

Data & Graphing

No Prep Games

Roll & Spin STEM-AND-LEAF PLOTS with whole numbers

Roll a die to generate the tens place of your number. Spin the spinner to generate the ones place. Write down your number on scratch paper. If that number is represented on the stem-and-leaf plot, place one of your markers over the leaf of that number. If another player already has a marker on that leaf, you may remove their marker and put yours over it. The winner is the player who controls more leaves when time is up.

STEM	LEAVES
1	0 7 7 9
2	2 5 6 6 7
3	0 2 7 7 9 9
4	2 2 5 5 6
5	5 5 6 7 9
6	0 2 5

Key: $4|5 = 45$

Roll & Spin STEM-AND-LEAF PLOTS with fractions

Roll a die to generate the ones place of your number. Spin the spinner to generate the fraction. Write down your number on scratch paper. If that number is represented on the stem-and-leaf plot, place one of your markers over the leaf of that number. If another player already has a marker on that leaf, you may remove their marker and put yours over it. The winner is the player who controls more leaves when time is up.

STEM	LEAVES
1	$\frac{0}{4}$ $\frac{1}{2}$ $\frac{1}{2}$
2	$\frac{0}{4}$ $\frac{0}{4}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{3}{4}$
3	$\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$ $\frac{3}{4}$

Key: $1|\frac{1}{4} = 1\frac{1}{4}$

4th GRADE

MARVEL Math

Fun & Engaging Games

Your students will love playing

DECIMAL DOT PLOT

4.9A

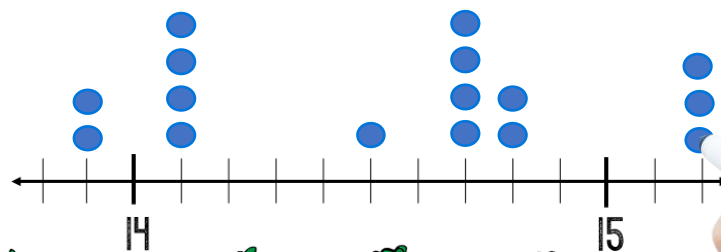
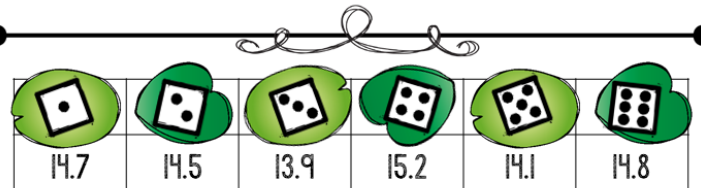


Materials: You will need 1 die and each player will need a different color dry-erase marker.

Player 1 rolls 1 die and finds the decimal value that corresponds to the number rolled. He/she places a dot on the dot plot for that value.

Player 2 repeats the same process, using a different color marker for his/her dots.

Play until 20 dots are on the dot plot. Look at each column of dots. The player with the most dots in the column controls that column. The player who controls the most columns wins that round. Play as many rounds as you can.



Print & Play

No cutting needed

DATA 3-in-a-row

Using Stem-and-Leaf Plots, Dot Plots & Frequency Tables

Player 1 places a chip on an open space on the gameboard and then rolls the die to select a set of data to use. Player 1 answers the question. If he or she is correct, the chip can stay on that space. Otherwise, that chip is removed. Players alternate turns until one player wins by controlling 3 boxes in a row!!!

Gameboard



What is the difference in hours between the shortest and longest movie?

What is the total length of all of the movies?

How long is the 2nd longest movie?

What is the sum in hours of the shortest and longest movies?

How many movies are longer than 2 hours?

What is the total length of all of the movies?

What is the difference in hours between the shortest and longest movie?

How many movies are less than 2 hours long?

How long is the 2nd longest movie?

What is the sum in hours of the shortest and longest movies?

How many movies are less than 2 hours long?

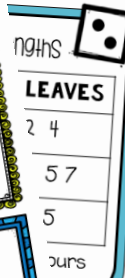
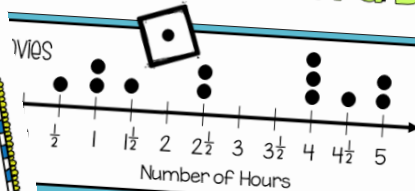
How many movies are longer than 2 hours?



DATA 3-in-a-row

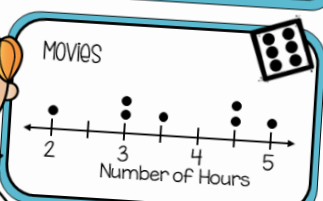
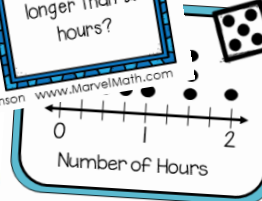
Using Stem-and-Leaf Plots, Dot Plots & Frequency Tables

Roll to Select a Data Set



Length in Hours	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5
Tally										

Length in Hours	1/2	1	1 1/2	2	2 1/2	3	3 1/2	4	4 1/2	5
Tally										



Color and Blackline Versions

For every game

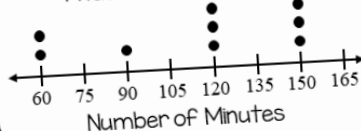
QUESTIONS ABOUT DATA

Using Stem-and-Leaf & Dot Plots

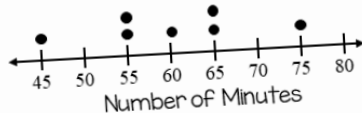
4.9B

Roll to Select a Data Set

Drama Team Practices



Basketball Team Practices



Length of each Volleyball Practice

STEM	LEAVES
5	1 4
6	2 3 9
7	3 5

Key: 514 = 54 minutes

Length of each Soccer Practice

STEM	LEAVES
6	5
7	4 5 5
9	0 0 0

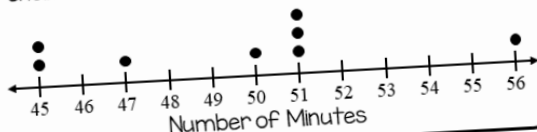
Key: 714 = 74 minutes

Length of each Math Team Practice

STEM	LEAVES
4	5 5
5	8 9
6	0 3 5

Key: 613 = 63 minutes

Choir Practices

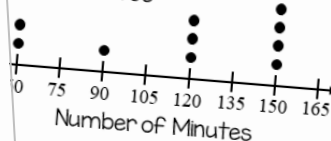


QUESTIONS ABOUT DATA

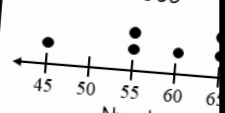
Using Stem-and-Leaf & Dot Plots

Roll to Select a Data Set

Drama Team Practices



Basketball Team Practices



Length of each Soccer Practice

STEM	LEAVES
5	1 4
6	2 3 9
7	3 5

54 minutes

Length of each Math Team Practice

STEM	LEAVES
6	5
7	4 5 5
9	0 0 0

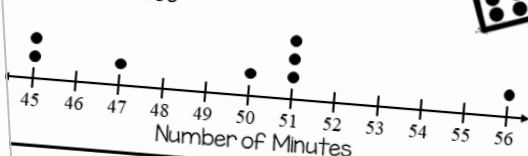
Key: 714 = 74 minutes

Length of each Soccer Practice

STEM	LEAVES
5	1 4
6	2 3 9
7	3 5

Key: 613 = 63 minutes

Choir Practices



All Games Have Keys

to help you make
self-checking math stations

Roll & Spin
STEM-AND-LEAF PLOTS
with whole numbers

Roll a die to generate the tens place of your number. Spin the spinner to generate the ones place. Write down your number on scratch paper. If that number is represented on the stem-and-leaf plot, place one of your markers over the leaf of that number. If another player already has a marker over it, you may remove their marker and put yours over it. The winner is the player who controls more leaves when time is up.

4.9A

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key: $4 \overline{) 5} = 45$

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Roll & Spin
STEM-AND-LEAF PLOTS
with whole numbers

KEY
The number that each leaf represents is recorded in a circle next to the leaf digit.

4.9A

STEM	LEAVES
1	0 ¹⁰ 7 ¹⁷ 7 ¹⁷ 9 ¹⁹
2	2 ²² 5 ²⁵ 6 ²⁶ 6 ²⁶ 7 ²⁷
3	0 ³⁰ 2 ³² 7 ³⁷ 7 ³⁷ 9 ³⁹ 9 ³⁹
4	2 ⁴² 2 ⁴² 5 ⁴⁵ 5 ⁴⁵ 6 ⁴⁶
5	5 ⁵⁵ 5 ⁵⁵ 6 ⁵⁶ 7 ⁵⁷ 9 ⁵⁹
6	0 ⁶⁰ 2 ⁶² 5 ⁶⁵

key: $4 \overline{) 5} = 45$

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Games Cover These Topics

- ✓ Stem-and-Leaf with Whole Numbers
- ✓ Stem-and-Leaf with Fractions
- ✓ Decimals Dot Plot
- ✓ Frequency Tables
- ✓ Building a Plot with Whole Numbers, Decimals and Fractions

About the Author

This resource was created by Melissa Johnson, who has 16 years of k-10 teaching experience and a masters degree in Mathematics Education. Her resources build conceptual understanding, make connections between math topics and engage students in the mathematics they are learning.

