

POSTER PROJECT 11.13.14

RULES:

1. You will work in groups of two or three people. Groups will be randomly chosen by Mr. Pearson.
2. Each group will have a unique task to complete.
3. Each group member must be an active participant and must contribute equally to the project.
*Group members who do not contribute or are consistently off-task will receive a ZERO for the project.
4. This is a group grade and will be your first grade for Trimester 2. Make it count! Be creative!
5. You may not switch groups or choose a different topic. Whichever group or topic you receive is final.
6. You will have until end of class Friday 11.14.14 to complete your task. Your group may work on during MATH Lab as well (Today and/or Tomorrow). Any projects not completed during class will be required to be done in MATH lab no later Friday 11.14.14 or will be considered LATE. Late projects will lose 20 points per day that they are late.

DIRECTIONS / GROUP CHECKLIST:

1. You will be responsible for completing the scenario (involving ratios and proportions) that your group is issued. Your group should NOT be talking with other groups during the class period.
2. You will begin to work out the scenario on your own paper. Each group member should individually work out the problem, then compare and contrast ideas that each person came up with.
3. After brainstorming, your group needs to create a ROUGH DRAFT on an 8.5 x 11 sheet of white paper (issued by Mr. Pearson). The ROUGH DRAFT should have all questions correctly answered and the given table filled in correctly.
4. In addition to completing the table, you must choose two additional methods to demonstrate and support your data such as a tape diagram, graph, double number line, etc.
5. Mr. Pearson will provide comments while you are working. Once your work on ROUGH DRAFT is complete, show it to Mr. Pearson. If your work is correct and approved, you will receive a blank 11 x 14 POSTER. This poster should represent your best quality work (FINAL DRAFT). There should not be any mistakes, erase marks, etc on the final draft because you have already done all of the work properly on the ROUGH DRAFT. The rough draft should be edited and revised prior to beginning the final draft. You will not receive a new POSTER (FINAL DRAFT) in the event you make mistakes, so be thoughtful and careful.
6. Your 11 x 14 POSTER (FINAL DRAFT) must include the following:
 - Original Statement and Questions from your Scenario
 - Recreated Table (filled in with correct values)
 - You must include at least two additional ways to support your answers (i.e. graphs, double number line diagrams, tape diagrams, etc.)
 - Tables, Graphs, etc. must be drawn with a ruler and must have equally spaced increments
 - Handwriting must be neat, easy to read. It should be free of spelling errors. Correct punctuation, capitalization, etc. must used.
 - Group member names should go on the back side (NOT the front of the poster once it is ready to turn in

Scenario 1: The Ratio of Boys to Girls is 4:5

Then choose two additional methods to demonstrate the data such as a tape diagram, graph, double number line, etc.

Additional questions to answer:

1. If there were 180 students in total, how many students were boys and how students many were girls based on the 4:5 ratio?
2. Is it possible to have an odd number of boys based on the ratio?



Number of Boys (B)	Number of Girls (G)	Ordered Pairs (B , M)
4	5	(4,5)
12		
	25	

Scenario 2: At the Farmer's Market, a vendor is selling fresh fruits and vegetables (Any 2 for \$1.00). Describe the ratio of fruits/vegetables to price. *Unit rate may help.

Then choose two additional methods to demonstrate the data such as a tape diagram, graph, double number line, etc.

Additional questions to answer:

1. A customer says he would like to buy \$3.75 worth of carrots and bell peppers. Is this possible – Why or why not?
2. What would it cost to buy 17 items?
3. What could you purchase with a \$20 bill?



Number of Fruits & Vegetables	Price \$ (in Dollars)
2	1
4	
8	
	5

Scenario 3: In Alaska, icebergs can be seen floating in lakes and other waterways. Floating icebergs move 2 meters every 3 hours. Describe the ratio of the number of meters travelled to number of hours.

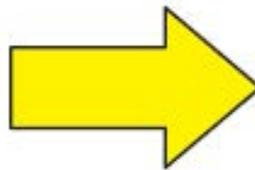
Then choose two additional methods to demonstrate the data such as a tape diagram, graph, double number line, etc.

Additional questions to answer:

1. If an iceberg traveled for 39 hours, how far has it moved?
2. If the iceberg moves 18 meters, how many hours did it travel for?



Moves 2 meters every 3 hours.



ICEBERGS IN ALASKA

Distance Iceberg Moves (in meters)	2	4	6	8	10
Time it takes Iceberg to move (in hours)					

Scenario 4: Eli can walk 5 city blocks in 12 minutes.

Describe the number of city blocks (B) to the number of minutes (M).

Then choose two additional methods to demonstrate the data such as a tape diagram, graph, double number line, etc.

Additional questions to answer:

1. If Eli walks for 2 hours, how many blocks has he walked?
2. Eli walked 35 blocks from one side of Redwood City to the other. How long did he walk for?



Number of City Blocks (B)	Number of Minutes (M)	Ordered Pairs (B , M)
5	12	
10		
20		
	60	

Scenario 5: Jen and Nikki are making bracelets to sell at the Swap Meet. They determined that each bracelet would have eight beads and two charms. Describe the ratio of charms to beads.

Then choose two additional methods to demonstrate the data such as a tape diagram, graph, double number line, etc.

Additional questions to answer:

1. If a bracelet has 25 charms, how many beads would it have? Then choose two additional methods to demonstrate the data such as a tape diagram, graph, double number line, etc.
2. If each bracelet sold costs \$5, how many beads and charms in total would be needed for \$30 worth of bracelets?



Charms	2	4	6	8	10
Beads	8				

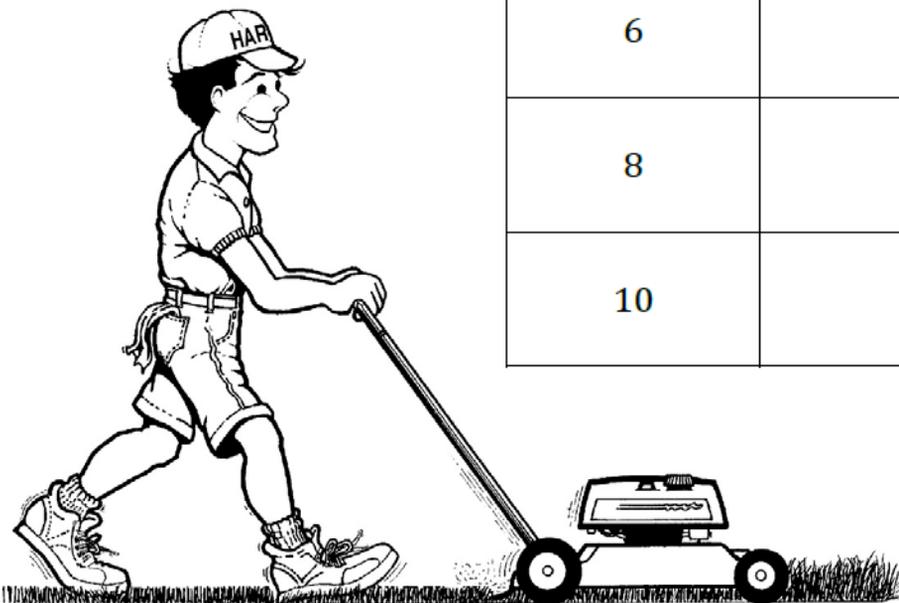
Scenario 6: Dominic works on the weekends mowing lawns in his neighborhood. For every 2 lawns he mows, he charges \$24. Describe the ratio of lawns to dollars.

Then choose two additional methods to demonstrate the data such as a tape diagram, graph, double number line, etc.

Additional questions to answer:

1. How many lawns would Dominic have to mow to earn \$240?
2. How much money would he earn if he mowed 9 lawns?

Lawns	Charge (in dollars)	Ordered Pairs
2		
4		
6		
8		
10		



Scenario 7: A carpenter uses four nails to install each shelf. Complete the table to represent the relationship between the number of nails (N) and the number of shelves (S). Describe the ratio of shelves to nails.

Then choose two additional methods to demonstrate the data such as a tape diagram, graph, double number line, etc.

Additional questions to answer:

1. Will the carpenter always use an even number of nails per shelf? How do you know?
2. If nails come in boxes of 50, how many shelves can be hung if the carpenter has four boxes of nails?



Shelves (S)	Nails (N)
1	4
2	
	12
	16
5	