First Five Minutes

1. Find your NEW assigned seat.
2. Re-Distribute Work Books
3. Materials:
   Pencil,
   Calculator

State test booklet goes AWAY in your folder.

Open WorkBook to Page: 116

Monday 25th

Today's GOAL

AIMS

7.SP.C.6: Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability.

CR

Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.

Class schedule

1. **AIMS: Understand probability, learn vocab about likelihood**
2. **Cool Down**
3. **CR: Fact Fluency**
4. **Skill Fluency**

WARM Up

Andre and his dad have been fishing for 2 hours. In that time, they have caught 9 bluegills and 1 yellow perch.

The next time Andre gets a bite, what kind of fish do you think it will be? Explain your reasoning.

1)

Follow these instructions to play one round of the game:

a) Everyone in the group records the color written on the bag in the first column of the table.

b) Without looking in the bag, one person takes out one of the blocks and shows it to the group.

Take ONE bag, ecery time you draw once you put the block back in. EACH teammate goes 4 times.

c. If they get a block that is the same color as the bag, they earn:

- 1 point during round 1
- 2 points during round 2
- 3 points during round 3

d. Next, they put the block back into the bag, shake the bag to mix up the blocks, and pass the bag to the next person in the group.

e. Repeat these steps until everyone in your group has had 4 turns.

TRADE bags with a teammate around you so you get to use ALL THREE colors, RED, BLUE, and Green.

A bag labeled "Green" that contains 9 green blocks and 3 of another color.

A bag labeled "Blue" that contains 8 blue blocks and 8 of another color.

A bag labeled "Red" that contains 4 red blocks and 10 of another color.

Lesson 1 Practice Problems

Morrison:

1. Backpack and coat on the back of your chair.
2. Complete headings on Cool down and CR packet.
3. Chromebook in seat basket

which tank is the best option for her to WIN????

A large fish tank is filled with table tennis balls with numbers written on them. Jada chooses 10 table tennis balls from the tank and writes down their numbers.

1	3	5	1	3	2	4	1	5	3

A second tank is filled with golf balls with numbers written on them. Jada chooses 10 golf balls from the tank and writes down their numbers.

1	4	5	2	6	2	2	1	4	8

Hey, hi!

Unit 8 Lesson 2

First Five Minutes

1. Go DIRECTLY to your seat.
2. Distribute Work Books
3. Materials: Pencil, Calculator

Open WorkBook to Page: 121

Monday 25th

Today's GOAL

AIMS

7.SP.C.6: Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability.

CR

Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.

Warm Up

Which is more likely to happen?

When reaching into a dark closet and pulling out one shoe from a pile of 20 pairs of shoes, you pull out a left shoe.

When listening to a playlist—which has 5 songs on it—in shuffle mode, the first song on the playlist plays first.

page 121

Label each event with one of these options:

impossible

unlikely

equally likely as not

likely

certain

first, 3 minutes solo and THEN 2 minutes to compare and check answers with a partner..see if there are any you disagree on?

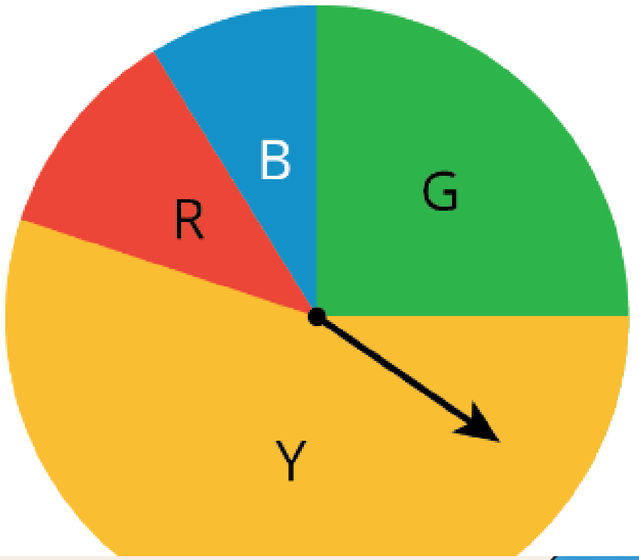
discuss:

1. **Were any of the scenarios listed difficult to categorize?**
2. **Which categories are the most strict about what can go in them?**
3. **What does it mean for an event to be certain?**
4. **What does it mean for an event to be likely?**

chance experiment

A chance experiment is something you can do over and over again, and you don't know what will happen each time.

For example, each time you spin the spinner, it could land on red, yellow, blue, or green.



outcome

An outcome of a chance experiment is one of the things that can happen when you do the experiment. For example, the possible outcomes of tossing a coin are heads and tails.

event

An event is a set of one or more outcomes in a chance experiment. For example, if we roll a number cube, there are six possible outcomes.

Examples of events are “rolling a number less than 3,” “rolling an even number,” or “rolling a 5.”

round one:

Order the events from least likely to most likely.

After ordering the first set of cards, pause here

round two:

Add the new set of cards to the first set so that all of the cards are ordered from least likely to most likely.

Let's share our methods for sorting the cards.

How were the numerical values of the likelihoods written?

How did you compare them when there was a mix of percentages, fractions, and decimals?

Some of the cards did not have a percentage, fraction, or decimal. How did you determine where those cards would go in the order?

Lesson 2 Practice Problems #1-3 p. 124

Morrison:

1. Backpack and coat on the back of your chair. Outerwear off.
2. Complete heading on CR packet.
3. Chromebook in seat basket

DO NOT START CR YET!!

cool down

Write the scenarios in order of likelihood from least to greatest after three years: the business makes money, the light bulb still works, and the car needs major repairs.

Name another chance experiment that has the same likelihood as one of the scenarios.

From the Mock

Currently, there are 350 students in the seventh grade at Winchester Heights Middle School. For the upcoming school year, they are planning to increase the number of seventh graders by 10%.

How many seventh-grade students does Winchester Heights Middle School plan to have in the upcoming school year?

A) 35 B) 3500 C) 385 D) 460

Go For the Gold!!

SKILL FLUENCY

- 3 minutes independent work time
- you may use your calculator if you need to
- Trade and Grade with partner

FACT FLUENCY

- Annotate the question for key info
- Use POE on all multiple choice
- Show your work, use any available space on the paper or the back of fact fluency
- Bubble sheets will be scanned!

Hey, hi!

Unit 8 Lesson 3

First Five Minutes

1. Find your NEW assigned seat.
2. Re-Distribute Work Books
3. Materials: Pencil, Calculator

HOMEWORK OUT

Open WorkBook to Page: 126

Monday 25th

Today's GOAL

AIMS

7.SP.C.6: Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability.

CR

Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.

Warm Up

Which game would you choose to play? Explain your reasoning.

Game 1: You flip a coin and win if it lands showing heads.

Game 2: You roll a standard number cube and win if it lands showing a number that is divisible by 3.

Outcomes

Imagine a spinner with equal sized sections.
Each section is marked with numbers 1 to 20.

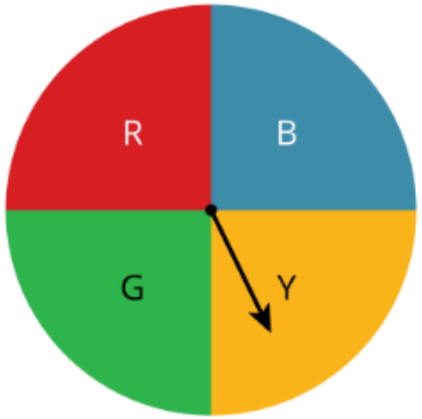
What might be an outcome?

What are all the possible outcomes?

Sample Space

1. For each situation, list the **sample space** and tell how many outcomes there are.

Independent Work::



a. Han rolls a standard number cube once.

b. Clare spins this spinner once.

c. Kiran selects a letter at **random** from the word “MATH.”

d. Mai selects a letter at random from the alphabet.

e. Noah picks a card at random from a stack that has cards numbered 5 through 20.

In Partners/Table Teams:

2. Next, compare the likelihood of these outcomes. Be prepared to explain your reasoning.

a. Is Clare more likely to have the spinner stop on the red or blue section?

b. Is Kiran or Mai more likely to get the letter T?

c. Is Han or Noah more likely to get a number that is greater than 5?

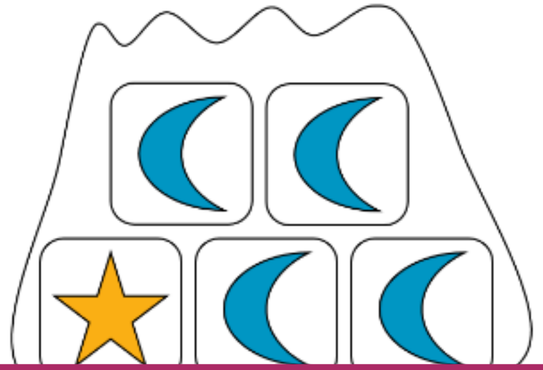
sample space

The sample space is the list of every possible outcome for a chance experiment.

probability

The probability of an event is a number that tells how likely it is to happen. A probability of 1 means the event will always happen. A probability of 0 means the event will never happen.

For example, the probability of selecting a moon block at random from this bag is $\frac{4}{5}$.



Hey, hi!

Unit 8 Lesson 4

First Five Minutes

1. Find your NEW assigned seat.
2. Re-Distribute Work Books
3. Materials: Pencil, Calculator

HOMEWORK OUT

Open WorkBook to Page: 132

CR- Resubmit

Any CR packet can be COMPLETED/ and turned BACK in for a revised grade. ANY revisions must be noted on the FRONT COVER, bubble sheet.

Due at the end of the week that the assessment happened.

WARM Up

1. Locate and label these numbers on the number line.

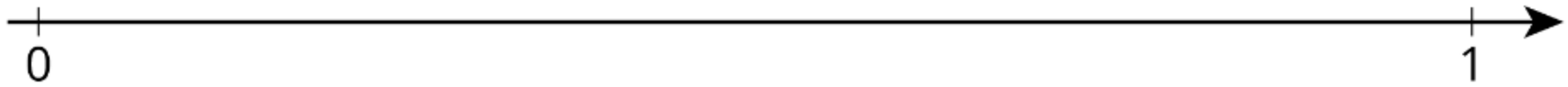
a. 0.5

b. 0.75

c. 0.33

d. 0.67

e. 0.25



2. Choose one of the numbers from the previous question. Describe a game in which that number represents your probability of winning.

Mai plays a game in which she only wins if she rolls a 1 or a 2 with a standard number cube.

1. List the outcomes in the sample space for rolling the number cube.

2. What is the probability Mai will win the game? Explain your reasoning.

3. If Mai is given the option to flip a coin and win if it comes up heads, is that a better option for her to win?

solo- answer #1-3

Sample Space: LIST of outcomes

#4 Page 133, #6 Page 134

1. **One person rolls the number cube. Everyone records the outcome.** *(example, lands on 3, we all write 3 down in the outcome column)*

2. Calculate the fraction of rolls that are a win for Mai so far. *(wins/games played)*
Approximate the fraction with a decimal value rounded to the hundredths place.
Record both the fraction and the decimal in the last column of the table.

Once Table is complete, answer #6 on the next page

Model

roll	outcome	total number of wins for Mai	fraction of games played that are wins
1			
2			

6. a. After 10 rolls, what fraction of the total rolls were a win?

b. How close is this fraction to the probability that Mai will win?

REPEAT!

7. Roll the number cube 10 more times. Record your results in this table and on the graph from earlier.

roll	outcome	total number of wins for Mai	fraction of games played that are wins
11			
12			

8. a. After 20 rolls, what fraction of the total rolls were a win?

b. How close is this fraction to the probability that Mai will win?

1. For each situation, do you think the result is surprising or not? Is it possible? Be prepared to explain your reasoning.

a. You flip the coin once, and it lands heads up.

b. You flip the coin twice, and it lands heads up both times.

c. You flip the coin 100 times, and it lands heads up all 100 times.

2. If you flip the coin 100 times, how many times would you expect the coin to land heads up? Explain your reasoning.

3. If you flip the coin 100 times, what are some other results that would not be surprising?

4. You've flipped the coin 3 times, and it has come up heads once. The cumulative fraction of heads is currently $\frac{1}{3}$. If you flip the coin one more time, will it land heads up to make the cumulative fraction $\frac{2}{4}$?

Morrison:

1. Backpack and coat on the back of your chair.
2. Complete headings on Cool down and CR packet.
3. Chromebook in seat basket

patron	item type
1	fiction book
2	non-fiction book
3	fiction book
4	fiction book
5	audiobook

Based on the information from these patrons . . .

1) Estimate the probability that the next patron will check out a fiction book. Explain your reasoning.
2) Estimate the number of DVDs that will be checked out for every 100 patrons. Explain your reasoning.

Go For the Gold!!

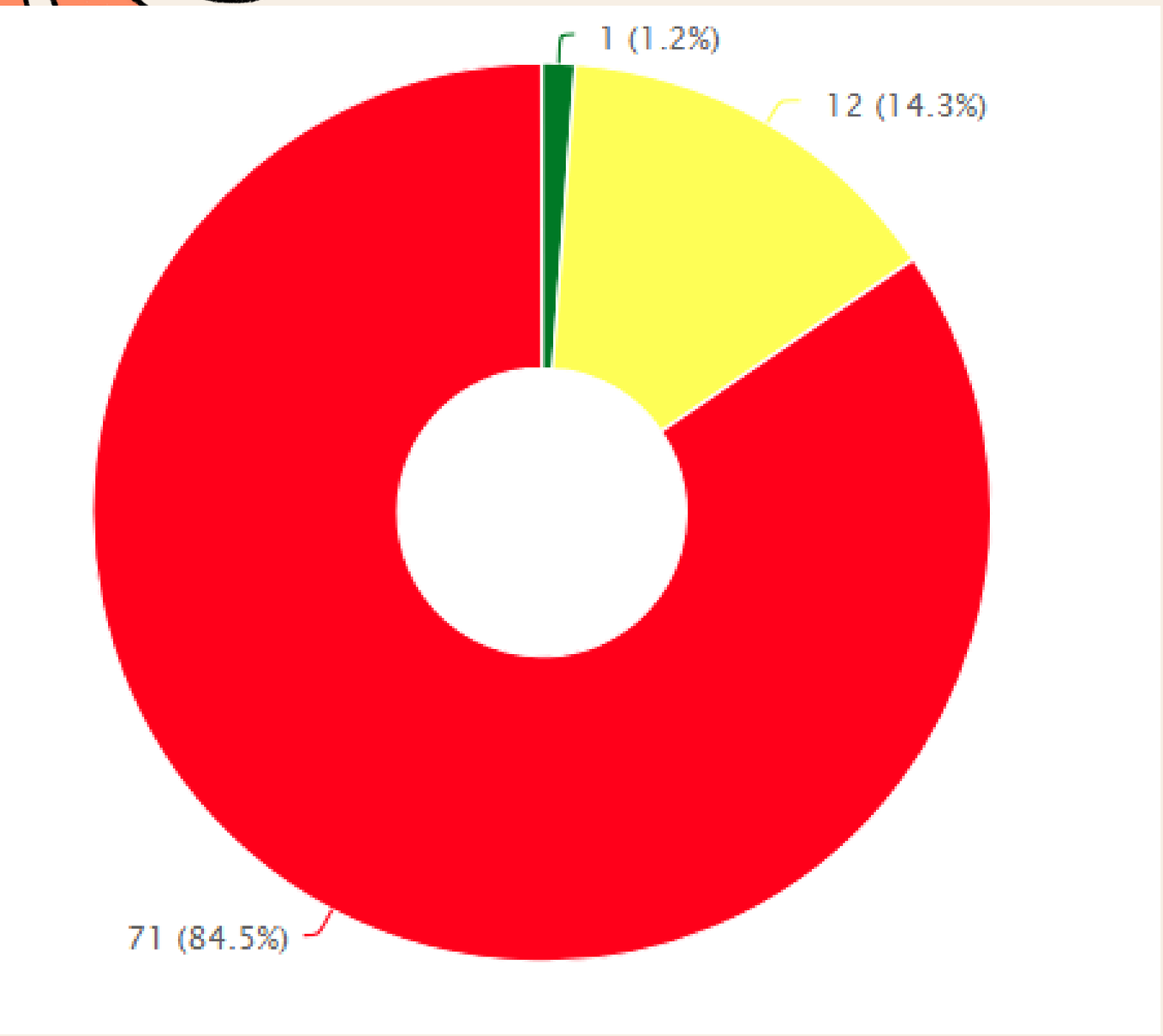
SKILL FLUENCY

- 3 minutes independent work time
- you may use your calculator if you need to
- Trade and Grade with partner

FACT FLUENCY

- Annotate the question for key info
- Use POE on all multiple choice
- Show your work, use any available space on the paper or the back of fact fluency
- Bubble sheets will be scanned!

Friday:



INTERACTION	COUNT ▼
Not Following Directions	354
Disrespect to Adult	173
Improper Peer Interaction	61
High Level Profanity	27
Teacher: Out of Uniform	22
Unauthorized Location	17
Improper Transition	13
Unauthorized Food	11
Low Level Profanity	7
Disrespect to Property	5

From the Mock

Currently, there are 350 students in the seventh grade at Winchester Heights Middle School. For the upcoming school year, they are planning to increase the number of seventh graders by 10%.

How many seventh-grade students does Winchester Heights Middle School plan to have in the upcoming school year?

A) 35 B) 3500 C) 385 D) 460

Go For the Gold!!

SKILL FLUENCY

- Annotate the question for key info
- Use POE on all multiple choice
- Show your work, use any available space on the paper or the back of fact fluency
- Bubble sheets will be scanned!

Unit 8 Lesson 5

First Five Minutes

1. Find your NEW assigned seat.
2. Re-Distribute Work Books
3. Materials: Pencil, Calculator

HOMEWORK OUT

Open WorkBook to Page: 139

CR- Resubmit

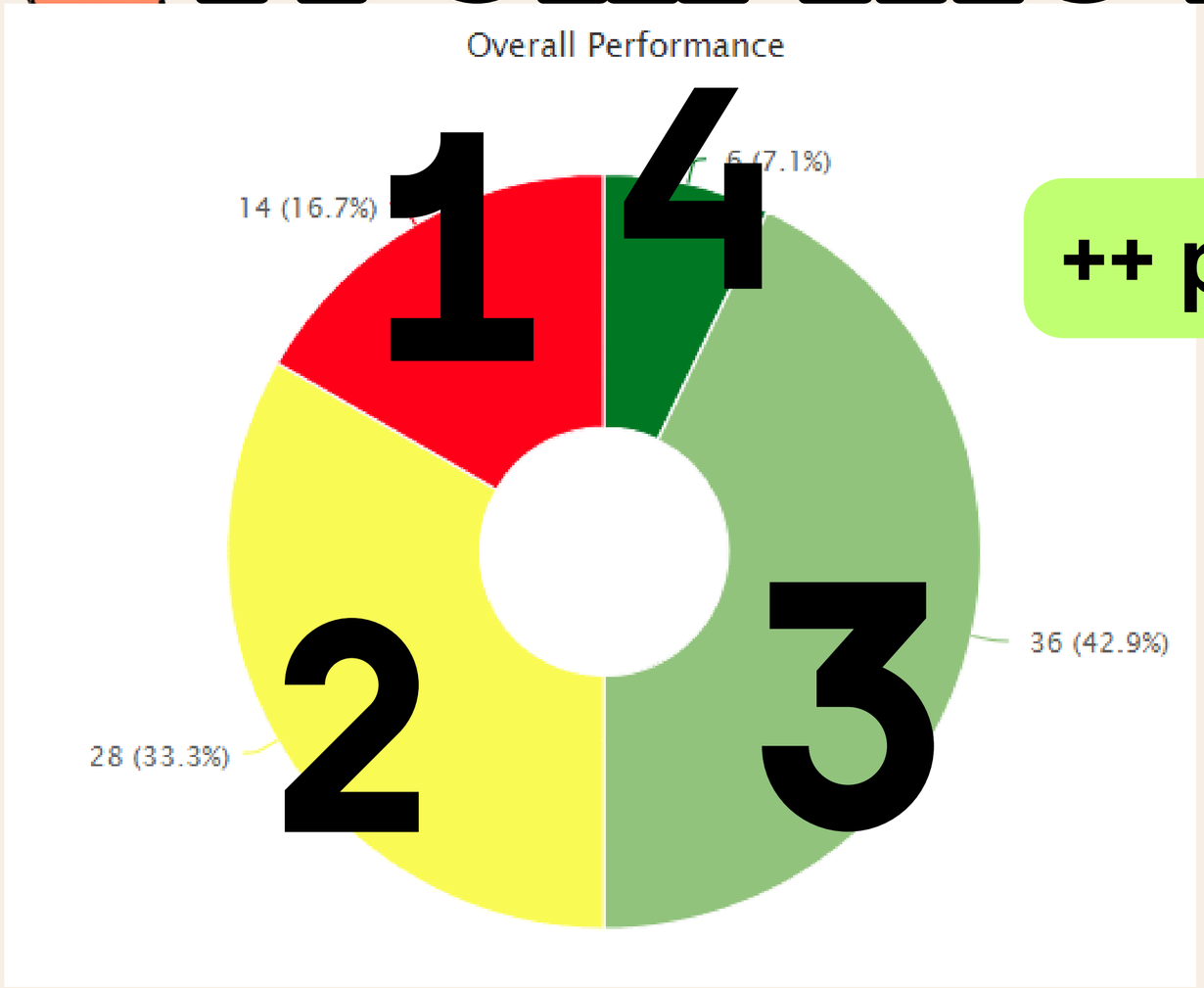
Any CR packet can be COMPLETED/ and turned BACK in for a revised grade. ANY revisions must be noted on the FRONT COVER, bubble sheet. Resubmit BIN is in the front under the calendar.

If you were absent FRIDAY: N.S.A.3 due TODAY.
Due BY FRIDAY, Week 1 Quiz, handed out today!!!

Grade reports from Mock went out Friday/Today.

JOB: Applications will be available tomorrow. DUE by Friday.

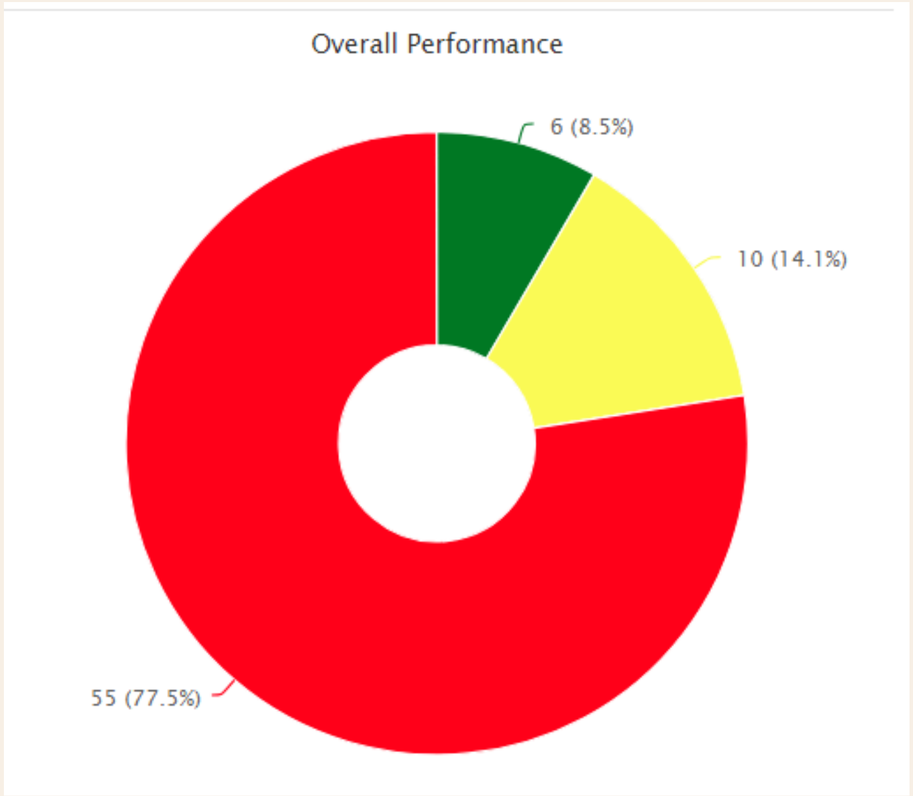
From the Mock

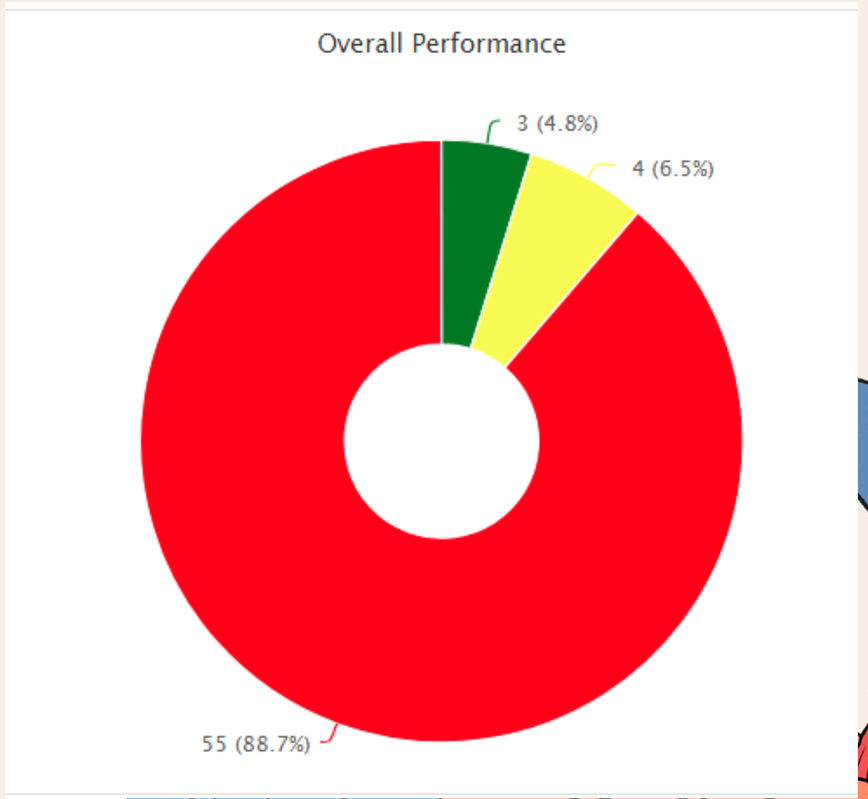


++ proportional relationships

-- percentages

Crescendo SO Far





Check In

Class Culture

- all three homerooms are having a very different math experience.
- Focusing on the priority and the positive

Reflecting

- Selfishness
- Cyclical

applies to teacher and student

- Morrison, we will continue this conversation once I touch base with Ms. Bailey

turn the page

- Importance of 7th Grade
- Foundation, understanding, Now we put it into action

WARM Up

- If the weather forecast calls for a 20% chance of light rain tomorrow, would you say that it is likely to rain tomorrow?
- If the probability of a tornado today is 1/10 , would you say that there will likely be a tornado today?
- If the probability of snow this week is 0.85, would you say that it is likely to snow this week?

Whole Class Experiment: Step 1

1. Write out the sample space for each spinner:

Spinner	Sample Space
A	
B	
C	
D	

sample space **is the LIST of all possible outcomes or results of that experiment.**

Whole Class Experiment: Step 2

Ms. McInnis will spin each spinner 10 times. Your job is to record the results of the experiment in the table

Next, record the outcomes for the class spin. We will spin each spinner TEN times.

a. Outcomes for spinner A:
b. Outcomes for spinner B:
c. Outcomes for spinner C:
d. Outcomes for spinner D:

Whole Class Experiment: Step 3

Use the data and the sample space from this worksheet to answer questions #5-9 on page 140.

ands on the number 3? Explain or show your reasoning.

7. For each spinner, what is the probability that it lands on something other than the number 3? Explain or show your reasoning.

8. Noah put spinner D on top of his closed binder and spun it 10 times. It never landed on the number 1. How might you explain why this happened?

9. Han put spinner C on the floor and spun it 10 times. It never landed on the number 3, so he says that the probability of getting a 3 is 0. How might you explain why this happened?

Last Point:

More Trials = More Accurate Results

3. Han has a number cube that he suspects is not so standard.

- Han rolls the cube 100 times, and it lands on a six 40 times.
- Kiran rolls the cube 50 times, and it lands on a six 21 times.
- Lin rolls the cube 30 times, and it lands on a six 11 times.

question:

based on these trials, who's data do you anticipate is the most accurate? Explain your reasoning.

COOL DOWN

Jada, Diego, and Elena each use the same spinner that has four (not necessarily equal sized) sections marked A, B, C, and D.

- Jada says, "The probability of spinning B is 0.3 because I spun 10 times, and it landed on B 3 times."
- Diego says, "The probability of spinning B is 20% because I spun 5 times, and it landed on B once."
- Elena says, "The probability of spinning B is $\frac{2}{7}$ because I spun 7 times, and it landed on B twice."

1) Based on their methods, which probability estimate do you think is the most accurate? Explain your reasoning.
2) Andre measures the spinner and finds that the B section takes up $\frac{1}{4}$ of the circle. Explain why none of the methods match this probability exactly.

Go For the Gold!!

FACT FLUENCY

- 3 minutes independent work time
- you may use your calculator if you need to
- Trade and Grade with partner

SKILL FLUENCY

- Annotate the question for key info
- Use POE on all multiple choice
- Show your work, use any available space on the paper or the back of fact fluency
- Bubble sheets will be scanned!

Unit 8 Lesson 8

First Five Minutes

1. Find your NEW assigned seat.
2. Re-Distribute Work Books
3. Materials: Pencil, Calculator

HOMEWORK OUT

Open WorkBook to Page: 160

CR- Resubmit

Any CR packet can be COMPLETED/ and turned BACK in for a revised grade. ANY revisions must be noted on the FRONT COVER, bubble sheet. Resubmit BIN is in the front under the calendar.

If you were absent FRIDAY: NSA3 past due .
Due BY FRIDAY, Week 1 Quiz, handed out tuesday!!!

Grade reports from Mock went out Friday/Today.

WARM Up

How many different meals are possible if each meal includes one main course, one side dish, and one drink?

main courses	side dishes	drinks
grilled chicken	salad	milk
turkey sandwich	applesauce	juice
pasta salad	—	water

How can you organize the list to ensure you have created all possible combinations?

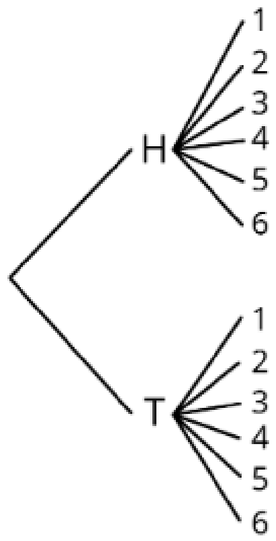
Consider the experiment: Flip a coin, and then roll a number cube.

Elena, Kiran, and Priya each use a different method for finding the sample space of this experiment.

- Elena carefully writes a list of all the options: Heads 1, Heads 2, Heads 3, Heads 4, Heads 5, Heads 6, Tails 1, Tails 2, Tails 3, Tails 4, Tails 5, Tails 6.

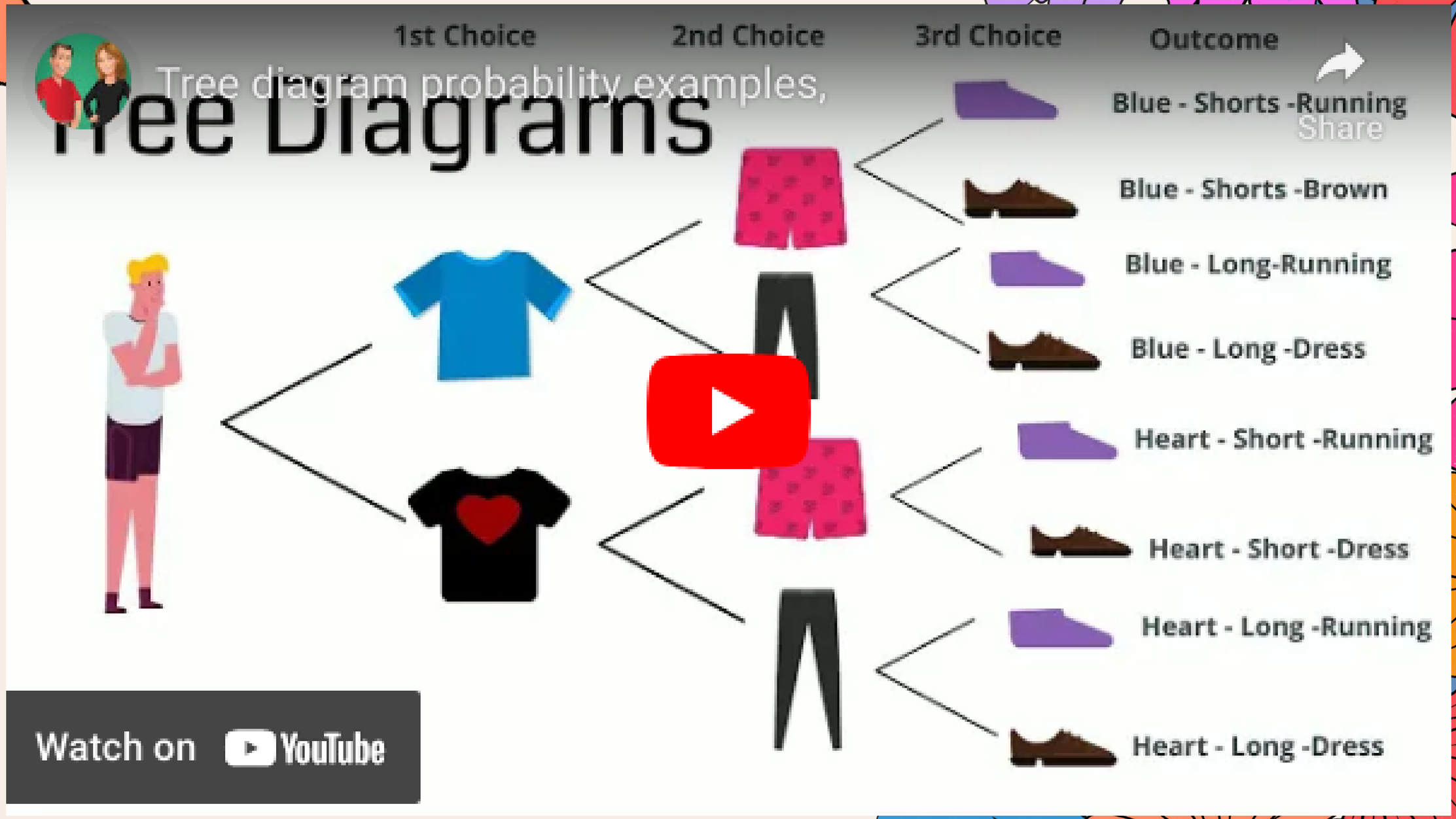
- Kiran makes a table:

	1	2	3	4	5	6
H	H1	H2				
T	T1	T2				



- Priya draws a tree w
branches in which e
pathway represents
outcome:

Compare the three methods. What is the same about each method? What is different? Be prepared to explain why each method produces all the different outcomes without repeating any. Which method do you prefer for this situation?

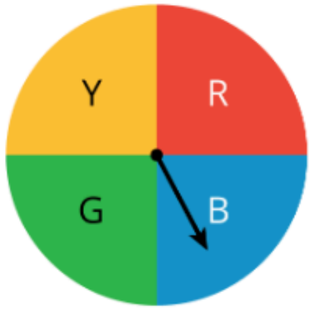

Tree diagram probability examples,
Tree Diagrams
1st Choice
2nd Choice
3rd Choice
Outcome
Share
Blue - Shorts -Running
Blue - Shorts -Brown
Blue - Long-Running
Blue - Long -Dress
Heart - Short -Running
Heart - Short -Dress
Heart - Long -Running
Heart - Long -Dress
Watch on YouTube

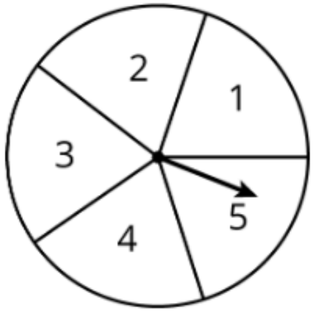
3. Find the sample space for each of these experiments using any method. Make sure you list every possible outcome without repeating any.

a. Flip a dime, then flip a nickel, and then flip a penny. Record whether each lands heads or tails up.

b. Han's closet has: a blue shirt, a gray shirt, a white shirt, blue pants, khaki pants, and black pants. He must select one shirt and one pair of pants to wear for the day.

c. Spin a color, and then spin a number.





d. Spin the hour hand on an analog clock, and then choose a.m. or p.m.

Go For the Gold!!

FACT FLUENCY

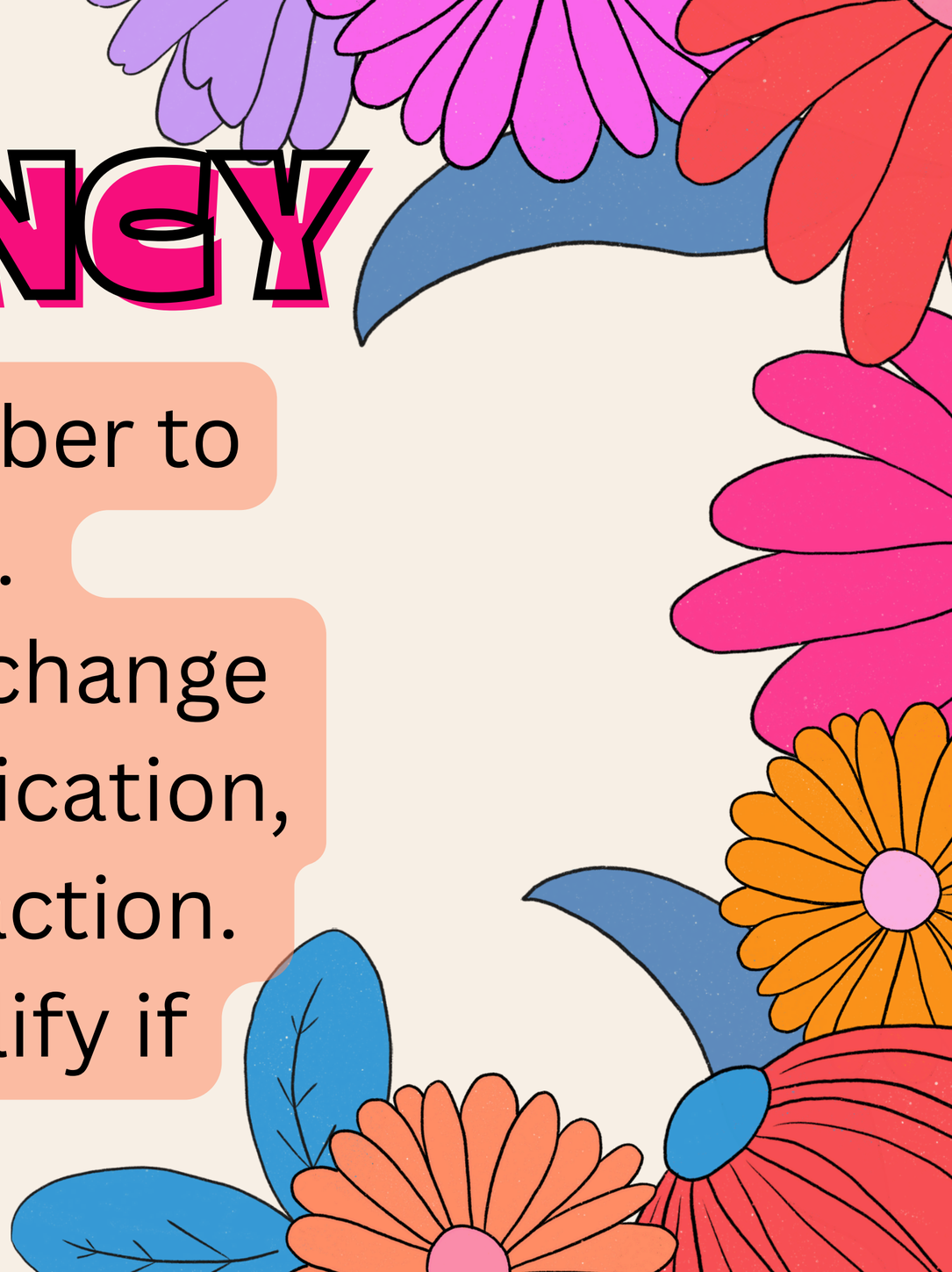
- 3 minutes independent work time
- you may use your calculator if you need to
- Trade and Grade with partner

SKILL FLUENCY

- Annotate the question for key info
- Use POE on all multiple choice
- Show your work, use any available space on the paper or the back of fact fluency
- Bubble sheets will be scanned!

FACT FLUENCY

- Change the mixed number to improper fraction.
- Keep the first fraction, change the operation to multiplication, and FLIP the second fraction.
- Multiply across, simplify if possible.



Unit 8 Lesson 9

First Five Minutes

1. Find your NEW assigned seat.
2. Re-Distribute Work Books
3. Materials: Pencil, Calculator

HOMEWORK OUT

Open WorkBook to Page: 167

CR- Resubmit

1. **Anything that has been graded is available to revise and resubmit.**
2. **THOSE ASSIGNMENTS go in the RESUBMIT bin in the front of the room. Place the assignment in the bin.**
    a. **DO not leave any papers just loose on my desk PLEASE!**
3. **Anything from the current week is due by Monday of the following week at the latest.**

WARM Up

Is each equation true or false? Explain your reasoning.

GEMDAS

$8 = (8 + 8 + 8 + 8) \div 3$

$(10 + 10 + 10 + 10 + 10) \div 5 = 10$

$(6 + 4 + 6 + 4 + 6 + 4) \div 6 = 5$

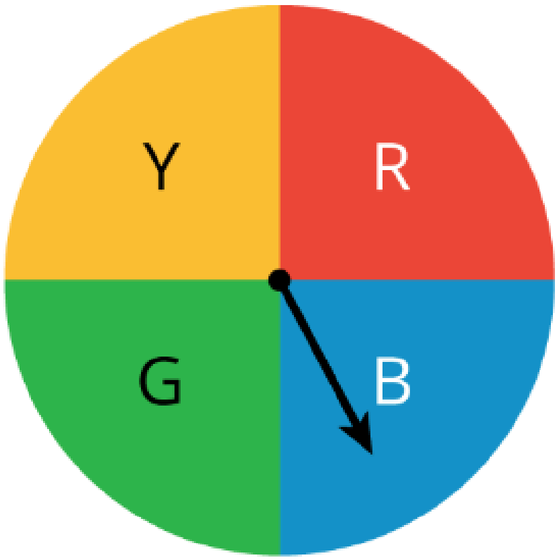
9.2 Color and Number

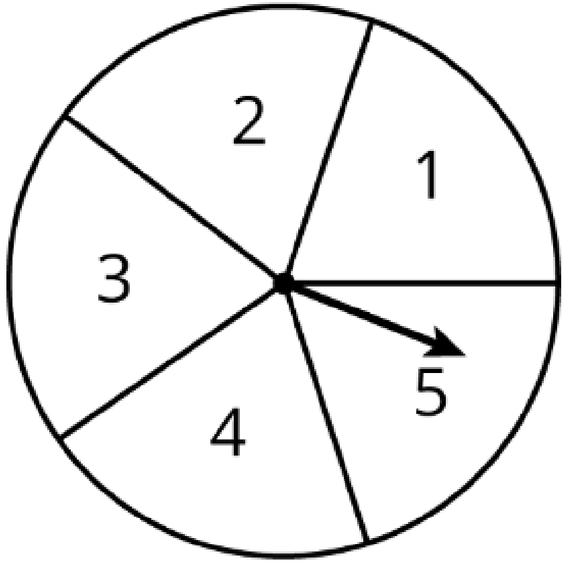
The other day, you wrote the sample space for spinning each of these spinners once.

What is the probability of getting:

#3c on page 162

1) Green and 3?
2) Blue and any odd number?
3) Any color other than red and any number other than 2?





9.4 Pick a Card

Imagine there are 5 cards. They are colored red, yellow, green, white, and black. You mix up the cards and select one of them without looking. Then, without putting that card back, you mix up the remaining cards and select another one.

1) Write the sample space and tell how many possible outcomes there are.

5 minutes to write out the sample space. LOOKING for exemplar to stamp on the board before answering the next set of questions.

9.4 Pick a Card

3. What is the probability that:

a. You get a white card and a red card (in either order)?

b. You get a black card (either time)?

c. You do not get a black card (either time)?

d. You get a blue card?

e. You get 2 cards of the same color?

f. You get 2 cards of different colors?

Morrison:

1. Backpack and coat on the back of your chair.
2. Complete heading on CR packet.
3. Chromebook in seat basket

FACT FLUENCY

- Change the mixed number to improper fraction.
- Keep the first fraction, change the operation to multiplication, and FLIP the second fraction.
- Multiply across, simplify if possible.

Go For the Gold!!

SKILL FLUENCY

- Annotate the question for key info
- Use POE on all multiple choice
- Show your work, use any available space on the paper or the back of fact fluency
- Bubble sheets will be scanned!

Unit 8 Lesson 10

First Five Minutes

1. Find your NEW assigned seat.
2. Re-Distribute Work Books
3. Materials: Pencil, Calculator

HOMEWORK OUT

Open WorkBook to Page: 173

CR- Resubmit

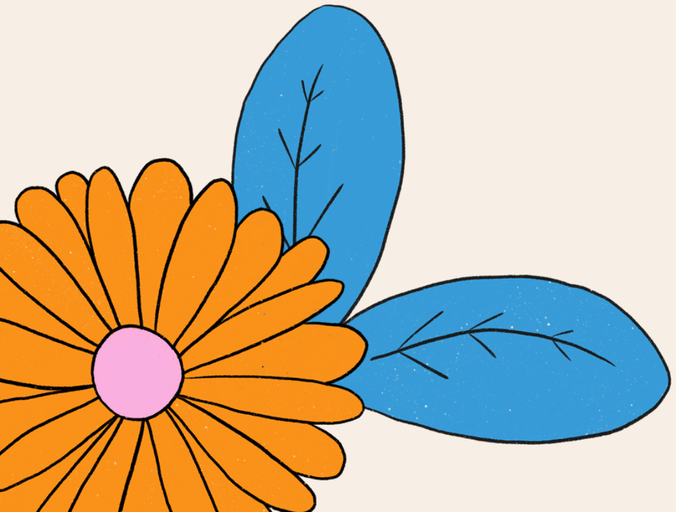
1. **Anything that has been graded is available to revise and resubmit.**
2. **THOSE ASSIGNMENTS go in the RESUBMIT bin in the front of the room. Place the assignment in the bin.**
    a. **DO not leave any papers just loose on my desk PLEASE!**
3. **Anything from the current week is due by Monday of the following week at the latest.**

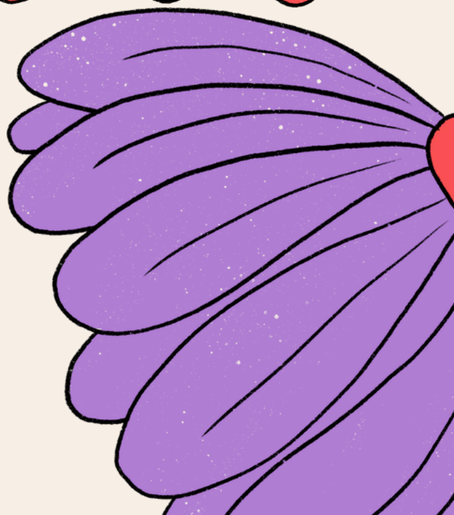
Agenda

1. **Aims Lesson**
    a. **Warm Up**
    b. **Activity 10.2**
    c. **Practice Problem**

remaining time:

complete any missing assignments or revisions on graded work!





WARM Up

Find the value of each expression mentally.

$(4.2 + 3) \div 2$

$(4.2 + 2.6 + 4) \div 3$

$(4.2 + 2.6 + 4 + 3.6) \div 4$

$(4.2 + 2.6 + 4 + 3.6 + 3.6) \div 5$

GEMDAS

10.2 Breeding Mice

When flipping two coins, what is the probability of both landing heads up?

10.2 Breeding Mice

A scientist is studying the genes that determine the color of a mouse's fur. When two mice with brown fur breed, there is a 25% chance that each baby will have white fur. For the experiment to continue, the scientist needs at least 2 out of 5 baby mice to have white fur.

To simulate this situation, you can flip a coin twice for each baby mouse.

- If the coin lands heads up both times, it represents a mouse with white fur.
- Any other result represents a mouse with brown fur.

10.2 Breeding Mice

1. Simulate 3 litters of 5 baby mice and record your results in the table.

	mouse 1	mouse 2	mouse 3	mouse 4	mouse 5	Do at least 2 have white fur?
simulation 1						
simulation 2						
simulation 3						

Unit 8 Lesson 11

First Five Minutes

1. Find your NEW assigned seat.
2. Re-Distribute Work Books
3. Materials: Pencil, Calculator

HOMEWORK OUT

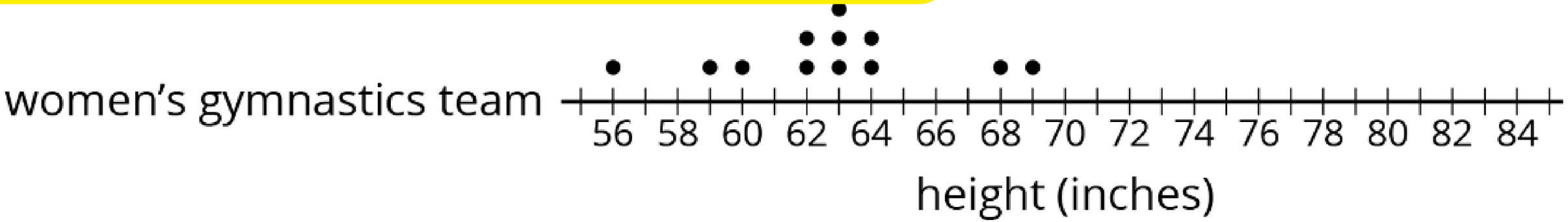
Open WorkBook to Page: 179

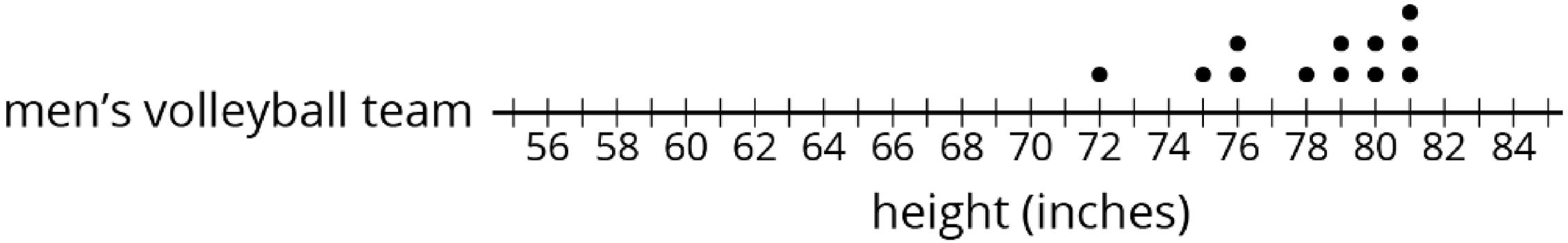
CR- Resubmit

1. **Anything that has been graded is available to revise and resubmit.**
2. **THOSE ASSIGNMENTS go in the RESUBMIT bin in the front of the room. Place the assignment in the bin.**
    a. **DO not leave any papers just loose on my desk PLEASE!**
3. **Anything from the current week is due by Monday of the following week at the latest.**

WARM Up

what do you notice or wonder?





Which team is TALLER?

Ways to compare the data

Mean

AVERAGE, find the sum of all the values, and divide by the number of data in the set.

Median

middle, cross off one value from end to end until you reach the middle value

Range

Maximum - Minimum = Range

11.2 Team Heights

1. How much taller is the volleyball team than the gymnastics team?

- Gymnastics team's heights (in inches) : 56, 59, 60, 62, 62, 63, 63, 63, 64, 64, 68, 69
- Volleyball team's heights (in inches): 72, 75, 76, 76, 78, 79, 79, 80, 80, 81, 81, 81

1. **Find the Mean, Median, and Range for each data set.**

2. compare the data, which team is taller and how do you know?

2. Make dot plots to compare the heights of the tennis and badminton teams.

- Tennis team's heights (in inches): 66, 67, 69, 70, 71, 73, 73, 74, 75, 75, 76
- Badminton team's heights (in inches): 62, 62, 65, 66, 68, 71, 73

1. **Find the Mean, Median, and Range for each data set.**

2. compare the data, which team is taller and how do you know?

Go For the Gold!!

FACT FLUENCY

- 3 minutes independent work time
- you may use your calculator if you need to
- Trade and Grade with partner

SKILL FLUENCY

- Annotate the question for key info
- Use POE on all multiple choice
- Show your work, use any available space on the paper or the back of fact fluency
- Bubble sheets will be scanned!

Morrison:

1. Backpack and coat on the back of your chair.
2. Complete heading on CR packet.
3. Chromebook in seat basket

Unit 8 Lesson 12

First Five Minutes

1. Find your NEW assigned seat.
2. Re-Distribute Work Books
3. Materials: Pencil, Calculator

HOMEWORK OUT

Open WorkBook to Page: 186

CR- Resubmit

1. **Anything that has been graded is available to revise and resubmit.**
2. **THOSE ASSIGNMENTS go in the *RESUBMIT* bin in the front of the room. Place the assignment in the bin.**
    a. **DO not leave any papers just loose on my desk PLEASE!**
    b. **MARK on your answer sheet *which questions* you fixed.**
3. **100% submission for each week = 100% in the gradebook**

WARM Up

Consider the question: In general, do the students at this school have more letters in their first name or last name? How many more letters?

1. What are some ways you might get some data to answer the question?

who do I need to ask? where can I get this data from?

2. The other day, we compared the heights of people on different teams and the lengths of songs on different albums. What makes this question about first and last names harder to answer than those questions?

what about the group size, how many people were on each team vs how many people are in the school???

12.2

Continue to consider the question from the Warm-Up: In general, do the students at this school have more letters in their first name or last name? How many more letters?

1. How many letters are in your first name? In your last name?

answer independently. you should have TWO numbers, for first name and last name.

2. Do the number of letters in your own first and last names give you enough information to make conclusions about students' names in your entire school? Explain your reasoning.

can we base a conclusion JUST by using your name? is that enough information?

12.2

	Bethune	Douglass	Morrison
Mean letters of first names	6	5	7
Mean letters of last names?	7	6	7

12.4

- A *population* is the entire pool from which data is taken.

- A *sample* is the part of the population from which data is actually collected.

For each question, identify the **population** and a possible **sample**.

1. What is the mean number of pages for novels that were on the best seller list in the 1990s?

Population:

Sample:

Go For the Gold!!

FACT FLUENCY

- 3 minutes independent work time
- you may use your calculator if you need to
- Trade and Grade with partner

SKILL FLUENCY

- Annotate the question for key info
- Use POE on all multiple choice
- Show your work, use any available space on the paper or the back of fact fluency
- Bubble sheets will be scanned!

Morrison:

1. Backpack and coat on the back of your chair.
2. Complete heading on CR packet.
3. Chromebook in seat basket

Unit 8 Lesson 13

First Five Minutes

1. Find your NEW assigned seat.
2. Re-Distribute Work Books
3. Materials: Pencil, Calculator

HOMEWORK OUT

Open WorkBook to Page: 192

CR- Resubmit

1. **Anything that has been graded is available to revise and resubmit.**
2. **THOSE ASSIGNMENTS go in the RESUBMIT bin in the front of the room. Place the assignment in the bin.**
    a. **DO not leave any papers just loose on my desk PLEASE!**
3. **Anything from the current week is due by Monday of the following week at the latest.**

yesterday

	Bethune	Douglass	Morrison
Mean letters of first names	6	5	7
Mean letters of last names?	7	6	7

WARM Up

Find the value of each quotient mentally.

how does dividing by 10 or 100 move the decimal point?

$$34,000 \div 10$$

$$340 \div 100$$

$$34 \div 10$$

$$3.4 \div 100$$

count off! by 2s.

1s = Medians

2s = Means

1. A young artist has sold 10 paintings. Calculate the measure of center you were assigned for each of these samples:

a. The first two paintings she sold were for $50 and $350.

b. At a gallery show, she sold three paintings for $250, $400, and $1,200.

c. Her oil paintings have sold for $410, $400, and $375.

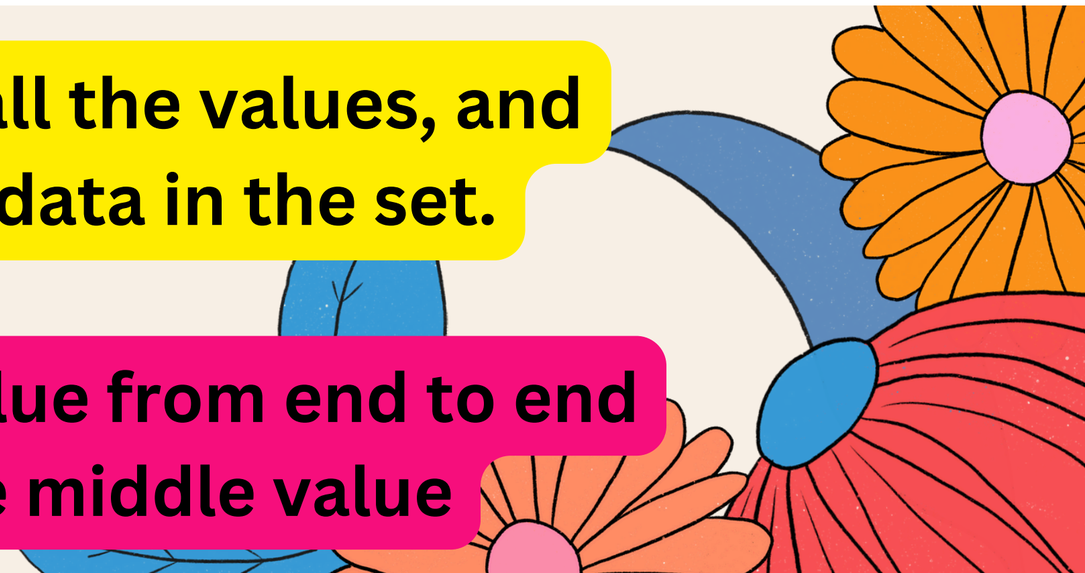
1s = Medians 2s = Means

Mean

AVERAGE, find the sum of all the values, and divide by the number of data in the set.

Median

middle, cross off one value from end to end until you reach the middle value



2. Here are the selling prices for all 10 of her paintings:

$50	$200	$250	$275	$280	$350	$375	$400	$410	$1,200

Calculate the measure of center you were assigned for all of the selling prices.

1s = Medians 2s = Means

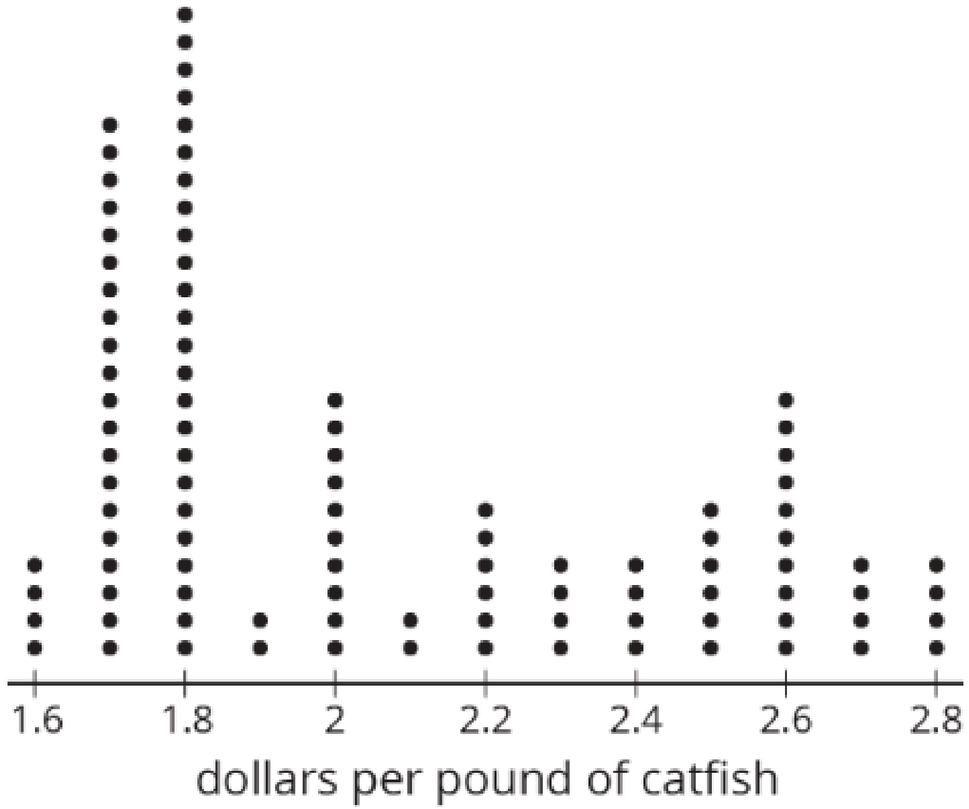
3. Compare your answers with your partner. Were the measures of center for any of the samples close to the same measure of center for the population?

	Mean	Median
Sample 1	200	200
Sample 2	616.67	400
Sample 3	395	400
POPULATION	379	315

The price per pound of catfish at a fish market was recorded for 100 weeks.

1. Here are dot plots showing the population and three different samples from that population. What do you notice? What do you wonder?

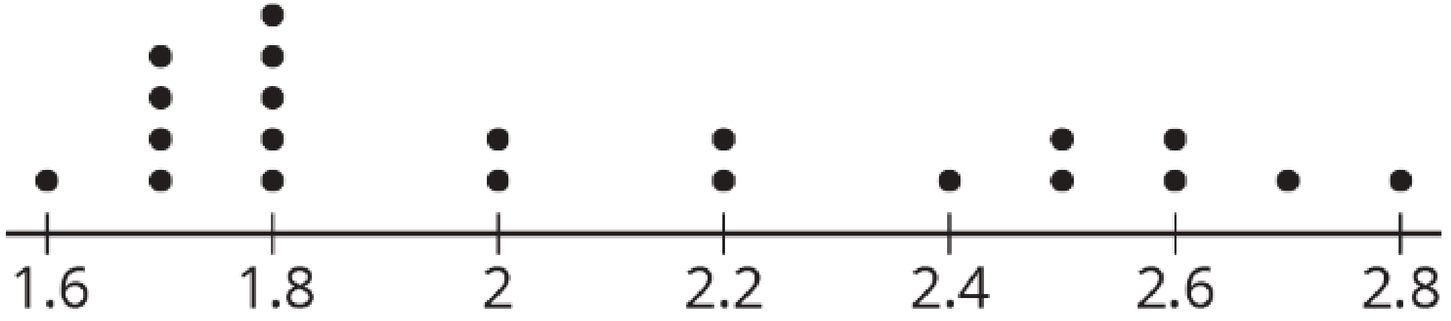
Population



What do you notice?

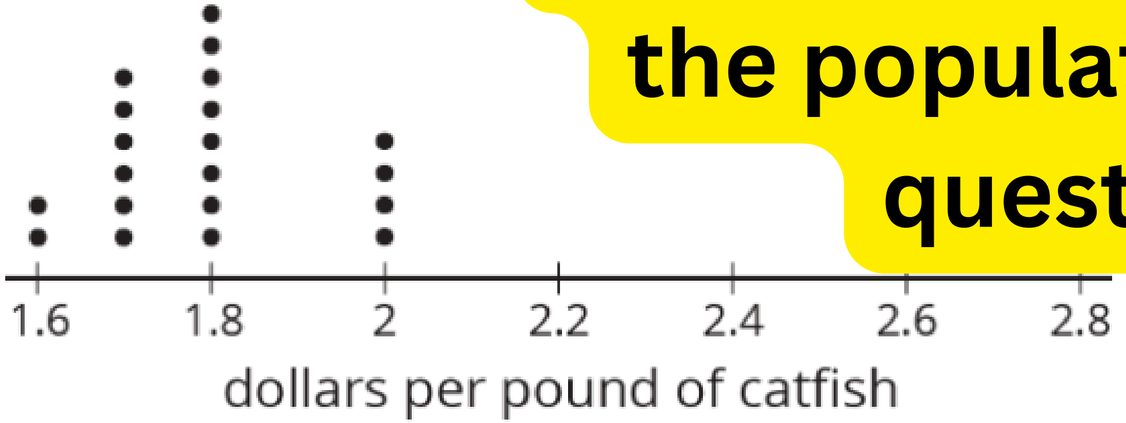
What do you wonder?

Sample 1

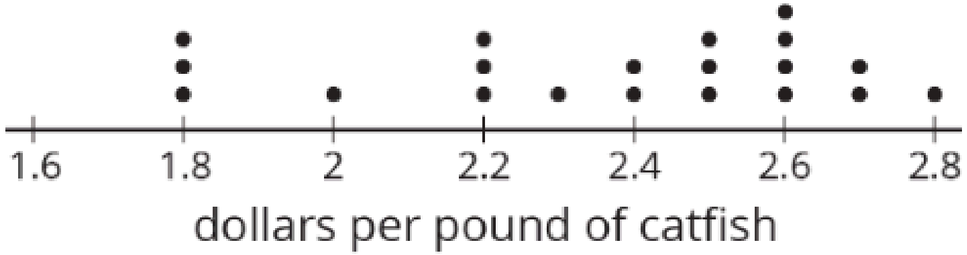


compare these samples to the population, answer question #2

Sample 2



Sample 3



Go For the Gold!!

FACT FLUENCY

- 3 minutes independent work time
- you may use your calculator if you need to
- Trade and Grade with partner

SKILL FLUENCY

- Annotate the question for key info
- Use POE on all multiple choice
- Show your work, use any available space on the paper or the back of fact fluency
- Bubble sheets will be scanned!

Morrison:

1. Backpack and coat on the back of your chair.
2. Complete heading on CR packet.
3. Chromebook in seat basket

Unit 8 Lesson 14

First Five Minutes

1. Find your NEW assigned seat.
2. Re-Distribute Work Books
3. Materials: Pencil, Calculator

HOMEWORK OUT

Open WorkBook to Page: 199

CR- Resubmit

1. **Grade Reports Have:**
    a. **7NSA1**
    b. **7NSA2**
    c. **7NSA3**
    d. **Weekly Quiz 1**
    e. **7EEA1**
    f. **7EEA4a**
    g. **7EEA4b**

on friday, all empty slots will become “M”

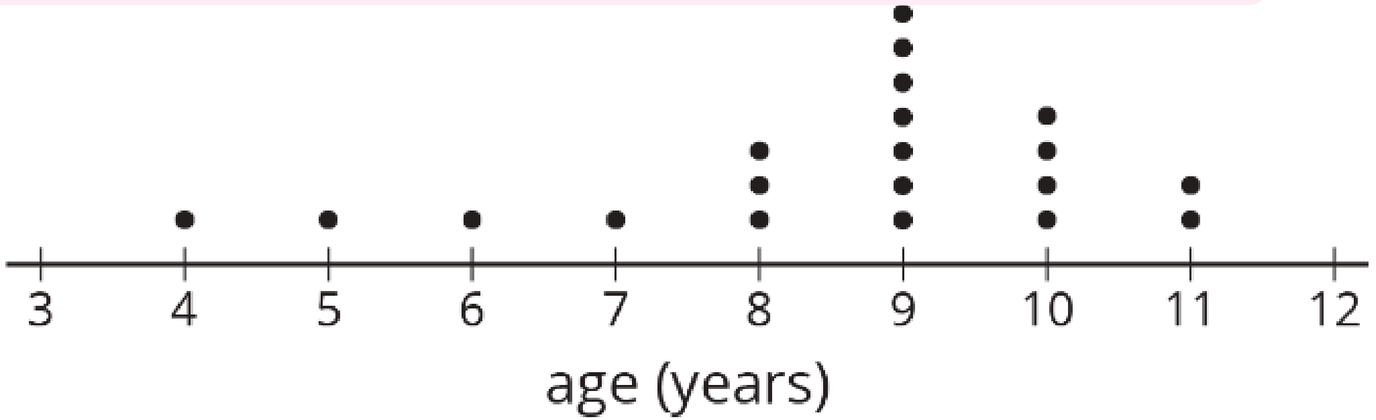
****Resubmissions not yet accounted for. You may have a late submission that hasnt gone in yet.**

WARM Up

A survey was taken at a movie theater to estimate the average age of moviegoers.

analyze the dot plot and answer questions 1-2 independently.

Here is a dot plot showing the ages of the first 20 people surveyed.



1. What questions do you have about the data from survey?

2. What assumptions would you make based on these results?

14.2

situation

1. Lin is running in an election to be president of the seventh grade. She wants to predict her chances of winning. She has the following ideas for surveying a sample of the students who will be voting:

a. Ask everyone on her basketball team who they are voting for.

b. Ask every third girl waiting in the lunch line who they are voting for.

c. Ask the first 15 students to arrive at school one morning who they are voting for.

3 possible ways to collect data

14.2

1. **Read each situation and the methods.**
2. **For EACH method, explain what kind of results would be obtained from each sample**
3. **Good Sample or no?**

1. Lin is running in an election to be president of the seventh grade. She wants to predict her chances of winning. She has the following ideas for surveying a sample of the students who will be voting:

a. Ask everyone on her basketball team who they are voting for.

b. Ask every third girl waiting in the lunch line who they are voting for.

c. Ask the first 15 students to arrive at school one morning who they are voting for.

2. A nutritionist wants to collect data on how much caffeine the average American drinks per day. She has the following ideas for how she could obtain a sample:

a. Ask the first 20 adults who arrive at a grocery store after 10:00 a.m. about the average amount of caffeine they consume each day.

Every 30 minutes, ask the first adult who comes into a coffee shop about the average amount of caffeine they consume each day.

Lesson 14 Practice Problems

1. **page 204**
2. **Answering Q 1-6**

Go For the Gold!!

FACT FLUENCY

- 3 minutes independent work time
- you may use your calculator if you need to
- Trade and Grade with partner

SKILL FLUENCY

- Annotate the question for key info
- Use POE on all multiple choice
- Show your work, use any available space on the paper or the back of fact fluency
- Bubble sheets will be scanned!

Morrison:

1. Backpack and coat on the back of your chair.
2. Complete heading on CR packet.

Bubble sheet out

First Five Minutes

1. Find your NEW assigned seat.
2. Re-Distribute Work Books
3. Materials: Pencil, Calculator

HOMEWORK OUT

Open WorkBook to Page 206

CR- Resubmit

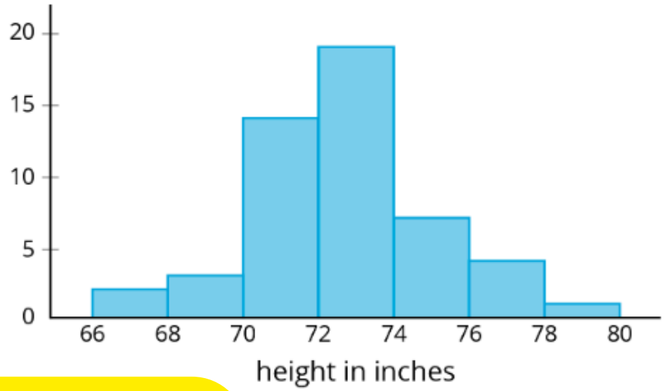
1. **Grade Reports Have:**
    a. **7NSA1**
    b. **7NSA2**
    c. **7NSA3**
    d. **Weekly Quiz 1**
    e. **7EEA1**
    f. **7EEA4a**
    g. **7EEA4b**

all empty slots will become “M”

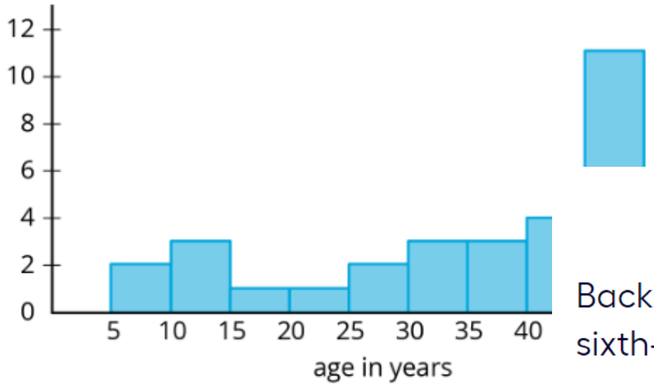
****Resubmissions not yet accounted for. You may have a late submission that hasnt gone in yet.**

WARM Up

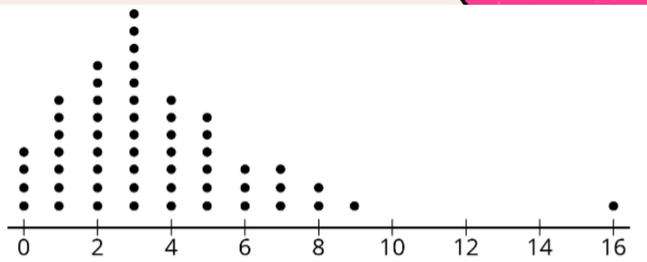
Heights of 50 basketball players



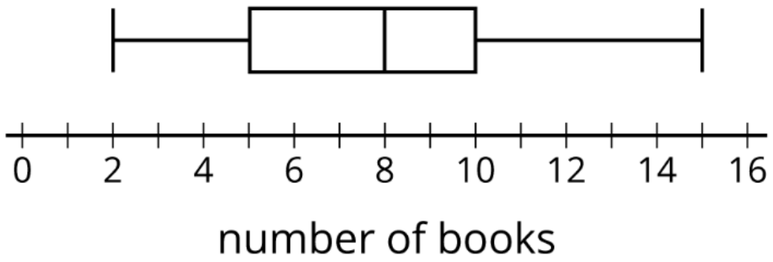
Ages of 30 people at a family dinner party



Backpack weights of sixth-grade students



How many books ts read over summer break



Mean

AVERAGE, find the sum of all the values, and divide by the number of data in the set.

Median

middle, cross off one value from end to end until you reach the middle value

should you use the MEAN or the MEDIAN to describe the data

count off! by 3s.

1s = Sample 1

2s = Sample 2

3s = Sample 3

Here are the ages (in years) of a random sample of 10 viewers for 3 different television shows. The shows are titled, “Science Experiments YOU Can Do,” “Learning to Read,” and “Trivia the Game Show.”

1. Calculate the mean for your sample
2. Based on the mean, which show does each sample relate to?

sample 1	6	6	5	4	8	5	7	8	6	6
sample 2	15	14	12	13	12	10	12	11	10	8
sample 3	43	60	50	36	58	50	73	59	69	51

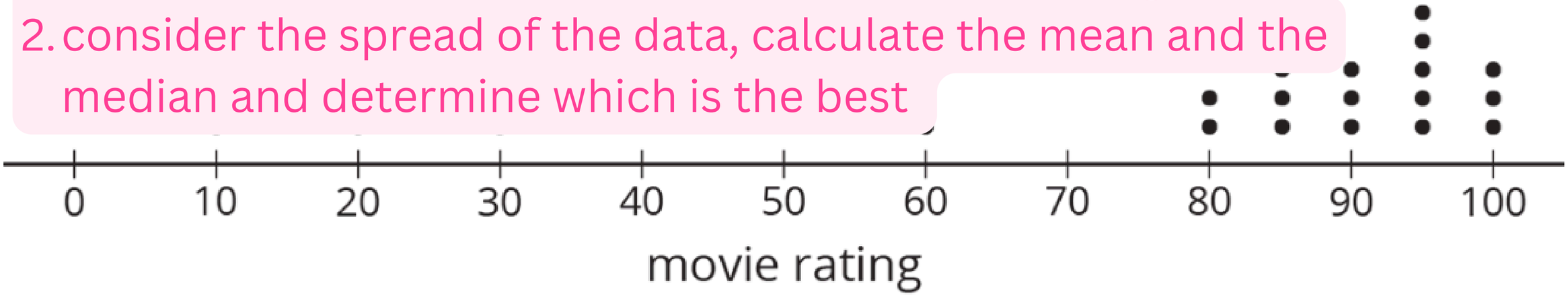
Here are three more samples of viewer ages collected for these same 3 television shows.

sample 4	57	71	5	54	52	13	59	65	10	71
sample 5	15	5	4	5	4	3	25	2	8	3
sample 6	6	11	9	56	1	3	11	10	11	2

1. Calculate the mean for your sample
2. Based on the mean, which show does each sample relate to?

A movie rating website has many people rate a new movie on a scale of 0 to 100. Here is a dot plot showing a random sample of 20 of these reviews.

1. 4 minutes silent solo work, check for understanding.
2. consider the spread of the data, calculate the mean and the median and determine which is the best



1. Would the mean or median be a better measure for the center of this data? Explain your reasoning.

Go For the Gold!!

- Wednesday and Thursday are going to be “Drill and Kill” Practice with unit 8 skills and 2 other major skill gaps:
  - **Mean median, mode, range**
  - **Percentages**
  - **Order of Operations with expressions (positive and negative numbers)**
- iReady: there is work assigned via iReady for additional practice with these skill gaps. Feel free to complete over break.

1 page = 1 Cool Down

turn in the wholePacket = State test CR packet

First Five Minutes

1. Go directly to assigned seat.
2. Re-Distribute Work Books
3. Materials: Pencil, Calculator

ANY CR TO TURN IN??

Open WorkBook to Page: 211

CR- Resubmit

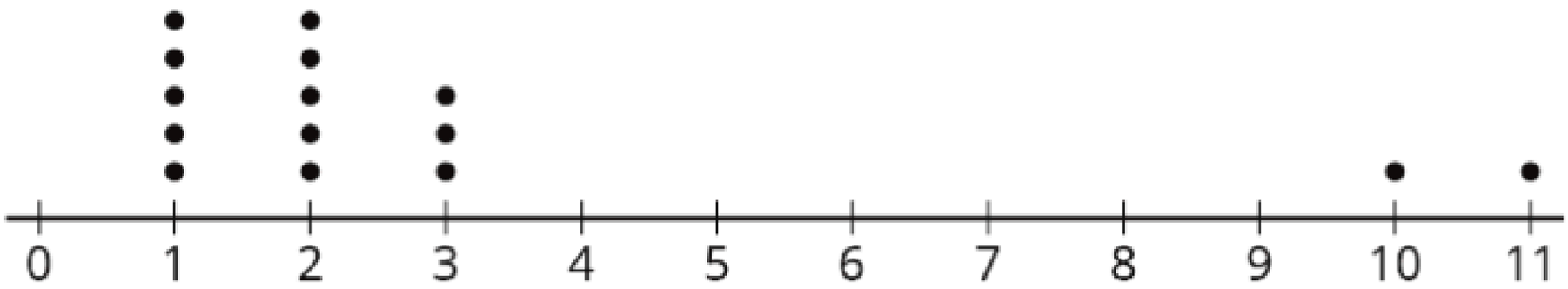
1. **Grade Reports Have:**
    a. **7NSA1**
    b. **7NSA2**
    c. **7NSA3**
    d. **Weekly Quiz 1**
    e. **7EEA1**
    f. **7EEA4a**
    g. **7EEA4b**

all empty slots will become “M”

****Resubmissions not yet accounted for. You may have a late submission that hasnt gone in yet.**

Model: lesson 15 Practice

1. A random sample of 15 items were selected.



For this data set, is the mean or median a better measure of center? Explain your reasoning.

1. Calculate the mean, calculate the median,
2. Compare your results to what your are seeing in the dot plot. Which should be used as the best measure of center for the dot plot?

Model: lesson 15 Practice

2. A video game developer wants to know how long it takes people to finish playing their new game. They surveyed a random sample of 13 players and asked how long it took them (in minutes).

1,235	952	457	1,486	1,759	1,148	548	1,037
1,864	1,245	976	866	1,431			

a. Estimate the median time it will take *all* players to finish this game.

1. Organize the data in a *least* to *greatest* list.
2. Calculate the mean, calculate the median
3. Which is the best measure of center?

16.1 Getting to School p 213

A teacher asked all the students in one class how many minutes it takes them to get to school. Here is a list of their responses:

20	10	15	8	5	15	10	5	20	5	15	10
3	10	18	5	25	5	5	12	10	30	5	10

1) What fraction of the students in this class say:

a. it takes them 5 minutes to get to school?

b. it takes them more than 10 minutes to get to school?

16.1 Getting to School p 213

2) If the whole school has 720 students, can you use this data to estimate how many of them would say that it takes them more than 10 minutes to get to school?

Be prepared to explain your reasoning.

Questions to consider

- ***what do I need to multiply the sample by to equal the population?***

16.3 Comic Book Hero p 215

proportion

A proportion of a data set is the fraction of the data in a given category.

For example, a class has 20 students. There are 2 left-handed students and 18 right-handed students in the class. The proportion of students who are left-handed is $\frac{2}{20}$, or 0.1.

16.3 Comic Book Hero p 215

1) What proportion of this sample want the new hero to have the ability to fly?
2) If there are 2,024 dedicated readers of *The Adventures of Super Sam*, estimate the number of readers who want the new hero to fly.

16.3 Comic Book Hero p 215

Two other comic books did a similar survey of their readers.

- In a survey of people who read *Beyond Human*, 42 out of 60 people want a new hero to be able to fly.
- In a survey of people who read *Mysterious Planets*, 14 out of 40 people want a new hero to be able to fly.

Do you think the proportion of all readers who want a new hero that can fly are nearly the same for the three different comic books? Explain your reasoning.

Lesson 16 Practice Problems p 219

1. Tyler wonders what proportion of students at his school would dye their hair blue, if they were allowed to. He surveyed a random sample of 10 students at his school, and 2 of them said they would. Kiran didn't think Tyler's estimate was very accurate, so he surveyed a random sample of 100 students, and 17 of them said they would.

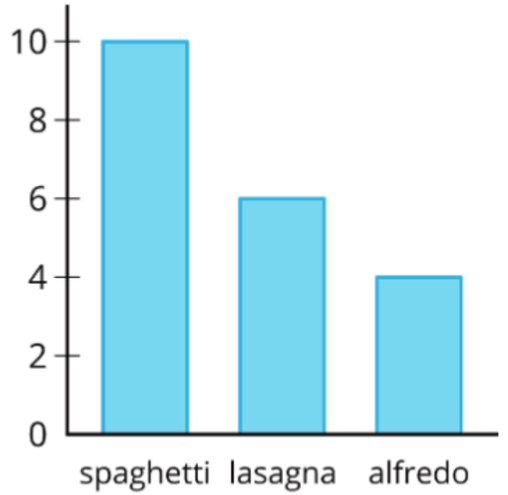
   a. Based on Tyler's sample, estimate what proportion of the students would dye their hair blue.

   b. Based on Kiran's sample, estimate what proportion of the students would dye their hair blue.

   c. Whose estimate is more accurate? Explain how you know.

1. Silent Solo
2. Answer #1 and #2

2. Han surveys a random sample of students about their favorite pasta dish served by the cafeteria and makes a bar graph of the results.



Estimate the proportion of the students who like lasagna as their favorite pasta dish.

Go For the Gold!!

- Wednesday and Thursday are going to be “Drill and Kill” Practice with unit 8 skills and 2 other major skill gaps:
  - **Mean median, mode, range**
  - **Percentages**
  - **Order of Operations with expressions (positive and negative numbers)**
- iReady: there is work assigned via iReady for additional practice with these skill gaps. Feel free to complete over break.

1 page = 1 Cool Down

turn in the wholePacket = State test CR packet