## Wrong is Right

Object of the Game: Win the most points by choosing the wrong answers.
How many can play?: Pairs

## Materials:

- Wrong is Right cards
- Special die with only $1,2,3$ (or you can use a regular die and $1 \& 2$ count as $1,3 \& 4$ count as $2,5 \& 6$ count as 3 ).
- Different color dry erase marker for each player


## To play:

Place the cards in a stack, where everyone can reach them. Player One rolls the 1-2-3 die. The player uses his/her color pen to scratch out the number of wrong answers that correspond with the roll of the die.

- Roll a 1 - scratch out 1 wrong answer
- Roll a 2 - scratch out 2 wrong answers
- Roll a 3 - scratch out 3 wrong answers

If Player One rolls a 1 - Then Player Two can scratch out 1 wrong answer with his/her color marker. Then player 1 can scratch out the remaining wrong answer with his/her color marker.

If Player One rolls a 2, then Player two can scratch out the remaining wrong answer with his/her color marker.

Once all the wrong answers have been scratched out, check the answer on the key. Players earn one point for each wrong answer they scratch. If a player accidentally scratches out the correct answer, he/she earns no points for that round (even if they did already scratch out some wrong answers). Keep score on the dry erase board. Then it is Player 2's turn to roll the dice.

Play until there are no more cards or until you run out of time. The cards are two-sided so be sure to play both sides.

## To win:

Winner is the one with the most points at the end of the game.

Printing: landscape, black \& white, 2-sided, laminate for dry erase

Unit: $4^{\text {th }}-$ Measurement \& Data Analysis

### 4.9.A - 4.9B - Represent Data and Solve Problems

## Wrong is Right

Note: Some parts of these materials are taken directly from released STAAR tests Copyright © 2015-2021. Texas Education Agency. All Rights Reserved. Used by Permission.


1. The table shows the heights in inches of the students in Mr. Garrison's class. Mr. Garrison made this dot plot to show the heights of his students. The dot plot is incomplete.

Student Heights

| Height <br> (inches) | Number of <br> Students |
| :---: | :--- |
| 53 | $\\|$ |
| 54 | $\mid$ |
| 55 | 卅 |
| 56 | 卅 $\\|$ |
| 57 | $\\|\\|$ |
| 58 | $\mid$ |
| 59 | $\\|$ |



Which height in inches is missing a data point on the dot plot?
A. 53
B. 55
C. 57
D. 59

2．The list gives information about the favorite color of each of 22 students．
－ 6 students chose red．
－ 2 students chose yellow．
－ 5 more students chose blue than yellow．
－ 3 fewer students chose purple than red．
－The rest of the students chose green．
Which frequency table represents the number of students who chose each color？

A． \begin{tabular}{|c|l|}
\hline \multicolumn{2}{|c|}{ Favorite Color } <br>

\hline Color \& | Number of |
| :---: |
| Students | <br>

\hline Red \& 册｜ <br>
\hline Yellow \& $\|$ <br>
\hline Blue \& 册 <br>
\hline Purple \& $\|\|$ <br>
\hline Green \& 册｜ <br>
\hline
\end{tabular}

C．

| Favorite Color |  |
| :---: | :---: |
| Color | Number of Students |
| Red | \＃ 1 |
| Yellow | ｜｜ |
| Blue | 冊｜｜ |
| Purple | III |
| Green | \＃ 1 |

B．

| Favorite Color |  |
| :---: | :---: |
| Color | Number of Students |
| Red | 冉｜ |
| Yellow | ｜｜ |
| Blue | 冊｜｜ |
| Purple | III |
| Green | ｜III |


| Favorite Color |  |
| :---: | :--- |
| Color | Number of <br> Students |
| Red | 哂 I |
| Yellow | \｜I |
| Blue | 哂 哂 I |
| Purple | III |
| Green | 册 册 |

3. The list shows the number of articles written by different reporters at a newspaper last month.

$$
6,2,5,2,6,0,4,6,1,8,5,2,6,4,2
$$

Which dot plot displays the same data?

Articles Written by Reporters
Articles Written by Reporters
A.

C.


Articles Written by Reporters
D.

4. The frequency table shows the number of times some people visited a movie theater last year.

Movie Theater Visitors

| Number of <br> Visits | Number of <br> People |
| :---: | :--- |
| $1-5$ | III |
| $6-10$ | 册 |
| $11-15$ | 册 |
| $16-20$ | III |

Which set of data could the frequency table represent?
A. $1,2,2,3,6,7,7,9,12,12,12,14,17,18,20$
B. $0,2,4,5,6,6,7,8,9,11,11,13,14,15,20,20,20$
C. $1,5,6,10,11,15,16,20,4,5,5,3$
D. $2,2,4,5,6,6,7,8,9,11,11,13,14,15,20,20,20$
5. The stem and leaf plot shows the scores given to the dogs at a dog show. Possible scores were between 0.1 and 5.0.

## Dog show Scores

| Stem | Leaf |
| ---: | :--- |
| 0 | 8 |
| 1 | 25 |
| 2 | 248 |
| 3 | 03368 |
| 4 | 055 |

1|5 means a score of 1.5.

What is the difference between the highest and lowest score shown in the stem and leaf plot?
A. 4.3
B. 3.7
C. 0.25
D. 0.47
6. The frequency table shows the favorite school lunches of some of the students. The table is missing the information for the number of students who like hamburgers best.

Favorite School Lunches

| Lunch Choice | Tally | Frequency |
| :---: | :---: | :---: |
| Pizza |  | 32 |
| Hamburger |  |  |
| Chicken | 册 \# \# \||l | 13 |

The number of students who chose a hamburger is half the number of students who chose pizza. How many students chose a hamburger or chicken as their favorite school lunch?
A. 29
B. 16
C. 48
D. 45
7. Students pushed toy cars to see how far they would roll. The table shows the number of cars that rolled different distances.

## Toy Cars

| Distance (feet) | $\frac{1}{2}$ | 1 | $1 \frac{1}{2}$ | 2 | $2 \frac{1}{2}$ | 3 | $3 \frac{1}{2}$ | 4 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of cars | 1 | 2 | 0 | 4 | 7 | 1 | 2 | 1 |

Which dot plot represents the data in the table?

Toy Cars
A.


Toy Cars
B.

C.


Toy Cars
D.

8. The table shows the total numbers of runs different baseball teams scored in one season. Which stem and leaf plot matches the information in the table?

Baseball Runs Scored

| Team | Total Number of Runs <br> Scored |
| :---: | :---: |
| R | 61 |
| S | 92 |
| T | 100 |
| U | 65 |
| V | 72 |
| X | 64 |


| A. Baseball Runs Scored |  | B. <br> Baseball Runs Scored |  | C. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Baseball R | uns Scored |
| Stem | Leaf |  |  | Stem | Leaf | Stem | Leaf |
| 6 | 1 | 6 | 145 | 6 | 145 |
| 9 | 2 | 7 | 2 | 7 | 2 |
| 10 | 0 | 8 | 4 | 8 | 4 |
| 6 | 5 | 9 | 2 | 9 | 2 |
| 7 | 2 | 10 | 0 | 10 |  |
| 6 | 4 |  |  |  |  |
| 8 | 4 | 6\|1 mean | s 61 runs | 6\|1 mean | s 61 runs |

9. The list shows the lengths of twelve strings in inches.

$$
26,30,19,21,24,26,18,31,27,21,17,29
$$

Which plot represents the data in the list?

C.

B.

String Lengths

| Stem | Leaf |
| ---: | :--- |
| 1 | 789 |
| 2 | 1146679 |
| 3 | 1 |

D. String Lengths

| Stem | Leaf |
| ---: | :--- |
| 1 | 789 |
| 2 | 1146679 |
| 3 | 01 |

1|8 means 18 inches
1|8 means 18 inches
10. A candy store sells fudge by the pound. The dot plot shows the number of customers who bought different numbers of pounds of fudge on Saturday.

## Fudge Sold on Saturday



Which frequency table represents the same data as the dot plot?
A.

| Weight (lb) | $1 / 2$ | 1 | $11 / 2$ | 2 | $21 / 2$ | 3 | $31 / 2$ | 4 | $41 / 2$ | 5 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tally | $\mid$ | $\|\|\|\mid$ | $\\|$ | $\\|\\|$ |  | $\|\|\|\mid$ | $\\|$ | $\\|\\|$ |  | $\mid$ |

B.

| Weight (lb) | 1 | 4 | 2 | 3 | 0 | 4 | 2 | 3 | 0 | 1 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tally | $\mid$ | $\|\|\|\|\mid$ | $\\|$ | $\\|\\|$ |  | $\|\|\|\mid$ | $\\|$ | $\\|\\|$ |  | $\mid$ |

C.

| Weight (lb) | $1 / 2$ | 1 | $11 / 2$ | 2 | $21 / 2$ | 3 | $31 / 2$ | 4 | $41 / 2$ | 5 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tally | $\mid$ | $\\|\\|\\|$ | $\\|$ | $\\|\\|$ | $\mid$ | $\\|\\|\\|$ | $\\|$ | $\\|\\|$ | $\mid$ | $\mid$ |

D.

| Weight (lb) | $1 / 2$ | 1 | $11 / 2$ | 2 | $21 / 2$ | 3 | $31 / 2$ | 4 | $41 / 2$ | 5 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tally | $\mid$ | \||||| | $\\|$ | $\\|\\|$ | \|||| | $\\|$ | $\|\|\mid$ | $\mid$ |  |  |

11. Karnika recorded the number of minutes she practiced volleyball each week for several weeks. She used a stem and leaf pot to organize the data.

Volleyball Practice Time

| Stem | Leaf |
| ---: | :--- |
| 14 | 022 |
| 15 | 55 |
| 16 | 0 |

14|2 means 142 minutes.

Based on the data, what is the amount of time in minutes Karnika practiced volleyball?
A. 894 min
B. 597 min
C. 594 min
D. 1,224 min
12. The stem and leaf plot shows the number of miles members of the walking club walked last week.

| Miles Walked |  |
| ---: | :--- |
| Stem | Leaf |
| 1 | 7 |
| 2 | $0,2,2,3,6,7$ |
| 3 | $2,3,5,5,7,7,7,9,9$ |
| 4 | $0,1,1,2$ |

$$
1 \mid 7 \text { means } 17 \text { miles. }
$$

What is the difference between the most miles walked and the least miles walked as shown in the stem and leaf plot?
A. 27
B. 25
C. 15
D. 17
13. The table shows the number of pets that each student in Mrs. Morris's class owns. Which dot plot represents the data in the table?
C. Students' Pets


| Number of <br> pets | Frequency |
| :---: | :---: |
| 0 | \# |
| 1 | $\\|\\|$ |
| 2 | \# \\| \| |
| 3 | $\\|$ |
| 4 | $\mid$ |
| 5 | $\\|$ |


4.9.A - 4.9B - Represent Data and Solve Problems - Wrong is Right
14. The stem and leaf plot shows the numbers of tickets Stephen won when he played games at a carnival.

| Number of Tickets Won |  |
| :---: | :---: |
| Stem | Leaf |
| 8 | 48 |
| 9 | 068 |
| 10 | 55 |
| 11 | 7 |
| 9\|6 means 96 tickets |  |

What is the total number of tickets that Stephen won at the carnival?
A. 783
B. 178
C. 81
D. 678
15. The table shows the heights in inches of the students in Mr. Gurley's class. Mr. Gurley made this dot plot to show the heights of his students. The dot plot is incomplete.

Student Heights

| Height <br> (inches) | Number of <br> Students |
| :---: | :--- |
| 53 | $\\|$ |
| 54 | I |
| 55 | 哂 |
| 56 | 哂 \\| |
| 57 | $\\|\\|$ |
| 58 | I |
| 59 | $\\|$ |



Which height in inches is missing a data point on the dot plot?
A. 54
B. 55
C. 57
D. 58

16．The list gives information about the favorite subject of 25 students．
－ 6 students chose reading
－ 9 students chose math
－ 4 more students chose reading than science．
－ 6 fewer students chose art than math．
－The rest of the students chose P．E．
Which frequency table represents the number of students who chose each subject？

A．

| Favorite Subject |  |
| :---: | :--- |
| Subject | Number of <br> Students |
| Reading | 哂 哂 |
| Math | 龶 IIII |
| Science | $\\|$ |
| Art | III |
| P．E． | 卅 |

C．

| Favorite Subject |  |
| :---: | :---: |
| Subject | Number of Students |
| Reading | 冊｜ |
| Math | 冊｜｜｜｜ |
| Science | \｜ |
| Art | III |
| P．E． | 冉 |

B．

| Favorite Subject |  |
| :---: | :---: |
| Subject | Number of <br> Students |
| Reading | 胦｜ |
| Math | 䏔 IIII |
| Science | IIII |
| Art | IIII |
| P．E． | 卅 |

D．

| Favorite Subject |  |
| :---: | :--- |
| Subject | Number of <br> Students |
| Reading | 哂 I |
| Math | 册 卅 |
| Science | III |
| Art | III |
| P．E． | 册 |

17. The frequency table shows the favorite pets of some of the students. The table is missing the information for the number of students who chose cats as their favorite.

Favorite Pets

| Pet | Tally | Frequency |
| :---: | :---: | :---: |
| Dogs |  | 43 |
| Cats |  |  |
| Lizards | \#\#1III | 9 |

The number of students who chose cats is four times the number of students who chose lizards. How many students chose a dog or cat as their favorite pet?
A. 36
B. 79
C. 52
D. 45
18. Jordy bought a sack of potatoes and weighed each potato. The potatoes weighed between 5 and 10 ounces each. The Stem and Leaf plot shows the weights of the potatoes.

## Potato Weights

| Stem | Leaf |
| ---: | :--- |
| 5 | $2,2,4,7,8$ |
| 6 | $2,3,7,8$ |
| 7 | $0,3,5,8,8$ |
| 8 | $1,2,3,7$ |
| 9 | 0,2 |

5|6 means 5.6 ounces.

What is the difference between the weight of the heaviest and lightest potao?
A. 3.4 ozs
B. 0.4 ozs
C. 4.0 ozs
D. 40 ozs
19. The Baylor Football team loves oranges. The following shows the number of oranges eaten yesterday by different members of the Baylor football team.

$$
5,1,4,1,5,4,3,5,0,7,4,1,5,3,1
$$

Which dot plot displays the same data?

20. The frequency table shows the points students earned in the summer reading program last year.

Summer Reading Program
Points

| Number of <br> points | Number of <br> readers |
| :---: | :--- |
| Less than 50 | IIII |
| $51-75$ | IIII |
| $76-100$ | Nㅔ \| |
| 101 or more | ⿻⺆ \| |

Which set of data could the frequency table represent?
А. 11,78,83,87,87,90,91,92,92,93,97,101,107,111,112,113,115,133,138
B. $11,22,39,46,54,55,59,68,78,83,87,87,90,91,111,112,113,115,133,138$
C. $54,55,59,68,78,83,87,87,90,91,111,112,113,115,133,138,212,232,252$
D. $11,22,39,46,54,55,59,68,111,112,113,115,128,132,133,138,145,153$
21. Scientists studied inch worms to see how far they could inch in 5 minutes in freezing temperatures. The chart shows the results. Inch Worms

| Distance (feet) | $\frac{1}{2}$ | 1 | $1 \frac{1}{2}$ | 2 | $2 \frac{1}{2}$ | 3 | $3 \frac{1}{2}$ | 4 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of inch worms | 3 | 1 | 3 | 3 | 3 | 3 | 2 | 2 |

Which dot plot represents the data in the table?
A.
Inch Worms
C.
Inch Worms

B. Inch Worms
D. Inch Worms

22. The table shows the field goal percentage for different players on a basketball team. Which stem and leaf plot shows the same information?

Field Goal Percentage

| Player | Field Goal \% |
| :---: | :---: |
| R. Woodard | 12 |
| Z. Collins | 49 |
| R. Langford | 43 |
| K. Diop | 51 |
| D. Murray | 46 |
| J. Poeltl | 61 |
| J. Wieskamp | 35 |

A.

Field Goal Percentage

| Stem | Leaf |
| ---: | :--- |
| 1 | 2 |
| 2 |  |
| 3 | 5 |
| 4 | $6,3,9$ |
| 5 | 1 |
| 6 | 1 |

B.

Field Goal Percentage

| Stem | Leaf |
| ---: | :--- |
| 1 | 12 |
| 2 |  |
| 3 | 35 |
| 4 | $49,43,46$ |
| 5 | 51 |
| 6 | 61 |

C.

Field Goal Percentage

| Stem | Leaf |
| ---: | :--- |
| 1 | $2,5,6$ |
| 2 |  |
| 3 | 4,5 |
| 4 | $6,3,9$ |
| 5 | 1,3 |
| 6 | 1,4 |

D.

Field Goal Percentage

| Stem | Leaf |
| ---: | :--- |
| 1 | 5,6 |
| 2 | 1 |
| 3 | 4 |
| 5 | 3 |
| 6 | 4 |
| 9 | 4 |

$\square$
5|1 means 51\%

23．Ms．Keller brought a giant teddy bear to class to be used as a class mascot．The students decided to give it a name．The table shows how many students voted for which name．

Names for the Class Bear

| Name | Tally |
| :--- | :---: |
| Ted | 册 |
| Bruno |  |
| Barry | 册 册 \｜ |

Ms．Keller forgot to write down the number of students who voted for the name＂Bruno，＂but it was twice as many as those who voted for the name＂Ted．＂Which name won and by how many votes？

A．Barry won by 2 votes

B．Bruno won by 5 votes
C．Ted won by 7 votes
D．Bruno and Barry tied
24. Veronica loves to read. She decided to keep track of how many pages a day she read for 20 days. She used a stem and leaf plot to organize the data.

| Pages Per Day |  |
| ---: | :--- |
| Stem | Leaf |
| 1 | $0,7,7,8$ |
| 2 | 0,6 |
| 3 |  |
| 4 | $2,5,5,7$ |
| 5 | $4,4,5,7,8$ |
| 6 | $0,1,3,8,9$ |
| $1 \mid 2$ means 12 pages |  |

Based on the stem and leaf plot how many days did she read 40 or more pages?
A. 0
B. 4
C. 14
D. 19
25. The list shows the ages of the first 12 people who came to see the new Batman movie on the first day it opened.

$$
26,30,19,21,24,26,18,31,27,21,17,29
$$

Which plot represents the data in the list?
A.


C. | Ages of Movie Goers |  |
| ---: | :--- |
| Stem | Leaf |
| 1 | 789 |
| 2 | 1146679 |
| 3 | 01 |

1|8 means 18 years old
B.

Ages of Movie Goers

| Stem | Leaf |
| ---: | :--- |
| 1 | 789 |
| 2 | 1146679 |
| 3 | 1 |
| $1 \mid 8$ means 18 years Old |  |

D.


26．A zoo has 30 spider Monkeys．The dot plot shows their weights．


Which frequency table represents the same data as the dot plot？

A． | Weight（lb） | 11 | $11 \frac{1}{2}$ | 12 | $121 / 2$ | 13 | $131 / 2$ | 14 | $14 \frac{1}{2}$ | 15 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tally |  | $\\|$ |  | 册｜ | 卅｜｜ | 龶｜ | $\\|$ | $\\|\| \|$ | ｜｜｜｜ |

B．


C．

| Weight（lb） | 11 | $11^{1 / 2}$ | 12 | $121 / 2$ | 13 | $131 / 2$ | 14 | $14^{1 / 2}$ | 15 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tally |  | \｜ | III | 册 | 冊｜ | 册 1 | ｜｜ | ｜｜I | ｜｜III |

D．

| Weight（lb） | 11 | $111 / 2$ | 12 | $121 / 2$ | 13 | $131 / 2$ | 14 | $141 / 2$ | 15 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tally |  | \｜ |  | 冊｜｜ | 冊｜｜ | 冊｜I | \｜ | III | ｜｜III |


| Bags of gold <br> captured | Number of <br> Days |
| :---: | :---: |
| 0 | $\\|$ |
| 1 |  |
| 2 | 册 |
| 3 | $\\|\\|\\|$ |
| 4 | $\\|$ |
| 5 | $\mid$ |

A. Number of Days


Bags of Gold Captured
B. Number of Days


Bags of Gold Captured
C. Number of Days

D. Number of Days

28. Fashionable Fiona has eight dresses with polka dots. She counted the dots on each dress and summarized the information in the stem and leaf plot below.

## Number of Polka Dots

| Stem | Leaf |
| ---: | :--- |
| 8 | 26 |
| 9 | 046 |
| 10 | 37 |
| 12 | 5 |

$9 \mid 6$ means 96 polka dots

What is the total number of polka dots on Fiona's dresses?
A. 72
B. 423
C. 783
D. 504
29. The stem and leaf plot shows the finishing time in seconds for the racers in the most recent 50-yard Wiener Dog Race at the fair.

| Wiener Dog Times |  |
| ---: | :--- |
| Stem | Leaf |
| 6 | 8 |
| 7 | 25 |
| 8 | 03368 |
| 9 | 248 |

$7 \mid 5$ means 7.5 seconds

What is the difference in time between the slowest wiener dog's time and the winning wiener dog's time?
A. 2.4 seconds
B. 3 seconds
C. 30 seconds
D. 0.7 seconds

30．Larry the Lizard Rancher is counting the lizards on his lizard ranch．

Lizards at the Lizard Ranch

| Type of Lizard | Tally | Frequency |
| :---: | :---: | :---: |
| Green Lizard |  |  |
| Spiny Lizard | 册 册 朋 \＃\＃1 | 21 |
| Alligator Lizard | \＃\＃册 册II | 17 |

It got dark before Larry had a chance to count the green lizards，but he knows he has twice as many green lizards as alligator lizards．How many lizards does Larry have in all？

A． 34

B． 38

C． 72

D． 83

