages 480–481)

6. The transfer of thermal energy when particles of a fluid move from one place to another is called _____.
7. Why is temperature higher at the bottom of an oven? _____

8. When a fluid circulates in a loop as it alternately heats up and cools down, a(n) _____ occurs.
9. Give three examples of convection currents in nature. _____

Radiation (page 481)

10. The transfer of energy by waves moving through space is called _____.
11. Circle the letter of each sentence that is true about radiation.
 - a. Energy is transferred by waves.
 - b. All objects radiate energy.
 - c. The amount of energy radiated from an object decreases as its temperature increases.
 - d. The farther away you are from a radiating object, the less radiation you receive.

Thermodynamics (pages 482–483)

12. Thermodynamics is the study of conversions between _____ and other forms of energy.
13. Is the following sentence true or false? Energy cannot be created or destroyed, but it can be converted into different forms.

14. Thermal energy flows spontaneously from _____ objects to _____ ones.
15. According to the second law of thermodynamics, what must happen for thermal energy to flow from a colder object to a hotter object? _____

16. Thermal energy that is not converted into work is called _____.
17. Is the following sentence true or false? Scientists have created a heat engine with 100 percent efficiency by reducing the temperature of the outside environment to absolute zero.

18. Is the following sentence true or false? Matter can be cooled to absolute zero. _____

“Always to Remember: The Vision of Maya Ying Lin” by Brent Ashabrunner

Build Vocabulary

Using Foreign Plural Forms

Some nouns that come to English from Latin and Greek form their plurals as they did in their original languages. For example, those that end in *-on* or *-um* sometimes form their plurals by changing the *-on* or *-um* to an *-a*: *criterion*—*criteria*. Those that end in *-is* often form their plurals by changing the *i* to an *e*: *parenthesis*—*parentheses*. Those that end in *-us* sometimes form their plurals by changing the *-us* to an *i*: *stimulus*—*stimuli*.

A. DIRECTIONS: Complete each sentence by writing the plural of the word in parentheses. If necessary, check a dictionary to see if your answers are correct.

1. (alumnus) Three _____ of our local high school are in the TV news business.
2. (medium) Many people feel the news _____ have grown very irresponsible.
3. (crisis) The news shows prefer to cover crimes, scandals, and _____.
4. (datum) Reporters sometimes seem to draw conclusions with very little _____.

Using the Word Bank

criteria	registrants	anonymously	harmonious
eloquent	unanimous	prominent	conception

B. DIRECTIONS: On the lines provided, fill in the word from the Word Bank that is being defined. Use each word only once. When you are done, the letters in the shaded boxes, reading down, will spell out a famous artist.

1. standing out _____
2. standards _____
3. with one's name unknown to others _____
4. people who sign up _____
5. expressive _____
6. everybody in complete agreement _____
7. combined in a pleasant or tuneful manner _____

Artist: _____

C. DIRECTIONS: Complete each sentence with the most appropriate word from the word bank.

1. What _____ did the teacher use in grading the term papers?
2. New _____ must sign up on the day before school starts.
3. The _____ of the speech was based on his early childhood.
4. Opinion was _____; everyone agreed to the suggestion.