Cohen Middle School
100 Robinwood Avenue
Elmira Heights, NY 14903
734-5078

Name: _____ **Date: December 3, 2019**____

Math: Solving Ratio Problems w/ Proportions

notes, flipchart hmwk wksht.

Social Studies:

Chapter 3 Section III

HW: Education/ TEST MONDAY 12/9

ELA: Daily Warm Up
Capitalization Rules

HW: Article of the Week Due 12-6-19
Book of the Month Due 1-6-20 NB

Science
1. Force #1 WORD SORT (VOCAB Pg 21 gravity / friction)
2. "Discovery of Friction" READ + DISCUSS
3. Unbalanced Forces – "Forces on CARTS A" Pg 19 Q#1+2 only

Computer Apps/ Technology

Warm-up

Science 6
12/3/19

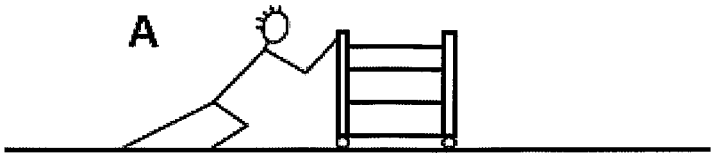
Force & Motion Notebook #1 Vocabulary

Word	Definition
Force	An interaction between objects; a push or pull
Gravity	The force of attraction between any two objects
Interaction	To act on, or be acted upon by one or more objects
Newton (N)	The common unit for measuring for force (metric system)
Spring Scale	A simple piece of technology designed to measure force.
Weight	The downward force of gravity on a mass
Mass	The amount of matter "stuff" in an object
Friction	A force acting between surfaces in contact, that acts to resist motion

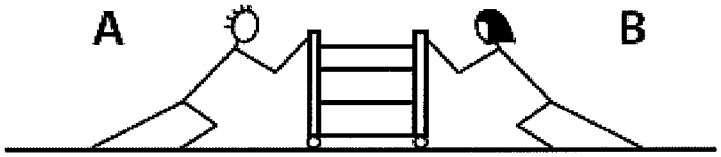
Copy these 2 definitions onto page 21 WORD BANK.

Science 12/3/19

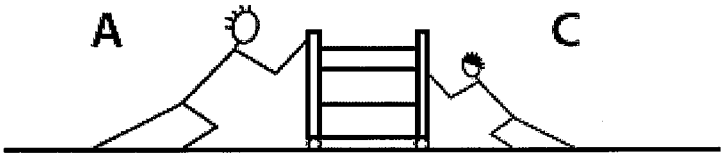
Forces on Carts A



1. In class, students learned that a cart will move when a force of 50 N or greater is applied. A student pushed on the cart with a force of 10 N. The cart did not move. Why not?



2. Student A pushed on the cart with a force of 500 N. Student B pushed on the other side of the cart. The cart did not move. How much force did student B apply? Explain how you know.



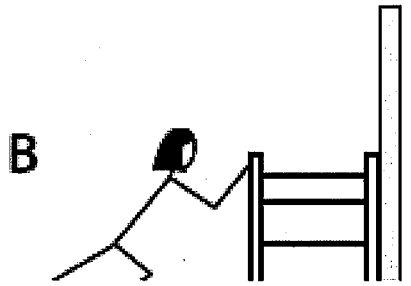
12/4/19 →

3. Student A pushed on the cart with a force of 400 N. Student C pushed on the other side of the cart. The cart rolled to the left. Did student C apply more, less, or the same force as student A? Explain how you know.

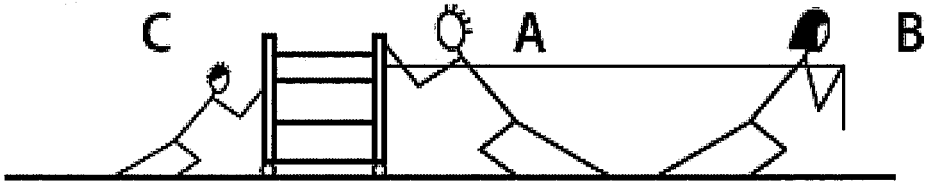
→

12/4/19

Forces on Carts B



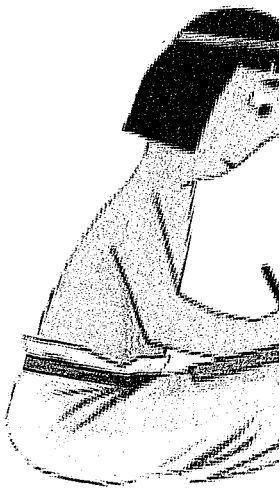
4. Student B pushed on a cart against the wall with 500 N of force. The cart didn't move. How do you explain what happened?



5. Student C pushed on the cart with 400 N. Student A pushed on the cart with 1,000 N of force. Student B pulled on a rope attached to the cart with 500 N of force. What will happen to the cart and why?

ıtion in Ancient Egypt

Ancient Egypt, only boys went to school. That doesn't seem fair! That's not how ı America. Why could only boys go to school? What education did the girls ive? Let's see what we can discover.



Boys needed an education to be useful in Ancient Egyptian culture. When they were oung, boys learned skills from their fathers. They learned to fish, hunt, and work in the family's fields. As a boy grew, his father would decide what type of education he would receive. For some of the poorer boys, all he could learn was his father's trade. However, some fathers wanted their sons to have a better life. But, this was very costly. School was not funded by the government. If a boy was to learn something other than his father's trade, there was a fee. If he could afford the fee, a father had two main options: an apprenticeship or school.

Artisans and craftsmen offered apprenticeships to boys. A father would pay a fee to have his son taught special skills. During an apprenticeship, a boy worked alongside the tradesman to learn from him. Apprenticeships lasted for many years. When a boy finished his training, he might be a weaver, goldsmith, butcher, or musician.

In schools, boys were taught reading, writing, and arithmetic. They were able to participate in sports and learn hunting skills. Students were expected to be obedient in school. Discipline was rigid. Instructors used physical punishment when a boy would disobey the rules. If a boy worked hard in school, he could become a scribe or civil servant. These positions were highly valued.

Talented boys could also move up in society. A boy with artistic or musical talent could gain the favor of a est, nobleman, or member the royal family. These talents were admired in Ancient Egypt. A boy with talent ld achieve a better life.

hile boys were off learning, girls stayed home with their mothers. They learned many different skills from others. At an early age, they learned by imitating their mothers at work. As girls grew older, they began with small tasks in the home. Gradually, they would help with more and more complex jobs. Girls had to ork in the family's fields to grow wheat. They needed to know how to care for the livestock. They bake bread, prepare meals, and spin flax into linen cloth. These skills were important to help them their lives.

ent Egyptian children were taught to be well-behaved. At first, it was the mother's job to n to be obedient and respectful. When children were four or five years of
he Books of Instruction (or Wisdom) to train their childr

e: _____

ren to learn. These sayings helped children learn good sense, charity, and rules for life.

nt for parents to have children who were accepted in society.

cient Egyptian boys and girls received the education they needed for their society. It may no

s didn't go to school, but it worked for the Egyptians. They had a strong civilization for thousan

ation in Ancient Egypt

estions

__ 1. In Ancient Egypt, all children were required to go to school.
A. true
B. false

__ 2. Ancient Egyptian girls learned the skills they needed for life from their mothers.
A. false
B. true

3. Name two occupations that boys could learn in Ancient Egypt.

4. In addition to reading, writing, and arithmetic, name one other thing boys did in school.

5. Name two things that girls learned to do in Ancient Egypt.

6. At what age did the fathers take over the children's education?

Name:
Educ

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Name: _____ edHelper

_____ 7. Who paid for a boy's education?

A. the boy
B. the boy's father
C. the government
D. the pharaoh

8. What was the textbook parents used to train their children to behave?

_____

_____

Name_____ Class Period____

ELA 6 WARM UP
Week of 12/2/19 **Be a learner not a finisher.**

Monday Mistakes

Correct the sentence and rewrite it below: If I had one wish. I would wish that I had a milion more wishs. (2 spelling mistake, 1 punctuation error)

_____

_____

_____

Tuesday Terms

Read the word and definition. Write a sentence that uses the word correctly and draw a quick sketch that will help you remember the word.

Word: **aspiration**	Definition: **a goal or objective that is strongly desired; hope; wish**
Sentence: _____ _____ _____ _____	Sketch:

Wednesday Word Ladder

Flip the paper over and complete the word ladder

Thursday Thoughts

"Wishes are funny, aren't they? . . . Sometimes they come true differently than you think they will." – Patricia Polacco, author

Write 2 to 3 sentences explaining what this quotation means.

_____

_____

_____

_____

Friday Figurative Language

Write a sentence with an example of personification. (Personification is giving nonhuman things human characteristics. Example: The computer was being mean to me and would not open my file.)

_____

_____

_____

_____

_____

Name _____

Read each clue and write the answer in the blanks.
Use the first and last words to fill in the sentence under the ladder.

HINT! Words with a ★ are more challenging!

SCIENCE

STEP BY STEP

10. A process or procedure.
Change 1 letter, then add 2.

9. The study of numbers.
Change 1 letter.

8. A match or part of a pair.
Rearrange the letters.

7. Antonym of *wild*.
Change 1 letter.

6. What _____ should we meet for dinner?
Change 1 letter.

★ **5. A prong or sharp point, as on a fork.**
Change the first and last letters.

4. Quickly close and open just one eye.
Change 1 letter.

3. I rinse dishes in the _____.
Take away 2 letters, then add 1.

2. I haven't seen any mice _____ my family got a cat.
Take away 2 letters.

1. My favorite class is _____ because I love experiments.
Take away 4 letters, then add 1.

Start Here

s c i e n t i f i c

The _____ _____ is a set of procedures for carrying out an experiment.

Literature Circles Reading Schedule

Bud, Not Buddy

Week of December 2:	Chapters 2 through 7
Week of December 9:	Chapters 8 through 11
Week of December 16:	Chapters 12 through 16
Week of January 6:	Chapters 17 through the Afterword

Flush

Week of December 2:	Chapters 2 through 6
Week of December 9:	Chapters 7 through 12
Week of December 16:	Chapters 13 through 16
Week of January 6:	Chapters 17 through 21

Percy Jackson and the Lightning Thief

Week of December 2:	Chapters 2 through 6
Week of December 9:	Chapters 7 through 11
Week of December 16:	Chapters 12 through 17
Week of January 6:	Chapters 18 through 22

Article of the Week Due: 12/6/19

Name:

Period:

Text messages sent by roaming eagles bankrupt scientific study

By Jason Daley, Smithsonian, adapted by Newsela staff on 11.25.19

Word Count **670**

Level **MAX**

Image 1. An endangered steppe eagle. Min, the steppe eagle who sent very expensive text messages through his GPS tracker, looks like this. Image courtesy of Pixabay

A team of Russian researchers set out to track endangered steppe eagles. They used a device that sends the birds' locations via text messages. They knew they would occasionally lose track of the birds when they flew into regions with little or no cellular coverage. Going off the grid isn't a huge deal. Usually, when that happens, the messages are sent once the eagles fly back into range. This works great as long as they stay in-network. With a solid cellular plan, the study should have been cost-effective.

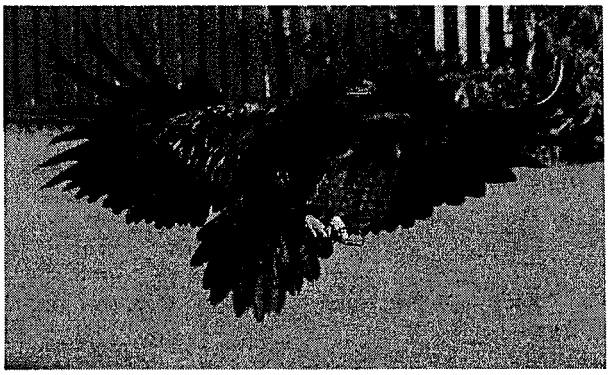
But what they didn't plan for was Min. Min is a globe-trotting steppe eagle whose taste for adventure turned into a big international texting habit.

The Russian Raptor Research and Conservation Network team had equipped 13 steppe eagles with SMS text-based tracking devices. Four times a day, the devices would send the coordinates of the eagles. This was so researchers could figure out where they spend their time. However, the birds often spend most of the summer breeding season in regions with little or no cellular coverage,

mostly in Kazakhstan. Once they move on, the device sends dozens — or sometimes hundreds — of backlogged tracking messages all at once.

That's not a problem when the birds send messages on the Kazakh or Russian networks. But when Min reappeared in early October after being out of range, the eagle did so in Iran. Roaming rates there are sky-high.

"He disappeared for five months, and all of a sudden here he is, with a very, very heavy phone bill," said Elena Shnayder. She is a scientist who works for the network.



Min sent hundreds of text messages at once at about 77 cents each. That price is five times the typical price on the Russian network. The texting alone wiped out the project's budget in one fell swoop. The budget had already taken a hit when other eagles took off to other places in Central Asia with high roaming charges. According to the Siberian Times, another eagle named Khakas is hanging out near the border of Uzbekistan and Turkmenistan. One nation has reasonable roaming charges and the other is quite expensive — and Khakas was toeing that line. Other eagles have sent messages from expensive networks in Tajikistan and Pakistan.

According to a blog post, the research team raised about $5,000 in crowdfunding. This will help cover the costs so they can continue tracking the eagles through the end of the year and into 2020. Peltier reports that the network used by the eagles' text-trackers, Megafon, announced that it would refund several months' worth of charges to the project. Megafon will also now offer special rates for the wayward eagles. In fact, Shnayder says other phone companies have reached out offering free SIM cards for any new eagles the project tracks now that the story has gone viral.

"It's quite an irony, because when we started the project and asked for discounts, many of them turned us down," she tells Peltier.

The steppe eagle needs all the help it can get. As Ryan F. Mandelbaum at Gizmodo points out, the massive eagle with a 7-foot wingspan spends its breeding season hunting the open deserts, steppes and savannas of Central Asia. It then disperses to southern Asia and parts of Africa for the winter. According to the IUCN, there are about 50,000 to 75,000 adult eagles remaining. However, they face many threats. Areas in their preferred habitat are being converted to agricultural use. Increases in wind turbines and power lines are also taking a toll on the species. Poachers and sport hunters also target the big eagles.

The steppe eagle is not the only raptor species facing problems. According to a recent study in the journal Biological Conservation, 18 percent of the world's 557 raptor species face extinction. Fifty-two percent have declining populations.

Quiz

1 Which sentence from the article shows the MAIN problem the Russian Raptor Research and Conservation Networks faced with their study?

(A) They knew they would occasionally lose track of the birds when they flew into regions with little or no cellular coverage.

(B) Once they move on, the device sends dozens — or sometimes hundreds — of backlogged tracking messages all at once.

(C) The texting alone wiped out the project's budget in one fell swoop.

(D) "It's quite an irony, because when we started the project and asked for discounts, many of them turned us down," she tells Peltier.

2 Read the conclusion below.

The steppe eagles study is receiving help from its current telephone company.

Which sentence from the article provides the BEST support to the statement above?

(A) According to a blog post, the research team raised about $5,000 in crowdfunding.

(B) This will help cover the costs so they can continue tracking the eagles through the end of the year and into 2020.

(C) Peltier reports that the network used by the eagles' text-trackers, Megafon, announced that it would refund several months' worth of charges to the project.

(D) In fact, Shnayder says other phone companies have reached out offering free SIM cards for any new eagles the project tracks now that the story has gone viral.

3 Which sentence from the article would be MOST important to include in a summary of the article?

(A) The Russian Raptor Research and Conservation Network team had equipped 13 steppe eagles with SMS text-based tracking devices.

(B) According to the Siberian Times, another eagle named Khakas is hanging out near the border of Uzbekistan and Turkmenistan

(C) As Ryan F. Mandelbaum at Gizmodo points out, the massive eagle with a 7-foot wingspan spends its breeding season hunting the open deserts, steppes and savannas of Central Asia.

(D) According to a recent study in the journal Biological Conservation, 18 percent of the world's 557 raptor species face extinction.

4 Read the following detail from the article.

Areas in their preferred habitat are being converted to agricultural use. Increases in wind turbines and power lines are also taking a toll on the species. Poachers and sport hunters also target the big eagles.

How does this detail develop the article's CENTRAL idea?

(A) It describes the types of habitats steppe eagles like to live in.

(B) It highlights why the text message bill was so high for the study.

(C) It explains how the steppe eagle project is protecting the birds.

(D) It shows some of the threats the steppe eagles face.

NAME _____

Give a Gift

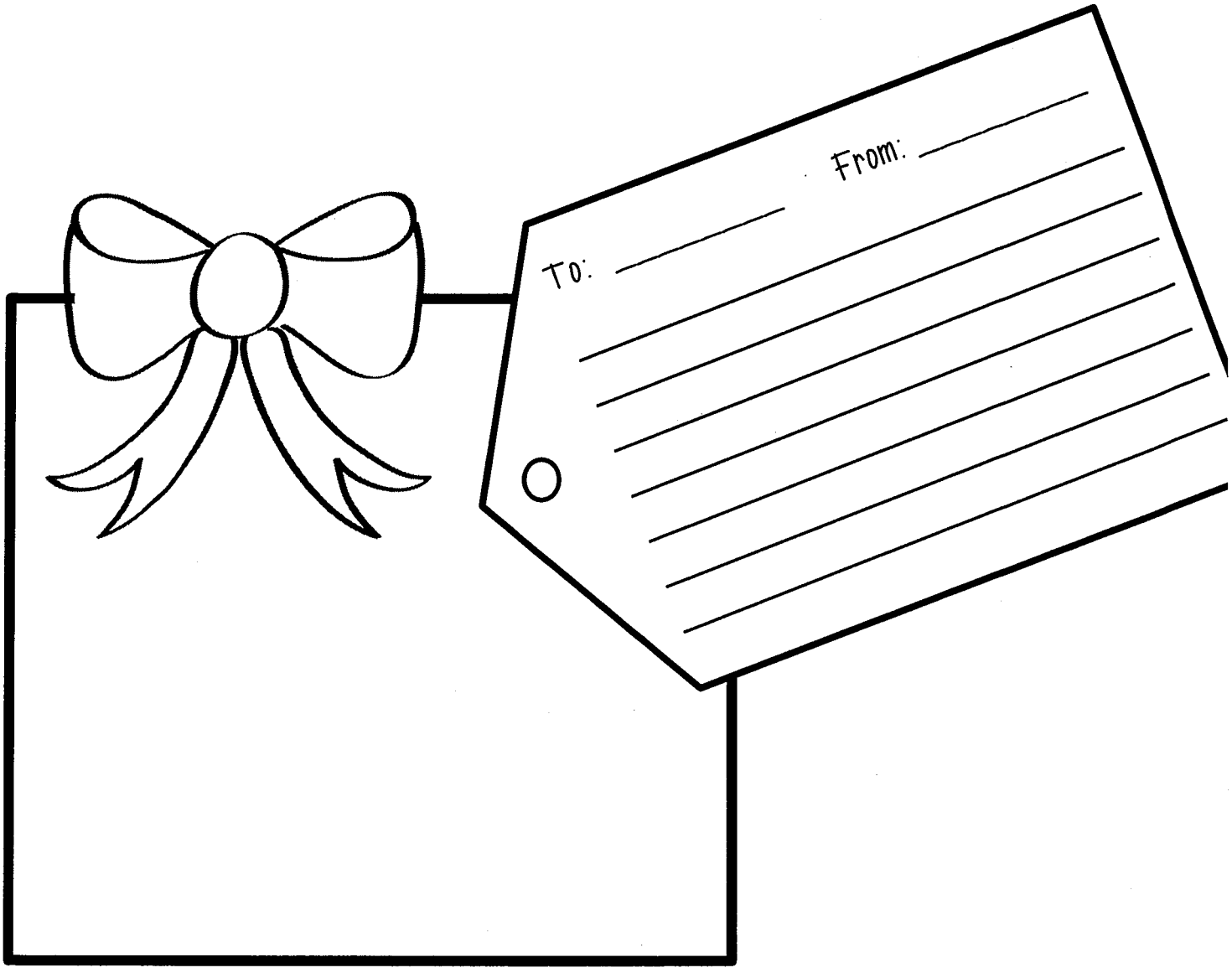
Imagine that you could give a gift to the protagonist (main character) or antagonist (main character's opponent) in the book. What would you give the character? Sketch the gift in the box and explain your choice on the gift tag below.

TITLE _____ AUTHOR _____

This or That

Give a gift to the PROTAGONIST in the story. Explain your choice on the gift tag.

Give a gift to the ANTAGONIST in the story. Explain your choice on the gift tag.



Name _____

Reading Response Prompt _____

THIS OR THAT

	0	1	2
Personal Reactions to the Text	Gives a response without explanation. Reactions may be superficial, mere summaries, or vague.	Reactions are supported by examples from the text, but provide little detail.	Multiple reactions to the text are supported by many details and examples.
Task Fulfillment	None of the tasks for this reading response were completed.	Some of the tasks for this reading response were completed.	All of the tasks for this reading response were completed.
Originality	The assignment does not demonstrate any originality.	Some original ideas are evident in the assignment.	The assignment showcases exceptional originality and creativity.
Work Quality & Effort	Poor work quality or effort.	Work quality and effort is mediocre.	Extraordinary work quality and effort demonstrated.
Mechanics, Usage, and Grammar	4+ mistakes in mechanics, usage, and/or grammar	1-3 mistakes in mechanics, usage, and/or grammar.	No mistakes in mechanics, usage, and grammar.

Total _____ / 10

A **ratio** is an ordered pair of non-negative numbers, which are not both zero. They compare quantities.

Equivalent ratios have the same ***value***.

The **order** of the numbers is **important** to the meaning of the ratio.

Switching the numbers changes the relationship.

The description of the ratio relationship tells us the correct **order** for the **numbers** in the ratio.

TYPES OF RATIOS: Part ***to*** Part and Part ***to*** Whole

George texts 3 words for every 5 words Caden texts.

Steps for Problem Solving Ratios Using Proportions

- Read the word problem carefully and identify the two things that are being compared.
- Determine the parts and whole
- Set up a proportion box and label each row
- Re-read the problem and place the given information in the correct places of the proportion box
- Solve the proportion for the missing information

Eg. In a bag of mixed walnuts and cashews, the ratio of number of walnuts to number of cashews is 5:6. Determine the amount of walnuts that are in the bag if there are 54 cashews.

W:C

Part W:C Part C, 54c Whole 11 total

Label

Walnuts
Cashews

5	x
6	54

Work/Solution

$\frac{5}{6} = \frac{x}{54}$

$5 \cdot 54 = 6 \cdot x$

$270 = 6 \cdot x$

$270 \div 6 = 45$

$x = 45$

$5 \cdot 54 = 6 \cdot 45$

$270 = 270$

Eg. Nate and Dylan were selling water bottles to raise money for new football uniforms. Nate sold 5 water bottles for every 3 water bottles Dylan sold. Together they sold 160 water bottles. How many did Dylan sell?

Part Nate 5 **Part** Dylan 3 **Whole** 8 total / 160 total

5 N
+3 D
8 total

Label

Dylan
total

3	x
8	160

Work/Solution

$\frac{3}{8} = \frac{x}{160}$

$3 \cdot 160 = 8 \cdot x$

$480 = 8x$

$480 \div 8 = 60$

$x = 60$

Check
$480 = 8 \cdot 60$
$480 = 480$ ✓

Dylan sold 60 bottles out of 160 total.

Practice: Ms. Johnson and Ms. Jacobs were folding report cards to send home. The ratio of the number of report cards Ms. Johnson folded to the number Ms. Jacobs folded is 2:3. At the end of the day, Ms. Johnson and Ms. Jacobs folded a total of 300 report cards. How many did Ms. Jacobs fold?

Part Johnson 2 **Part** Jacobs 3 **Whole** 300 total / 5 total

2+3

Label

Jacobs
total

3	x
5	300

Work/Solution

$\frac{3}{5} = \frac{x}{300}$

$3 \cdot 300 = 5 \cdot x$

$900 = 5x$

$900 \div 5 = 180$

$x = 180$

Check
$900 = 5 \cdot 180$
$900 = 900$ ✓

Ms. Jacobs folded 180 report cards out of a total 300.

At a picnic, hamburgers and hot dogs were consumed in the ratio of 5 to 3. If 30 hamburgers were consumed, how many hot dogs were consumed?

Part _____ **Part** _____ **Whole** _____

Label

_____
_____

Work/Solution

Name _____ Homework Lessons 5 & 6

Use your notes to help you set up and solve these real life ratio problems.

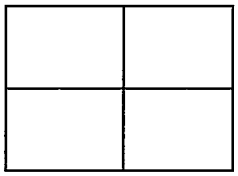
1. At Cohen Middle School, chocolate milk is an option for lunch on Friday. There are three chocolate milks sold for every white milk sold. If 120 containers of chocolate milk was sold on Friday, how many containers of white mild were sold?

Part _____ **Part** _____ **Whole** _____

Label **Work/Solution**

_____

_____



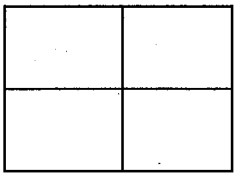
2. On Ms. Moore's science test, Joey had a ratio of 5 to 4 correct to incorrect answers. If Joey got 12 answers wrong, how many did he answer correctly?

Part _____ **Part** _____ **Whole** _____

Label **Work/Solution**

_____

_____



3. In Mr. Smith's support time class, 3 out of every 5 students would prefer to play PS4 than do their homework. If there are 20 students in his class, how many prefer to play PS4 than do their homework?

Part _____ **Part** _____ **Whole** _____

Label **Work/Solution**

_____

_____