

6th Grade Math Lesson Plans

Harrison East Elementary School

Day 2

Print and complete "Exponents Worksheet" and bring it to class
ALONG with the additional "Factoring Worksheet".

Exponents Worksheet

Directions: Convert exponents to real numbers.

1. $86^4 =$ _____

2. $82^1 =$ _____

3. $88^5 =$ _____

4. $7^3 =$ _____

5. $91^1 =$ _____

6. $55^2 =$ _____

7. $96^3 =$ _____

8. $5^4 =$ _____

9. $30^2 =$ _____

10. $58^4 =$ _____

11. $91^1 =$ _____

12. $48^3 =$ _____

13. $88^5 =$ _____

14. $67^2 =$ _____

15. $23^3 =$ _____

16. $76^2 =$ _____

17. $74^4 =$ _____

18. $19^4 =$ _____

19. $26^1 =$ _____

20. $29^3 =$ _____

Factoring Worksheet 2

Factor the following numbers to their prime factors

1a. 27

1b. 35

2a. 135

2b. 21

3a. 15

3b. 120

4a. 134

4b. 50

5a. 171

5b. 174

6a. 191

6b. 124

Answer Key

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Ms. Van Camp's Lessons for Calamity Day #2

Coal Project Part 1

Students will research the importance of coal as a natural resource. How is coal formed? What is it made of? Is coal a renewable resource or non-renewable? What is coal used for? Is coal looked at as a positive or negative aspect to our communities? Explain your reasoning in detail and state facts from three different resources. What does it take to mine coal? What machinery and technology was used in the past and how has it changed throughout the years?

Interview a coal miner about his job responsibilities, training or classes or tests that have to be taken before they are certified to be a coal miner, safety precautions, hazards to the job, rewarding experiences, how far underground do they dig for coal, where's the deepest mine and how far down did it go? How did they feel the first time going underground? What time do they go to work? How long are their shifts? Which mine company do they work for? What are a miner's wages? Any health problems from working underground? If so, what are they?

6th GRADE LANGUAGE ARTS

DAY TWO BLIZZARD BAG

* IF YOU CANNOT PRINT,
PLEASE JUST WRITE YOUR
ANSWERS ON A SHEET OF
PAPER.

Lesson 3.8 Homophones: *overseas/oversees, ring/wring, cent/scent/sent*

Homophones are words that sound the same but have different spellings and different meanings.

overseas - abroad or beyond the sea

oversees - supervises

ring - a circular band; the sound of a bell

wring - squeeze

cent - one penny

scent - odor

sent - past tense of send

If you are unsure about which homophone to use, look up the meanings in a dictionary.

Match It

Fill in the blanks in the sentences in Column A with a homophone from Column B.

Column A

1. I bid one _____ more and won the item.
2. Deb has a beautiful _____ on her finger.
3. The sailor was stationed _____.
4. The flowers have a beautiful _____.
5. _____ out the dish cloth over the sink.
6. Mr. Morgan _____ metal production.
7. David _____ the envelope yesterday.

Column B

- | | |
|--|----------|
| | overseas |
| | oversees |
| | ring |
| | wring |
| | cent |
| | scent |
| | sent |
-
8. My oldest dog _____ feeding time for all of my pets.
 9. I would like to travel _____ for a semester.
 10. It was raining so hard I had to _____ out my shirt.
 11. Did I hear someone _____ the doorbell?
 12. The letter was _____ to the wrong address.
 13. The item costs three dollars and one _____.
 14. The perfume has a strong _____.

Moving Mountains

Where are most of the world's volcanoes located?

¹ Have you ever heard of the *Ring of Fire*? It might sound like something straight out of science fiction, but it is a real place. The Ring of Fire is the name used by scientists to describe an area where frequent volcanic eruptions and earthquakes take place. In fact, about 75 percent of the world's 1,900 active and dormant, or inactive, volcanoes are located there.

² In some parts of the world, giant pieces of Earth's crust, called *plates*, are constantly in motion. They collide and slowly slide over, under, and past one another. The Ring of Fire is located at the juncture of the Pacific plate with several other plates. The Ring of Fire is an arc-shaped region that runs along the coast of North and South America, along the eastern edge of Asia, across Alaska's Aleutian Islands, and along the coast of New Zealand in the South Pacific.

³ Sometimes, plates move past one another without creating much of a disturbance. Other times, when two plates collide, an earthquake occurs. This is exactly what happens at the well-known San Andreas Fault in California, and it is why earthquakes are so common in that part of the country.

⁴ Even though the plates move relatively slowly, at about the same rate that human fingernails grow, the friction they create as they slide into one another produces a great deal of energy. The heat from inside Earth is strong enough to melt rock and turn it into magma, or molten rock. Eventually, the magma rises because it is lighter, or less dense, than the rocky material that surrounds it. When it reaches the surface, it becomes known as lava and forms volcanoes.

⁵ The presence of dissolved gases in the magma determines whether or not the eruption will be explosive. Picture a bottle of soda that has been shaken. When the bottle is opened, the gases cause the liquid to explode from the bottle



with force. In the same way, volcanoes that have a high concentration of gases will also explode with greater force.

⁶ Although most people view volcanoes as enormous and potentially dangerous mountains, scientists see them as temporary structures on earth's surface. They may not change much over the course of a lifetime, or even several lifetimes. Still, scientists know that over time volcanoes will move and shift, rise and fall with the movement of Earth's plates.

Vocabulary Skills

Write the words from the passage that have the meanings below.

1. fiction in which an element of science plays an important role; it often takes place in the future

_____ Par. 1

2. without stopping; all the time

_____ Par. 2

3. to crash or strike together

_____ Par. 2

4. the place where two things come together

_____ Par. 2

5. the rubbing together of two objects or surfaces

_____ Par. 4

6. heavy; having the parts packed tightly together

_____ Par. 4

Read each pair of words listed below. If the words are synonyms, write **S** on the line. If the words are antonyms, write **A** on the line.

7. _____ frequent uncommon
 8. _____ huge enormous
 9. _____ strong powerful
 10. _____ rise fall

Words that have a single middle consonant are usually divided into syllables before the consonant. For example, *e/vil* or *o/pen*. Divide the words below into syllables using a slash (/).

11. e r u p t
 12. a l o n g
 13. o v e r

Reading Skills

1. What is one difference between the way that scientists view volcanoes and most other people view them?

2. For what reason is the San Andreas Fault well known?

3. The author compares the rate at which Earth's plates move with something that is more familiar. What is the other element in the comparison?

4. Name two continents that border the Ring of Fire.

5. What percentage of the world's volcanoes are located in the Ring of Fire?

6. Why does magma rise to the surface?

7. What purpose would a reader have for reading this passage?
 _____ for pleasure or entertainment
 _____ for information
 _____ to learn how to solve a problem

Watery Giants

What are the oceans' most destructive waves, and what causes them?

1 If you have ever gone swimming in an ocean or in one of the Great Lakes, you may have some idea how powerful waves can be. Waves that are only a few feet tall hold enough energy to knock you off your feet. Now, try to imagine the power of a wave that is 50 feet tall and more than 100 miles wide, traveling at speeds of as much as 500 miles per hour. It's easy to see how such a wave could devastate an entire town.

2 The name for these enormous waves is *tsunami*, which means *harbor wave* in Japanese. Tsunamis are caused by a disturbance in the ocean, such as an earthquake or undersea volcanic eruption. Although underwater disturbances are the most common cause of tsunamis, they can also occur if a large meteorite crashes into the ocean.

3 Tsunamis may be relatively small when they are far out at sea. However, as they draw closer and closer to shore, they gather power. One sign of an approaching tsunami is water that recedes at the shore. This occurs because so much of the ocean water is sucked into the wave as it gathers strength.

4 Tsunamis do not consist of a single wave. One wave follows another in a series that may last several hours. A *period* is the length of time in between waves. For average wind-powered waves, a period may be about ten seconds long. Because a tsunami is so much larger, its period may be as long as an hour.

5 Tsunamis have destroyed homes, schools, and entire coastal towns in minutes. The force of a wave as it breaks can be strong enough to travel several hundred feet inland. That is exactly what happened to Hilo, a town on the island of Hawaii, in 1946. At that time, there was not yet an accurate warning system in place.

6 An earthquake registering 7.1 on the Richter scale occurred in Alaska's Aleutian Islands on April 1. About four hours later, Hawaii was struck with the first of seven waves. The waves

measured between 24 and 32 feet in height and arrived at 15 to 20 minute intervals. By the time the tsunamis had run their course, 159 lives had been taken.

7 The devastation of the 1946 tsunamis led a team of scientists and government officials to create the Pacific Tsunami Warning System. They hoped that people would never again suffer such great losses because they were unaware of a tsunami's approach. They set up a system to monitor earthquakes that could cause tsunami. They also determined ways to predict the time of arrival of tsunamis so that people would have time to evacuate.

8 Unfortunately, there was no such warning system covering the Indian Ocean on December 26, 2004. An enormous earthquake took place and triggered the deadliest tsunami in history. Countries like Thailand, India, and Indonesia were especially hard hit. The loss of life was devastating, and people all around the world reached out to help the victims.

9 Plans are being made to create a global tsunami monitoring system. No system is perfect, but as technology advances, humans will learn better ways to protect themselves against some of the most incredible and powerful forces of nature.



Vocabulary Skills

Write the words from the passage that have the meanings below.

1. to ruin or destroy

_____ Par. 1

2. something that interrupts or alters events

_____ Par. 2

3. moves back; moves away from

_____ Par. 3

4. periods of time in between events

_____ Par. 6

5. watch; closely observe

_____ Par. 7

Read each word below. Then, write the letter of its abbreviation in the space beside it.

- | | |
|-------------------------|-----------|
| 6. _____ hour | a. m.p.h. |
| 7. _____ Alaska | b. HI |
| 8. _____ miles per hour | c. AK |
| 9. _____ Hawaii | d. hr. |

Reading Skills

1. Check the line beside the word that best describes what type of passage this is.

_____ biography
 _____ informational
 _____ fiction

2. What does the word *tsunami* mean in Japanese?

3. What are two possible causes of tsunamis?

4. What is one way in which tsunamis are different than other waves?

5. What is one positive effect of the 1946 tsunamis?

6. Name three countries that were affected by the tsunami of 2004.

7. Why didn't the Pacific Tsunami Warning System alert people of the 2004 tsunami?

Circle the word that best completes each sentence below.

8. Tsunamis can cause great _____.

accuracy destruction earthquakes

9. Scientists are looking for ways to be able to better _____ the arrival of tsunamis.

explain control predict

10. Tsunamis are not _____ caused by meteorites.

frequently oddly powerfully

Study Skills

Use a dictionary to help you divide the words below into syllables.

1. t s u n a m i
2. g o v e r n m e n t
3. d e v a s t a t i o n
4. t e c h n o l o g y
5. e n o r m o u s
6. m e t e o r i t e