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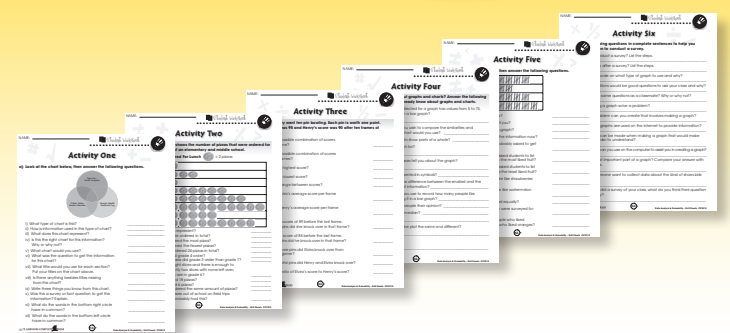
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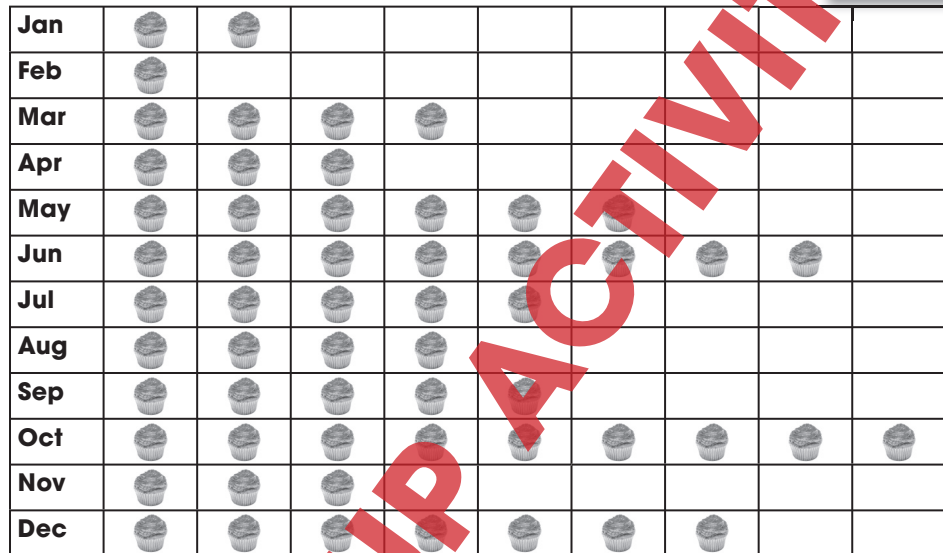
NAME: \_\_\_\_\_

Warm-Up Drill Sheet # 1



1a) The pictograph below shows the number of birthdays the students of Mr. Lee's class have each month.

Ex: How many more students have an October birthday than a January birthday? **7 more students**



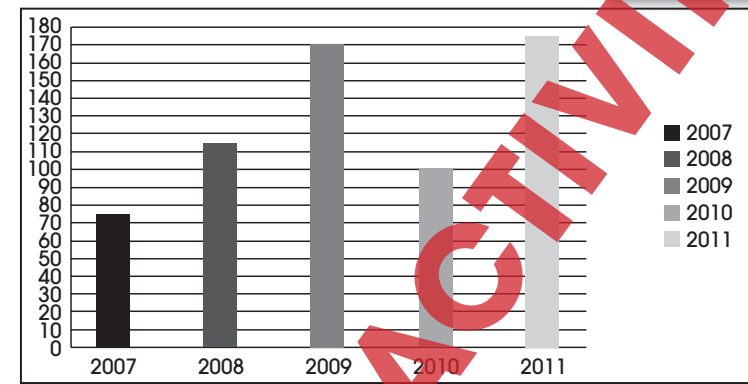
- How many months are shown on this pictograph? \_\_\_\_\_
- Which month had the greatest number of birthdays? \_\_\_\_\_
- Which month had the fewest birthdays? \_\_\_\_\_
- Which winter month had the most birthdays? \_\_\_\_\_
- Which summer month had the most birthdays? \_\_\_\_\_
- How many students have a birthday the same month as you? \_\_\_\_\_
- How many more students have a December birthday than a November birthday? \_\_\_\_\_
- What two consecutive months have a total of 7 birthdays? \_\_\_\_\_
- August has twice as many birthdays as which month? \_\_\_\_\_
- How many total birthdays are found in the second half of the year? \_\_\_\_\_
- How many more birthdays are in September than August? \_\_\_\_\_
- What months have only five student birthdays? \_\_\_\_\_

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

Warm-Up Drill Sheet # 2



4a) The graph below shows the number of books sold at a book fair from 2007 to 2011.



- How many books were sold at the book fair? \_\_\_\_\_
- How many books were sold in 2007? \_\_\_\_\_
- How many books were sold in 2008? \_\_\_\_\_
- How many books were sold in 2009? \_\_\_\_\_
- How many books were sold in 2010? \_\_\_\_\_
- How many more books were sold in 2008 than in 2007? \_\_\_\_\_
- How many more books were sold in 2009 than in 2008? \_\_\_\_\_
- How many fewer books were sold in 2010 than in 2009? \_\_\_\_\_
- How many more books were sold in 2008 and 2009 than in 2007? \_\_\_\_\_
- How many books were sold in 2011? \_\_\_\_\_
- How many more books are expected to sell in 2011 than in 2010? \_\_\_\_\_
- What year sold the most books? \_\_\_\_\_
- What year sold the fewest books? \_\_\_\_\_
- What two years sold the most overall? \_\_\_\_\_
- What two years sold the fewest overall? \_\_\_\_\_

Timed Drill Sheet # 4

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



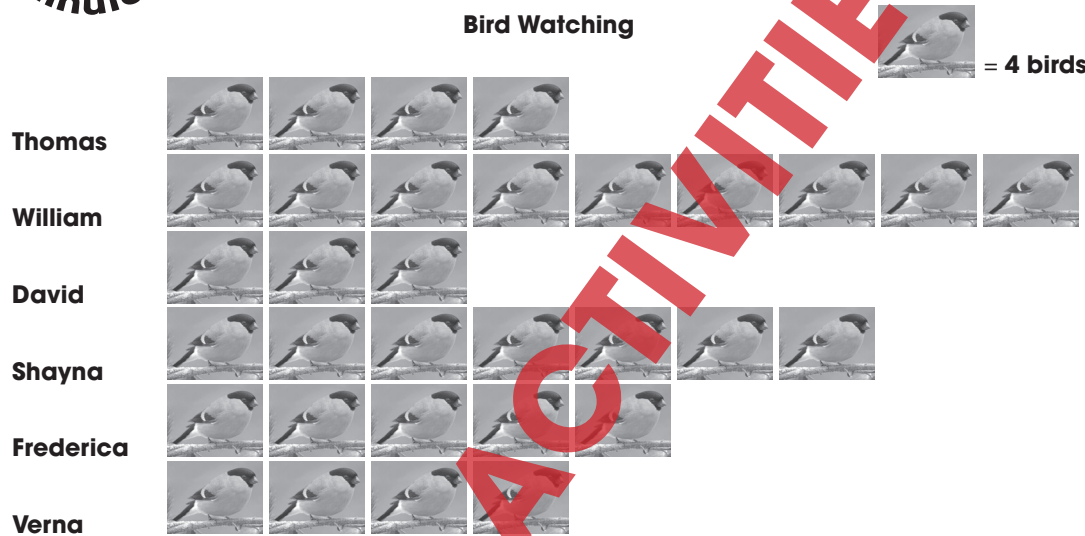
6a) The pictograph below shows the number of birds each student saw on their bird watching trip.

Ex: Who saw 16 birds? **Thomas and Verna**

**Thomas and Verna**



**1 bird = 4 birds**



- How many birds did Thomas see? \_\_\_\_\_
- How many birds did William see? \_\_\_\_\_
- How many birds did Shayna see? \_\_\_\_\_
- How many birds did Verna see? \_\_\_\_\_
- Who saw the most birds? \_\_\_\_\_
- Who saw the fewest birds? \_\_\_\_\_
- How many more birds did Frederica see than Verna? \_\_\_\_\_
- How many more birds did William see than David? \_\_\_\_\_
- How many total birds did Thomas and Shayna see? \_\_\_\_\_
- Who saw 12 birds? \_\_\_\_\_
- Who saw 20 birds? \_\_\_\_\_
- How many total birds were seen? \_\_\_\_\_

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

Timed Drill Sheet # 7



11a) Each letter of the word **MATHEMATICS** is written on a card and placed in a cloth bag. Cards are chosen at random from the bag. Find the probability that the card chosen will be the following.



Ex: The letter "M" or "A". **4 in 11**

- The letter "A". \_\_\_\_\_
- The letter "C". \_\_\_\_\_
- The letter "E". \_\_\_\_\_
- The letter "M". \_\_\_\_\_
- The letter "T". \_\_\_\_\_
- The letter "I". \_\_\_\_\_
- The letter "H". \_\_\_\_\_
- The letter "S". \_\_\_\_\_
- A vowel. \_\_\_\_\_
- A consonant. \_\_\_\_\_
- A letter between A and M. \_\_\_\_\_
- A letter between N and Z. \_\_\_\_\_



### Review A

a) The following numbers are placed in a bag. When choosing a number from the bag, what is the probability that the following will happen?

5 2 7 5 8  
4 8 9 3 6

- i) What numbers are you mostly likely to choose? \_\_\_\_\_
- ii) What numbers are you least likely to choose? \_\_\_\_\_
- iii) What is the ratio of 7's to 5's? \_\_\_\_\_
- iv) How many odd numbers could be chosen? \_\_\_\_\_
- v) How many even numbers could be chosen? \_\_\_\_\_
- vi) What is the probability of choosing an odd number? \_\_\_\_\_
- vii) What is the probability of choosing an even number? \_\_\_\_\_
- viii) What numbers are less likely to be chosen than an 8? \_\_\_\_\_
- ix) What numbers are more likely to be chosen than a 3? \_\_\_\_\_
- x) What is the probability of choosing a two digit number? \_\_\_\_\_
- xi) What is the probability of choosing a single digit number? \_\_\_\_\_
- xii) What is the ratio of odd numbers to even numbers? \_\_\_\_\_



### Review B

a) Tad rolled two standard dice twelve times. He calculated the total number of each two-dice combination and wrote down his results in the chart below.

| Roll | Total | Roll | Total | Roll | Total |
|------|-------|------|-------|------|-------|
| 1    | 5     | 5    | 7     | 9    | 8     |
| 2    | 7     | 6    | 9     | 10   | 5     |
| 3    | 11    | 7    | 2     | 11   | 7     |
| 4    | 6     | 8    | 12    | 12   | 9     |

- i) Which total did Tad roll the most? \_\_\_\_\_
- ii) Which totals did Tad roll the least? \_\_\_\_\_
- iii) How many odd numbered totals did Tad roll? \_\_\_\_\_
- iv) How many even numbered totals did Tad roll? \_\_\_\_\_
- v) How many times did Tad roll a 5? \_\_\_\_\_
- vi) What are two possible dice pairs Tad could have rolled for Roll 12? \_\_\_\_\_
- vii) What are two possible dice pairs Tad could have rolled for Roll 4? \_\_\_\_\_
- viii) According to these results, which total is Tad most likely going to roll? \_\_\_\_\_
- ix) What fraction of the rolls were even numbers? \_\_\_\_\_
- x) What fraction of the rolls were odd numbers? \_\_\_\_\_
- xi) What two-dice combination numbers were not rolled? \_\_\_\_\_
- xii) How many rolls did it take for Tad to roll an even number? \_\_\_\_\_



### Review C

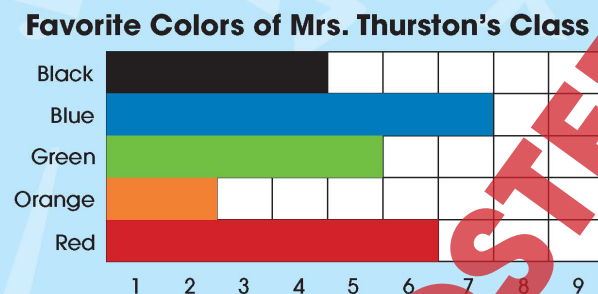
a) A standard dart board is shown to the right.



- i) What is the probability of hitting any number on the dart board? \_\_\_\_\_
- ii) What is the probability of hitting a number on the bottom half of the dart board? \_\_\_\_\_
- iii) Is it likely, unlikely, certain, impossible to hit a bull's-eye? \_\_\_\_\_
- iv) Is it likely, unlikely, certain, impossible to hit a bull's-eye five times in a row? \_\_\_\_\_
- v) Is it likely, unlikely, certain, or impossible to hit an even number 5 times out of ten shots? \_\_\_\_\_
- vi) What is the probability of hitting an odd number, not including the bulls-eye? Explain as a ratio. \_\_\_\_\_
- vii) What is the probability of hitting an even number not including a bulls-eye? Explain as a ratio. \_\_\_\_\_
- viii) If the score of the first five shots was 86, what numbers did the shooter hit? Show one way. \_\_\_\_\_
- ix) If the score of the first three shots was 42, what numbers did the shooter hit? Show one way. \_\_\_\_\_
- x) If the score of the first four shots was 36, what numbers did the shooter hit? Show one way. \_\_\_\_\_
- xi) If the score of the first two shots was 21, what numbers did the shooter hit? Show one way. \_\_\_\_\_
- xii) If the score of the first six shots was 79, what numbers did the shooter hit? Show one way. \_\_\_\_\_

### Survey

The chart below shows the favorite colors of the students in Mrs. Thurston's class.



- i) How many students were surveyed for this graph? \_\_\_\_\_
- ii) What color was the most popular favorite color? \_\_\_\_\_
- iii) What color was the least popular color? \_\_\_\_\_
- iv) How many more students chose blue than black? \_\_\_\_\_
- v) How many more students chose green than orange? \_\_\_\_\_
- vi) How many total students chose green and black? \_\_\_\_\_
- vii) What fraction of students chose black? \_\_\_\_\_
- viii) What fraction of students chose red? \_\_\_\_\_
- ix) What is the ratio of students who chose orange to students who chose green? \_\_\_\_\_
- x) What is the ratio of students who chose blue to students who chose red? \_\_\_\_\_
- xi) A total of eight students chose which two colors as their favorites? \_\_\_\_\_
- xii) Two fewer students chose what color than black? \_\_\_\_\_

**Reflection** Conduct the same survey in your class. Complete the questions above using your own survey results.

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



17a) Four students competed to see who could throw a ball the farthest.



| Student          | Amanda           | Winston          | Christian        | Martina          |
|------------------|------------------|------------------|------------------|------------------|
| <b>1st Throw</b> | 11 ft<br>(3.4 m) | 11 ft<br>(3.4 m) | 12 ft<br>(3.7 m) | 9 ft<br>(2.7 m)  |
| <b>2nd Throw</b> | 10 ft<br>(3 m)   | 12 ft<br>(3.7 m) | 15 ft<br>(4.6 m) | 11 ft<br>(3.4 m) |
| <b>3rd Throw</b> | 10 ft<br>(3 m)   | 18 ft<br>(5.5 m) | 17 ft<br>(5.2 m) | 13 ft<br>(4 m)   |

There are two ways the students can win.  
**1st - distance per throw**  
**2nd - overall distance of all throws**

- i) What was the total distance that Winston threw the ball? \_\_\_\_\_
- ii) What was the total distance that Amanda threw the ball? \_\_\_\_\_
- iii) What was the total distance that Christian threw the ball? \_\_\_\_\_
- iv) What was the total distance that Martina threw the ball? \_\_\_\_\_
- v) Who won for distance in each throw? \_\_\_\_\_
- vi) Who won for overall distance for throwing the ball? \_\_\_\_\_
- vii) Who had the largest difference between the first throw and last throw? \_\_\_\_\_
- viii) Who actually threw better on the first throw than the last throw? \_\_\_\_\_
- ix) How much farther was Winston's last throw than Christian's last throw? \_\_\_\_\_
- x) How much farther was Martina's second throw than Amanda's second throw? \_\_\_\_\_
- xi) What two students threw the ball the same distance during one round? \_\_\_\_\_
- xii) Which student saw his or her score increase by two feet during each round of throws? \_\_\_\_\_

**17.**

- a)
  - i) 41 ft (12.6 m)
  - ii) 31 ft (9.4 m)
  - iii) 44 ft (13.5 m)
  - iv) 33 ft (10.1 m)
  - v) Christian for throw 1 and 2; Winston for throw 3.
  - vi) Christian
  - vii) Winston
  - viii) Amanda
  - ix) 1 ft (0.3 m)
  - x) 1 ft (0.4 m)
  - xi) Amanda and Winston
  - xii) Martina

**Review A**

- a)
  - i) 5 or 8
  - ii) 2, 3, 4, 6, 7 or 9
  - iii) 1:2
  - iv) 5
  - v) 5
  - vi) 5 in 10 or 1 in 2
  - vii) 5 in 10 or 1 in 2
  - viii) 2, 3, 4, 6, 7 or 9
  - ix) 5 or 8
  - x) 0 in 10
  - xi) 10 in 10 or 1 in 1
  - xii) 5:5 or 1:1

**Review B**

- a)
  - i) 7
  - ii) 2, 6, 8, 11 and 12
  - iii) 8
  - iv) 4
  - v) 2 times
  - vi) Answers may vary. Possible answers include: 5, 4 or 6, 3
  - vii) Answers may vary. Possible answers include: 3, 3 or 5, 1
  - viii) 7
  - ix) 1/3
  - x) 2/3
  - xi) 3, 4 and 10
  - xii) 4 rolls

**Review C**

- a)
  - i) 1 in 21
  - ii) 2 in 21
  - iii) unlikely
  - iv) likely
  - v) likely
  - vi) 1:2
  - vii) 1:2
  - viii) Answers may vary. Possible answer includes: 20, 20, 20, 10, 16
  - ix) Answers may vary. Possible answer includes: 10, 20, 12
  - x) Answers may vary. Possible answer includes: 10, 10, 10, 6
  - xi) Answers may vary. Possible answer includes: 10, 11
  - xii) Answers may vary. Possible answer includes: 20, 20, 10, 10, 10, 9

**EASY MARKING ANSWER KEY**