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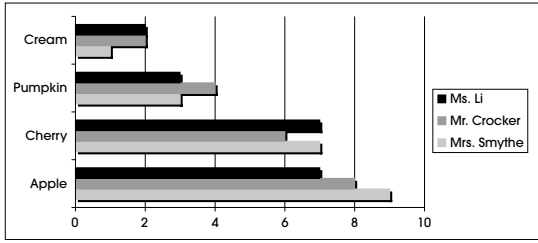
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Warm-Up Drill Sheet # 1



1a) The triple bar chart below shows the results of a survey done with students in three classrooms. The students were asked which pie flavor is their favorite.

Ex: How many students are there in all 3 classes? 59



- How many students are in Ms. Li's class?
- How many students are in Mr. Crocker's class?
- How many students are in Mrs. Smythe's class?
- How many students in Mrs. Smythe's class like pumpkin pie best?
- How many students in Mr. Crocker's class like cherry pie best?
- How many students in Ms. Li's class did not select cream pie as a favorite?
- Which two classes had two students who liked cream pie?
- How many more students in Mrs. Smythe's class liked apple pie than cherry pie?
- Three students in Ms. Li's class liked what type of pie?
- How many more students in Mrs. Smythe's class liked apple pie than students who liked apple pie in Ms. Li's class?
- How many more students in Mr. Crocker's class liked pumpkin pie than cream pie?
- How many students in Mrs. Smythe's class liked cherry or pumpkin pie?
- The same amount of students in what two classrooms liked cherry pie?
- The most popular pie in all three classes was what flavor?
- The least popular pie in all three classes was what flavor?
- What was the average number of students who voted for apple pie as their favorite?



Reflection

Conduct your own survey in your class about favorite desserts. Make a graph to show your results.

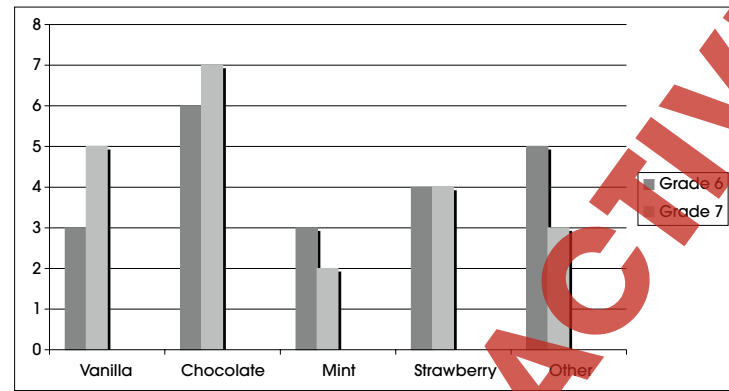
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Warm-Up Drill Sheet # 3



7a) The chart below shows the favorite ice cream flavors of a grade 6 and 7 class.

FAVORITE ICE CREAM FLAVORS



- What was the most popular flavor with the grade 6 class?
- What was the most popular flavor with the grade 7 class?
- Suppose a student answered "Neapolitan". Which category would this be under?
- An equal amount of 6th graders and 7th graders selected what flavor?
- How many total 6th graders were asked to take part in this poll?
- How many total 7th graders were asked to take part in this poll?
- What fraction of the total 6th graders chose mint as their favorite flavor?
- What fraction of the total 7th graders chose chocolate as their favorite flavor?
- Eight total students in both grades chose what two flavors as their favorites?
- What is the ratio of 7th graders to 6th graders who like chocolate most?
- What is the average number of students who selected vanilla as their favorite flavor?
- Three less 7th grade students like strawberry than what flavor?
- Half as many 6th graders like what flavor than chocolate?
- A ratio of 5 to 3 students in grades 7 and 6 like what flavor?
- How many more students in both grades voted for chocolate than other?
- Five total students liked what flavor?

NAME: \_\_\_\_\_

Timed Drill Sheet # 7



11a) Sports Centre is having its annual Winter Blast Sale on sports items. The following chart below shows the pre and post sale prices.

Ex: Which sale item cost one eighth of one other item pre sale? Baseballs cost 1/8 of hockey gloves



Item	Pre sale price	Post sale price
Hockey stick	\$80.00	\$72.00
Hockey gloves	\$56.00	\$50.00
Basketball hoop	\$50.00	\$40.00
Basketball sneakers	\$80.00	\$68.00
Basketballs	\$12.00	\$9.00
Baseball bats	\$25.00	\$22.00
Baseball helmets	\$40.00	\$35.00
Baseballs	\$8.00	\$7.00
Footballs	\$26.00	\$22.00

- Which items were the most expensive pre sale?
- Which item was the least expensive pre sale?
- Which item decreased in price by \$6.00 for the sale?
- Which item decreased by the least amount of money for the sale?
- Which item had a 10 percent discount for the sale?
- Which post sale items cost the same as other pre sale items?
- What item had exactly a 15 percent discount for the sale?
- What item has the largest percentage discount post sale?
- What two items cost the same post sale?
- What items can be purchased for exactly \$42.00 post sale?
- Which items could be purchased for a total of \$37 pre sale?
- Which sale item cost one tenth of two other items pre sale?
- What item cost \$31 more than basketballs post sale?
- What is the ratio of the price of hockey gloves to basketball hoops post sale?
- What is the mode of the post sale prices?
- What is the range of the post sale prices?

Explore With Technology

Use your computer or internet to research the prices of the above sports equipment in your area. Write the prices and compare the costs of the items. Explain how the costs are similar and different.

NAME: \_\_\_\_\_

Timed Drill Sheet # 8



12a) The Museum of Science for Children has the following game in its probability room. Students press a button releasing a disc. The disc falls on one of the numbers on the game board below.

Ex: What is the probability that you will land on the number 7? 1 in 10

1	2	3	4	5
6	7	8	9	10

- What is the probability that you will land on an odd number?
- What is the probability that you will land on an even number?
- What is the ratio of odd numbers to even numbers?
- What percent of the game board is made of white squares?
- What percent of the game board is made of light gray squares?
- What fraction of the game board is made of dark gray squares?
- What fraction of the squares have black numbers?
- What fraction of the squares have white numbers?
- What is the ratio of white numbers to black numbers?
- What percent of the numbers on the board are even and less than 10?
- What are your chances of landing on a light gray square?
- What are your chances of landing on a dark gray square with an odd number?
- What are your chances of landing on a white square with an odd number?
- What are your chances of landing on a light gray square with an odd number?
- What are you more likely to land on, a dark gray square with an even number or a white square with an odd number?
- What are you more likely to land on, a dark gray square with an odd number, a light gray square with an odd number, or a square with white letters?



Reflection

Create your own game board like this one. Write six probability statements using your board.





## Review A

a) The line plot below shows how many students have each number of pets at home.

Mrs. Jones Class Pet Survey

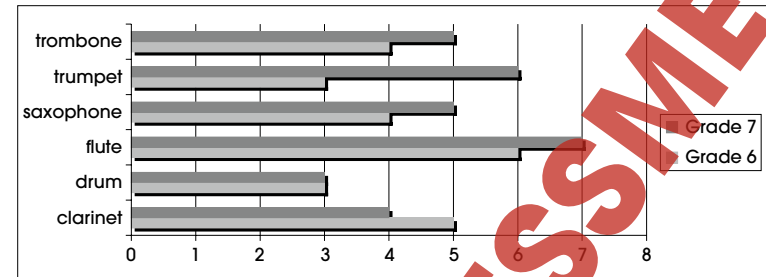


- How many students took this survey? \_\_\_\_\_
- How many students had no pets? \_\_\_\_\_
- How many more students had 1 pet than 8 pets? \_\_\_\_\_
- How many total students had more than 3 pets? \_\_\_\_\_
- What is the mode of number of pets? \_\_\_\_\_
- What percent of the students have no pets? \_\_\_\_\_
- What percent of the students have 8 pets? \_\_\_\_\_
- What fraction of students own 2 pets? \_\_\_\_\_
- One-fourth of the students own how many pets? \_\_\_\_\_
- The number of students who own four, five, or six pets is equal to the number of students who owns how many pets? \_\_\_\_\_
- Twice as many students own how many pets as own 4 pets? \_\_\_\_\_
- What is the ratio of students who own 3 pets to students who own 6 pets? \_\_\_\_\_
- How many total pets does this class have? \_\_\_\_\_
- What fraction of the total pets are owned by people who own 3 pets? \_\_\_\_\_
- What fraction of the total pets are owned by people who own 6 pets? \_\_\_\_\_
- What is the average number of pets people had? \_\_\_\_\_



## Review B

a) The graph below shows the number of students who play different instruments in the Carroll School band.

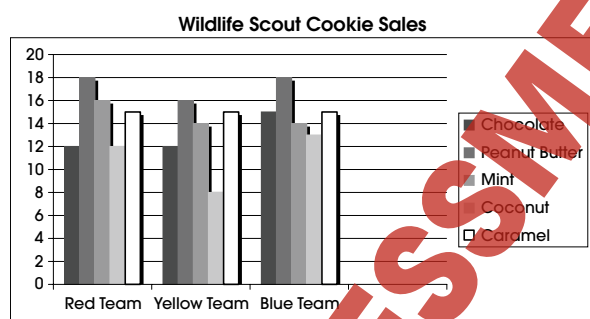


- How many total sixth graders are in the band? \_\_\_\_\_
- How many total seventh graders are in the band? \_\_\_\_\_
- What instrument is played by the greatest number of sixth and seventh graders? \_\_\_\_\_
- What instrument is played by the least number of sixth and seventh graders? \_\_\_\_\_
- What instrument is played by an equal number of sixth and seventh graders? \_\_\_\_\_
- How many more seventh graders play trombone than sixth graders? \_\_\_\_\_
- Which instrument is played by twice as many seventh graders as sixth graders? \_\_\_\_\_
- Which instrument is played by more sixth graders than seventh graders? \_\_\_\_\_
- What fraction of the sixth graders play clarinet? \_\_\_\_\_
- What fraction of the seventh graders play saxophone? \_\_\_\_\_
- What is the ratio of sixth grade flute players to sixth grade drum players? \_\_\_\_\_
- What is the ratio of seventh grade clarinet players to seventh grade trumpet players? \_\_\_\_\_
- What percent of the sixth graders play drums? \_\_\_\_\_
- What percent of the seventh graders play trumpet? \_\_\_\_\_
- What percent of the total sixth and seventh graders play flute? \_\_\_\_\_
- What percent of the total sixth and seventh graders play saxophone? \_\_\_\_\_



## Review C

a) The following column chart shows the number of boxes of each type of cookie sold for three different groups at the Wildlife Scout cookie sale.



- How many total cookie sales did the Red Team have? \_\_\_\_\_
- How many total cookie sales did the Yellow Team have? \_\_\_\_\_
- How many total cookie sales did the Blue Team have? \_\_\_\_\_
- Forty percent of the cookie sales for the Blue Team were for which two cookies? \_\_\_\_\_
- Thirty four cookie sales for the Red Team were which two varieties? \_\_\_\_\_
- The Yellow Team had twice as many Peanut Butter cookie sales as sales of which cookie? \_\_\_\_\_
- The Yellow Team and Red Team both had 12 of which cookie sales? \_\_\_\_\_
- The three teams had equal sales for which type of cookie? \_\_\_\_\_
- The Red Team had an equal number of which cookies sold? \_\_\_\_\_
- The Blue Team has a 1:1 ratio in which two cookie sales? \_\_\_\_\_
- What is the ratio in Mint Cookie sales between the Yellow Team and Blue Team? \_\_\_\_\_
- Twenty percent more of which cookies were sold by the Red Team than Caramel cookies? \_\_\_\_\_
- Which team had the smallest number of sales for one type of cookie? \_\_\_\_\_
- What is the ratio of Peanut Butter sales to Chocolate sales for the red team? \_\_\_\_\_
- There is one less total sales of which cookies than there were total sales of Caramel cookies for all three teams? \_\_\_\_\_
- What is the average number of Chocolate cookie sales for all three teams? \_\_\_\_\_

## Probability

As a class or in small groups, roll 2 dice 12 times and record your results below.

a) List the 2-dice combinations you rolled below.

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

b) For each 2-dice combination listed above, list the other different 2-dice combinations you could roll to get that same total.

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

c) For each 2-dice combination listed in section a), list the probability of rolling the total number using any 2 dice.

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

d) List the probability of rolling the following totals with 2 dice.

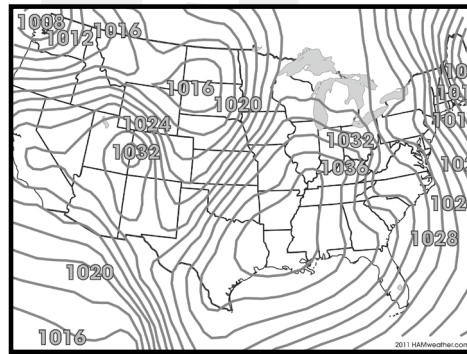
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

NAME: \_\_\_\_\_



**17a) Look at the following weather predications for the month of March below.**

**Ex: What is the median high temperature predicted for all five cities?**  
**51°F (10.6°C)**



City	Predicted High	Predicted Low	Sky at day	Chance of precipitation
Chicago	34°F (1.1°C)	28°F (-2.2°C)	Mostly cloudy	25% chance of rain
Vancouver	51°F (10.6°C)	40°F (4.6°C)	Mostly sunny	5% chance of rain
Los Angeles	75°F (23.9°C)	58°F (14.4°C)	Mostly sunny	10% chance of rain
New York	36°F (2.2°C)	25°F (-3.9°C)	Cloudy	80% chance of snow
Orlando	82°F (27.8°C)	60°F (15.6°C)	Mostly cloudy	70% chance rain

- i) Which city has the lowest predicted high temperature? \_\_\_\_\_
- ii) Which city has the highest predicted low temperature? \_\_\_\_\_
- iii) Which city is least likely to see precipitation? \_\_\_\_\_
- iv) Which city is most likely to see precipitation? \_\_\_\_\_
- v) Which city is most likely to see rain? \_\_\_\_\_
- vi) What is the average predicted high for all five cities? \_\_\_\_\_
- vii) What is the average predicted low for all five cities? \_\_\_\_\_
- viii) What is the median temperature predicted for all five cities? \_\_\_\_\_
- ix) What is the range in predicted high temperatures? \_\_\_\_\_
- x) What is the range in predicted low temperatures? \_\_\_\_\_
- xi) Which city is likely to see the most clouds? \_\_\_\_\_
- xii) What is the ratio between Los Angeles predicted high and New York's predicted low in Fahrenheit? \_\_\_\_\_
- xiii) The predicted high for Chicago is lower than the predicted low of which three cities? \_\_\_\_\_
- xiv) Which city's predicted high is 3°F (19.5°C) more than twice the predicted high of New York? \_\_\_\_\_
- xv) What is the mean predicted temperature for Orlando? \_\_\_\_\_
- xvi) What is the mean predicted low of Chicago and Los Angeles? \_\_\_\_\_

**17.**

- a)**
- i) Chicago
  - ii) Orlando
  - iii) Vancouver
  - iv) New York
  - v) Orlando
  - vi) 55.6°F (13.12°C)
  - vii) 42.2°F (28.5°C)
  - viii) 45.5°F (7.6°C) median
  - ix) 48°F (26.7°C) range
  - x) 35°F (19.5°C) range
  - xi) New York
  - xii) 3:1
  - xiii) Vancouver, Los Angeles and Orlando
  - xiv) Los Angeles
  - xv) 71°F (21.7°C)
  - xvi) 43°F (6.1°C)

**Review A**

- a)**
- i) 20 students
  - ii) 2 students
  - iii) 4 students
  - iv) 6 students
  - v) 0, 4 and 5 pets
  - vi) 10%
  - vii) 5%
  - viii) 1/5
  - ix) 1 pet
  - x) 1 pet
  - xi) 2 pets
  - xii) 3:1
  - xiii) 54 pets
  - xiv) 1/6
  - xv) 1/9
  - xvi) 2.7 pets

**Review B**

- a)**
- i) 25 students
  - ii) 30 students
  - iii) Flute
  - iv) Drum
  - v) Drum
  - vi) 1 more
  - vii) Trumpet
  - viii) Clarinet
  - ix) 1/5
  - x) 1/6
  - xi) 2:1
  - xii) 2:3
  - xiii) 12%
  - xiv) 20%
  - xv) 23.6%
  - xvi) 16.4%

**Review C**

- a)**
- i) 61 sales
  - ii) 51 sales
  - iii) 75 sales
  - iv) Chocolate and Caramel
  - v) Peanut Butter and Mint
  - vi) Coconut
  - vii) Chocolate
  - viii) Caramel
  - ix) Chocolate and Coconut
  - x) Chocolate and Caramel
  - xi) 1:1
  - xii) Peanut Butter
  - xiii) Yellow Team
  - xiv) 3:2
  - xv) Mint
  - xvi) 13 sales

**EASY MARKING ANSWER KEY**

