Cohen Middle School
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Elmira Heights, NY 14903
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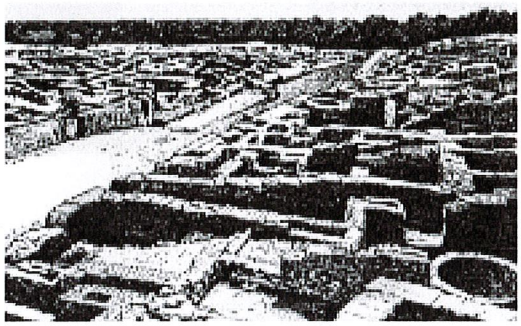
Name: _____ **Date:** _December 11, 2019____

Math:	Ratio Tables to Equations notes hmwk wksht & Test Tues.
Social Studies:	**India Geography** **HW: Indus Valley**
ELA:	Daily Warm Up Types of Characters Update Story Diagram Vocabulary.com
Science	(1) Study Vocab – Word Sort Self-check (2) Brainpop "Magnetism" (3) Lab pgs 7-8 (4) Notebook Force #2 Due tomorrow (pgs 1-5, 7-8, Claim, word Bank)
Computer Apps/ Technology	(HW) Finish p.8 Study

Name: _____

Indus Valley Civilization



A long, long time ago, there was a group of people called the Aryans. The Aryans were possibly from southern Russia and Central Asia. As nomads, they never liked to linger in one place. Instead, they much preferred to herd their animals by moving them from one spot to another. About 3,600 years ago, the Aryans decided to change their lifestyle. They wanted to give up endless wandering. They wanted to have a permanent settlement that they could call home. When they arrived in India, they did exactly that. As the Aryans learned to adapt to their new environment, they brought with them their religion and customs. Their culture later became the foundation of the Indian culture and led people to believe that it was India's oldest civilization.

That notion changed completely in 1921!

In 1921, archaeologists unearthed two ancient cities - Harappa and Mohenjo-daro - near the Indus River. Both sites predated the Aryans' settlement by about 1,000 years. The discovery, undoubtedly, was a surprise to everybody. Right away, it pushed the Indian history back even further than it already was. Scholars around the world termed the newly found culture "the Indus valley civilization." Some also called it "the Harappan civilization" because Harappa was the first city the archaeologists dug out.

The Indus River lies on the western side of the Indian subcontinent. Today, both the river itself and the two ancient cities fall within the confines of Pakistan. The excavations indicated that people of this ancient culture were excellent city planners. They laid out all the streets at right angles so it was easy for them to navigate. They used same-sized baked bricks to build their homes and equipped each home with a courtyard, private wells, plumbing system, and bathrooms. They also erected public buildings such as granaries. In terms of economic activities, people of the Indus valley civilization were mostly farmers. They grew rice, peas, sesame seeds, wheat, barley, and cotton. They domesticated water buffaloes to help them plough. They devised complicated irrigation schemes to help them water their crops. People of the Indus valley civilization were not an isolated bunch. Their extensive trading networks even reached the distant lands in the Persian Gulf and Sumer (today's Iraq).

Unfortunately, because there were no extensive records about the Indus valley civilization, we have only scant knowledge of it. Though most scientists believe that people of this ancient culture had their own language and writing system, they have not yet been able to decipher the meanings. Due to the limited information on hand, we don't even know exactly why and when the entire culture disappeared. Some attributed the cause to the Aryans. Some connected it with a climate change. Today, archaeologists around the world continue to flock to Pakistan and India to excavate. Since the groundbreaking discovery in the 1920s, they have unearthed several more cities in the same region. Hopefully, one day, they will find the missing link and unveil the mystery of the Indus valley civilization!

Name: _____ edHelper

Indus Valley Civilization

Questions

_____ 1. The Aryan civilization was once thought to be the oldest culture in India.

A. False
B. True

_____ 2. When was Harappa discovered?

A. 1973
B. 1949
C. 1800
D. 1921

_____ 3. Which of the following about the Indus valley civilization is correct?

A. People of the Indus valley civilization kept domesticated animals like water buffaloes.
B. It predated the Aryan civilization by about 500 years.
C. The Indus valley is located on the eastern side of the Indian subcontinent.
D. People of the Indus valley civilization were mostly nomads.

_____ 4. Which of the following is a crop NOT grown by people of the Indus valley civilization?

A. Rice
B. Wheat
C. Cotton
D. Cucumber

_____ 5. Why did the Indus valley civilization disappear?

A. The Aryans
B. The ice age
C. An earthquake
D. Nobody knows for sure yet.

_____ 6. In what country is Harappa located now?

A. Sri Lanka
B. India
C. Pakistan
D. Nepal

_____ 7. What can we NOT find in a typical house of the Indus valley civilization?

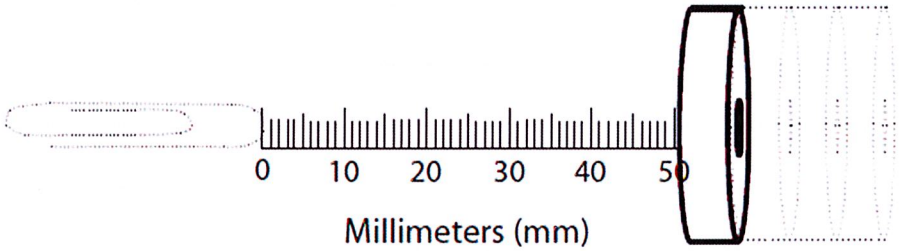
A. A courtyard
B. A telephone
C. A bathroom
D. A well

_____ 8. How did people of the Indus valley civilization lay out the streets in their cities?

A. In circles
B. Crisscross like a grid
C. In triangles
D. In a random pattern

Adding Magnets

1. Position a paper clip on the diagram below so the end is at the 0 mm mark on the ruler. Stand a magnet on edge at 50 mm.
2. Slowly slide the magnet to the left until the paper clip jumps toward the magnet.
3. Record the position of the magnet (jump distance) when the paper clip moved.
4. Collect data for three trials, then repeat with two magnets, three magnets, and four magnets.



Magnets	Trial 1 jump distance (mm)	Trial 2 jump distance (mm)	Trial 3 jump distance (mm)	Trial 4 jump distance (mm)
1				
2				
3				
4				

Analyze Data from Previous Table

1. What happened to the jump distance that the paper clip moved when you added more magnets?

2. What happened to the force of attraction when you added more magnets?

3. What evidence do you have that the force increased?

4. Why do you think the force increased so much with the second magnet, and only a little with the third or fourth magnet?

Summary

5. When magnetic fields are added together, the force of attraction _____. The farther / outside magnets have a _____ effect on the force of attraction.

Force NB #2 Magnetism Vocabulary

Attract	To pull toward each other
Repel	To push away from each other
Pole	the end of a magnet
Magnetic field	An area of magnetic influence around a magnet
Magnetism	A property of certain kinds of materials that causes them to attract iron or steel
Temporary magnet	A piece of iron that behaves like a magnet only when it's under the influence of an external magnetic field
Compass	An instrument (tool) that uses a free-rotating magnetic needle to show direction
Gravitational Field	An invisible area of gravitational influence around a mass

Unit: Ratios
Student Handout 6

Name _____
Date _____ Pd _____

REPRESENTING RATIOS WITH EQUATIONS

VALUE OF THE RATIO

- The value of the ratio represents the relationship between the two quantities. It is often easier to see in a ratio table.
- It can be written as an equation

Ratio value $\frac{9}{1}$: Reciprocal $\frac{1}{9}$

HOURS X WORKED	[process] (·9)	$ EARNED Y
0	0·9	0
1	1·9	9
3	3·9	27
6	6·9	54
8	8·9	72

independent x variable: hours worked

y variable: dependent: total money earned

x ·9 = y or y = 9x
equation or equation

Use the situations below to complete the tables and write an equation.

1. A bike rider cycles 20 miles in 1 hour.

HOURS (H) X	[process] (·20)	MILES (M) Y
0	0·20	0
1	1·20	20
2	2·20	40
3	3·20	60
4	4·20	80

a. describe the process hours multiplied by 20

b. equation m = 20h

2. Tamara saves $38.50 every month.

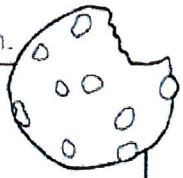
MONTH (M)	[process]	TOTAL SAVED (T)
1		
3		
5		
7		
9		

a. describe the process _____

b. equation _____

Values in ratio tables can also be written as _____ _____.

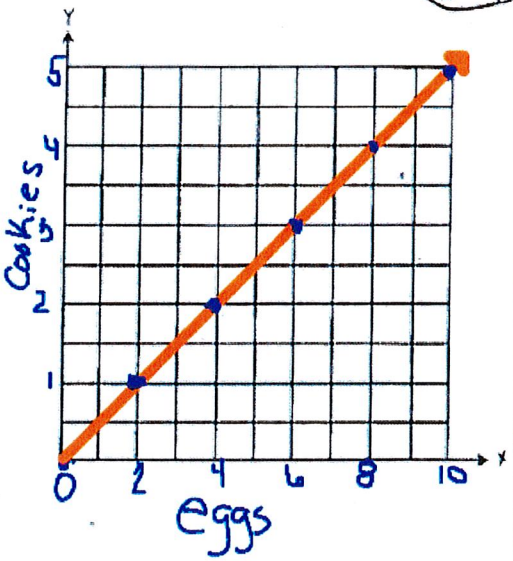
Use the information in the questions below to complete the tables and sketch the graph.



3. A recipe for oatmeal raisin cookies requires 2 eggs for every 1 dozen cookies.

Ratio value $\frac{2}{1}$ reciprocal $\frac{1}{2}$

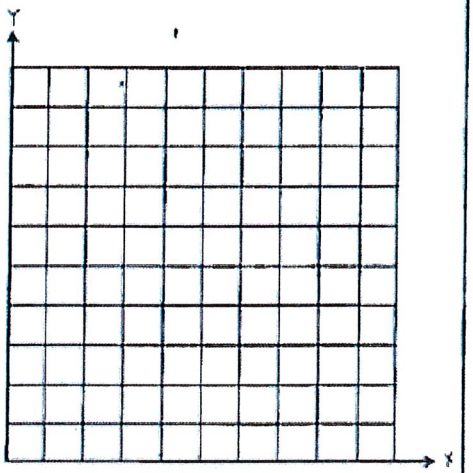
EGGS (E)	[process]	DOZEN COOKIES (C)	[ordered pairs]
2	$2 \cdot \frac{1}{2}$	1	(2, 1)
4	$4 \cdot \frac{1}{2}$	2	(4, 2)
6	$6 \cdot \frac{1}{2}$	3	(6, 3)
8	$8 \cdot \frac{1}{2}$	4	(8, 4)
10	$10 \cdot \frac{1}{2}$	5	(10, 5)

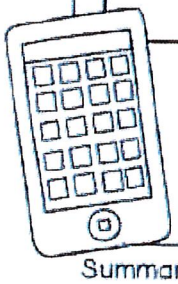


Equation: $C = \frac{1}{2}e$ or $C = \frac{1}{2} \cdot e$

4. A cell phone company charges Joey $45 per month.

MONTHS (M)	[process]	TOTAL $ (T)	[ordered pairs]





Equation: _____

Summarize today's lesson:

Unit: Ratios
Homework 5

Name _____

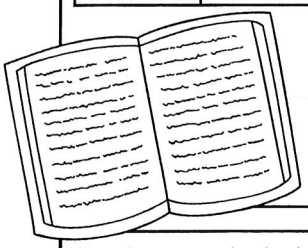
Date _____ Pd_____

REPRESENTING RATIOS WITH EQUATIONS

Read each scenario below. Then, complete the tables, graph the ordered pairs, and write an equation.

1. The book fair fundraises $250 per day for the school.

DAYS (D)	[process]	TOTAL $ (T)	→	[ordered pairs]
			→	
			→	
			→	
			→	
			→	



Equation: _____

2. A parent pledged $0.50 per lap in a walk-a-thon at school.

LAPS (L)	[process]	TOTAL $ (T)	→	[ordered pairs]
			→	
			→	
			→	
			→	
			→	

Equation: _____