

## Assignment

Name \_\_\_\_\_

Date \_\_\_\_\_ Period \_\_\_\_\_

**Find the missing length of each right triangle to the nearest tenth.**

1)  $a = 3$ ,  $b = 3.6$ ,  $c = ?$

2)  $a = 11.4$ ,  $b = 7.5$ ,  $c = ?$

3)  $a = 4.5$ ,  $b = 1.9$ ,  $c = ?$

4)  $a = ?$ ,  $b = 4.2$ ,  $c = 5.3$

5)  $a = ?$ ,  $b = 3.9$ ,  $c = 12.8$

6)  $a = ?$ ,  $b = 2.5$ ,  $c = 2.8$

7)  $a = 3.9$ ,  $b = 10.9$ ,  $c = ?$

8)  $a = ?$ ,  $b = 4.2$ ,  $c = 8.3$

**Do the following lengths form a right triangle?**

9)  $a = 5$ ,  $b = 12$ ,  $c = 13$

10)  $a = 6$ ,  $b = 8$ ,  $c = 9$

11)  $a = 3$ ,  $b = 4$ ,  $c = 5$

12)  $a = 6$ ,  $b = 8$ ,  $c = 10$

**Find the volume of each figure. Round to the nearest tenth.**

13) A cone with radius 4 m and a height of 10 m.

14) A sphere with a radius of 4 ft.

15) A cone with diameter 4 ft and a height of 4 ft.

16) A cylinder with a radius of 9 in and a height of 12 in.

17) A sphere with a radius of 7 in.

18) A sphere with a diameter of 1.2 cm.

19) A cylinder with a radius of 12 km and a height of 8 km.

20) A cylinder with a diameter of 24 m and a height of 11 m.

Name:

Date:

**WORD STUDY** ▶ **LATIN PREFIX: SUB-**

The Latin prefix *sub-* means “under” or “beneath.” For instance, the word *subtract* means “to take away.” It comes from the Latin *sub-*, meaning “from below,” and *trahere*, meaning “to draw.”

- A. DIRECTIONS:** Each word below contains the prefix *sub-*. Choose the word that best fits in each sentence, and write it on the line.

suburb    subversive    submarine    subway    subsist    substandard

- The buses stopped running due to the blizzard, forcing us to take the \_\_\_\_\_ instead.
- My performance on the exam was \_\_\_\_\_, so I opted to retake it in hopes of getting a better score.
- I decided to move to a \_\_\_\_\_ when my rent in the city was tripled.
- The protesters were arrested on the grounds of providing \_\_\_\_\_ pamphlets against the government.
- The \_\_\_\_\_ moved slowly beneath the surface of the water, invisible to the world above the sea.
- Tyree vowed that he could \_\_\_\_\_ on pizza and cake alone; we thought that a rather silly notion.

- B. DIRECTIONS:** Reread the sentences in Part A. Then, match each word with its definition by writing the correct letter on the line.

- |                      |  |
|----------------------|--|
| 1. _____ suburb      | <b>A.</b> an outlying district of a city                               |
| 2. _____ subversive  | <b>B.</b> to feed, nourish, or sustain oneself                         |
| 3. _____ submarine   | <b>C.</b> seeking to undermine the power of an established institution |
| 4. _____ subway      | <b>D.</b> an underground electric railway                              |
| 5. _____ subsist     | <b>E.</b> a vessel designed to operate underwater                      |
| 6. _____ substandard | <b>F.</b> below the usual standard                                     |

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**WORD STUDY** → **LATIN PREFIX: *SUB-***

**A. DIRECTIONS:** Use each word with the Latin prefix *sub-* in a complete sentence that demonstrates its meaning. Consult a dictionary, if necessary.

1. subjugation

\_\_\_\_\_

2. subordinate

\_\_\_\_\_

3. subterranean

\_\_\_\_\_

4. subside

\_\_\_\_\_

**B. WORD STUDY:** Below, write four more examples of words with the Latin prefix *sub-*, provide a brief definition, and then use each in a sentence.

1. Word: \_\_\_\_\_ Definition: \_\_\_\_\_

Sentence: \_\_\_\_\_

2. Word: \_\_\_\_\_ Definition: \_\_\_\_\_

Sentence: \_\_\_\_\_

3. Word: \_\_\_\_\_ Definition: \_\_\_\_\_

Sentence: \_\_\_\_\_

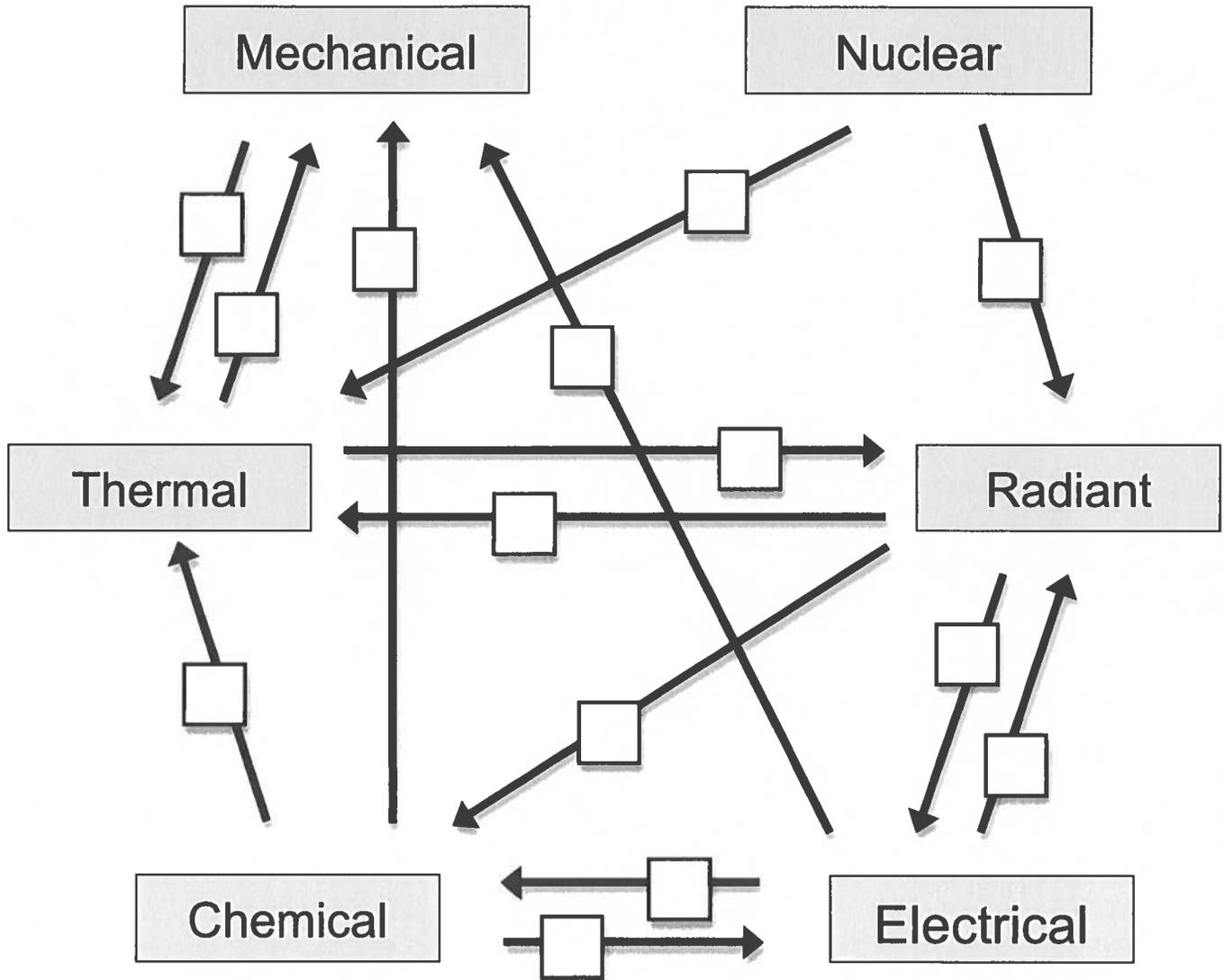
4. Word: \_\_\_\_\_ Definition: \_\_\_\_\_

Sentence: \_\_\_\_\_

Name: \_\_\_\_\_

### Student Assessment Page

Label the boxes in the diagram using the choices from the table below. There can only be one answer per box and you can only use each letter once.



|                   |                   |               |                     |
|-------------------|-------------------|---------------|---------------------|
| A. Fire           | B. Photosynthesis | C. Battery    | D. Steam/gas engine |
| E. Friction       | F. Burning coal   | G. Lightening | H. Battery charger  |
| I. Solar cooker   | J. Sun            | K. Fission    | L. Solar panel      |
| M. Moving muscles | N. Motor          |               |                     |

## Assignment on the Mayan Civilization

The Mayan civilization was one of the most advanced ancient societies of Mesoamerica, flourishing from around 2000 BCE to the 16th century CE. Known for their remarkable achievements in writing, mathematics, astronomy, and architecture, the Maya developed complex city-states throughout present-day Mexico, Guatemala, Belize, Honduras, and El Salvador. Their hieroglyphic writing system is considered one of the most sophisticated in the ancient world, and their calendar was astonishingly accurate. The Maya built impressive step pyramids, palaces, and ceremonial centers. Despite their accomplishments, the civilization experienced a mysterious decline, with many major cities abandoned by the 10th century.

### Fill in the Blank

Fill in the blank with the correct words:

1. The Mayan civilization was known for its advanced system of \_\_\_\_\_, which included over 800 different symbols.
2. The Maya developed a highly accurate \_\_\_\_\_ that could predict solar and lunar eclipses.
3. Mayan cities, such as Tikal and Chichen Itza, were often built around large \_\_\_\_\_ where important ceremonies took place.
4. The region where the Maya lived is now part of countries like Mexico and \_\_\_\_\_.
5. After the decline of their major cities, many Maya continued to live in smaller \_\_\_\_\_ and maintain their traditions.

**Word bank:** Guatemala, calendar, hieroglyphs, villages, plazas

### Short Answer

1. Discuss the importance of an ancient society's ability to write things down.
  
  
  
  
  
  
  
  
  
  
2. Discuss one possible cause for the decline of the major Mayan cities and support your answer with evidence.