

2 Mini-Lessons (Editable)

Statistics

Stem-and-Leaf-Plot

STEM	LEAF
1	0 2

Histogram

What are

Circle Graph

Random Sampling

Measure Center

THINK-PAIR-SHARE

Vocabulary

entire group of people or

Statistics Mini-Lesson

would we go about selecting this sample?

a random sample of the students in your classroom to find out an estimate of the average number of pens and

Vocabulary

distance that two points are from each other

mode: the number that most in a data set

deviation from the mean: how far the data point is from the mean. to calculate: subtract the two values (the data point and the mean)

Mean Absolute Deviation

mean average from

How Do You Find the Mean Absolute Deviation?

1. Find the mean.
2. Find the distance between each data value and the mean. (data point - mean)
3. Find the average of those differences.

UQ - LQ

MAE

Probability

Vocabulary

experiment: an activity with varying results

outcomes: the possible results of an

0	1/2
Impossible	Equally Likely

Think-Pair-Share

Where on the probability scale will the following be?

A vowel will be picked randomly select a

Vocabulary

theoretical probability: When outcomes are equally likely, the theoretical probability of an event is the ratio of the number of favorable outcomes to the number of possible outcomes.

experimental probability is based on results from an experiment

fair experiment: all outcomes are equally likely.

Who differs the

Theoretical and Experimental Probability

Experimental Probability

$$P(\text{event}) = \frac{\text{number of favorable outcomes}}{\text{total number of outcomes}}$$

Fill in the blank:

..... is the number of successful trials in a sample of trials. observed proportion.

is a partner. Independent or Dependent?

at seats for the school picks first, then it is

Probability Mini-Lesson

Independent or Dependent?

2) Maggie spins the spinner twice.

Compound Events

- sample space
- fundamental event M has event N has total number of outcomes
- compound event

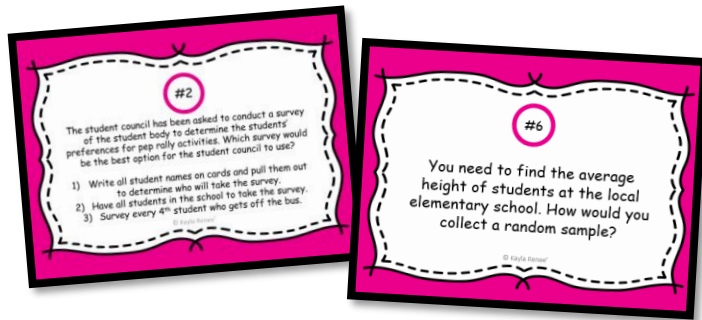
Think-Pair-Share

How would you go about solving this problem?

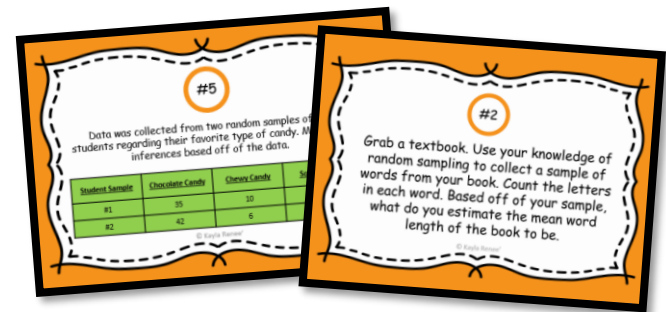
There are 4 green marbles, 2 blue marbles, 1 red marble, and 5 purple marbles. You pick 3 marbles out, without replacement. Find P (green, blue, then red)

Statistics Math Centers

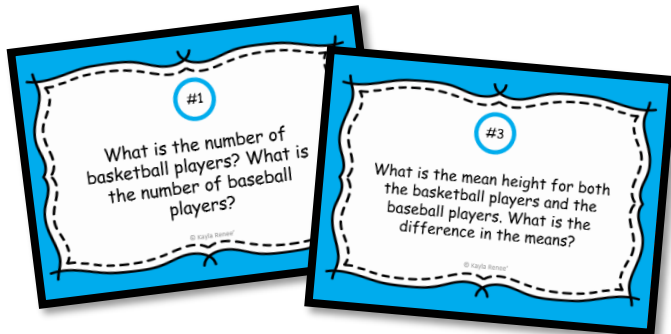
Random Sampling Task Cards Mini-Set (8 Cards)



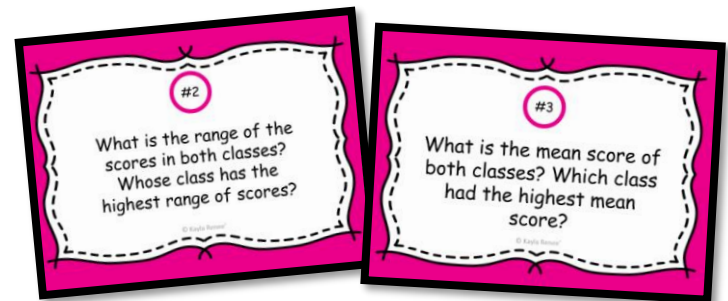
Drawing Inferences from Random Samples Task Cards Mini-Set (8 Cards)



Visual Data Overlap Task Cards Mini-Set (6 Cards)



Measures of Center and Variability Task Cards Mini-Set (8 Cards)

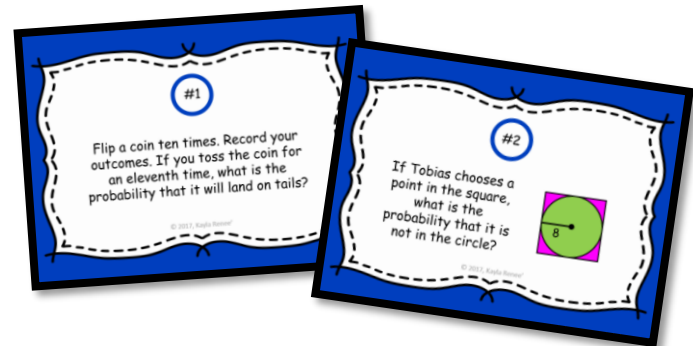


Probability Math Centers

Compound Events Task Cards Mini-Set (8 Cards)



Developing a Probability Model Task Cards Mini-Set (8 Cards)



7th Grade Statistics and Probability Memory/Match Game

measures of center	histogram	mean	median	mode
mean median mode		AVERAGE $3 + 5 + 7 = 15$ $15 \div 3 = 5$	MIDDLE 1, 3, 5, 7, 8, 10 5	Mode, Mode, Mode the MOST 3, 6, 4, 2, 1, 7, 2, 4, 3
inequality	event	probability	outcome	theoretical probability
$\leq$ 	set of outcomes 		possible results 	

Homework

Name _____
Date _____

Day 3: Statistics Review

Directions: Match the following vocabulary words with their definitions.

- 1) _____ statistics
- 2) _____ stem-and-leaf plot
- 3) _____ histogram
- 4) _____ circle graph
- 5) _____ population
- 6) _____ sample
- 7) _____ unbiased sample
- 8) _____ biased sample
- 9) _____ mean
- 10) _____ median
- 11) _____ mode
- 12) _____ interquartile range
- 13) _____ mean absolute deviation

- a. the average - add all of the numbers and divide by how many there are
- b. a representation of a population/ it is selected at random and is large enough to provide accurate data
- c. the average distance of all the data points from their mean
- d. the science of data
- e. not representative of a population/one or more parts of the population are favored over others
- f. a bar graph that shows data in intervals
- g. represents the middle 50% of a data set
- h. the number that occurs the most in a data set
- i. data represented in displayed sections of a circle - the data is given as percents that add to be 100%
- j. a table that uses digits to organize data
- k. the middle number in a data set
- l. an entire group of people or objects
- m. part of the population

14) Meg wanted to conduct a survey to find out what students at her middle school wanted the theme of the end of the year dance to be. What survey sample would give her the most accurate results?

- a) random students as they enter the school building
- b) students during math class
- c) random 7th grade students during gym
- d) students in the 8th grade hallway

15) What is the range of these test scores?
53, 62, 70, 75, 81, 82, 84, 87, 91, 95

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Name _____
Date _____

Probability Review

Directions: Match the following vocabulary words with their definitions.

- 1) _____ probability
- 2) _____ outcome
- 3) _____ theoretical probability
- 4) _____ experimental probability
- 5) _____ event
- 6) _____ fair experiment
- 7) _____ tree diagram
- 8) _____ sample space
- 9) _____ independent event
- 10) _____ dependent event
- 11) _____ compound event
- 12) _____ fundamental counting principle

- a. the occurrence of one event has no impact on the next event(s) occurring
- b. mathematical rule that allows you to figure out the number of outcomes in a probability problem
- c. the ratio of the number of favorable outcomes to the number of possible outcomes when all possible outcomes are equally likely
- d. the occurrence of one event does affect the likelihood that the other event(s) will occur
- e. a tool that shows branches that help determine the possible number of outcomes in an event
- f. a number that measures the likelihood that the event will occur
- g. a collection of one or more outcomes
- h. consists of two or more events
- i. the possible results of an experiment
- j. all possible outcomes are equally likely
- k. probability that is based on repeated trials of an experiment
- l. the set of all possible outcomes of one or more events

13) You roll two standard dice. What is the probability that both dice show 6?

1/36

14) How many different outfits can you make from 7 t-shirts, 3 pairs of jeans, and 5 pairs of shoes?

105

15) Independent or Dependent?: There are 4 red gumballs, 1 green gumball, and 4 blue gumballs. If two gumballs are purchased, what is the probability of both being blue?

dependent

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Editable Title!