| Check when done	Math Assignments for this week
✅	
○	15 total practice problems focused on the content focus for the week (problems can come from the Digits practice and Close-and-Checks **OR** from practice work done in the Khan Academy lessons – copied onto paper). **Must show ALL steps in getting to the solution**.
○	30 Prodigy problems if possible – or, if no internet access, 20 student-created problems with their answers and work. If doing the student-created problems, these need to be mixed types of problems, focusing on the standards we have done this year. As an example, there should be division problems, fractions problems, decimal problems, and algebraic expressions and equations. Hint: Use your math notebook to get ideas about what sorts of problems to include, then make up some of your own. **Every step must be shown in your work**.
○	One Mixed Review "quiz" – the goal of this quiz each week will be to help you know where you still need practice. I will make up the quiz each week and send it via your student email (I will also send it in the family email on Thursdays). The "Quiz" will frequently include at least one reflection question that may require that you play games that I will send in email.

Intro to Statistics

Content Focus and Materials	Goals for the Practice	Tasks Use check sheet above to track work	Check-in and support opportunities	Turning in the Work
Digits workbooks lessons 15-1, 15-2, 15-3, 15-4 **OR** Khan Academy, 6th grade, Statistical Questions, Histograms, Dot plots and Frequency Tables, Box plots "Concept on a Page" notes	By the end of the week, students will: • Understand the difference between a statistical question and other types of questions • Explore different types of statistical representations •	15 concept practice exercises from Digits **OR** Khan Academy. You can also make up your own problems IF they are related to the statistics concepts we are studying: (15 points) 30 correct Prodigy problems Quiz – can be emailed or written. Please complete the quiz without notes. (15 points)	Video/phone office hours: Monday – Thursday: 8:30 AM – 10:30 AM Friday: 8:30-10:00 and 12:12:30 "Lunch with your Teachers" **Digits** on line www.pearsonrealize.com User name is: IDnumbertusd Password is: digits56	All work for weeks 3 and 4 is due 5/15 or sooner. Hard copy work may be delivered to Freiler 5/15. If possible please turn on-line work in as it is finished. Paper work may also be submitted via email (fmartin@tusd.net) by either scanning or taking a clear picture of the work and attaching to an email.

Concept Notes on a Page guide for Week 4 – Intro to Statistics

- A statistical question is a question about some aspect of the real world that could have more than one possible answer. Example: How many Prodigy problems did each student do this week? Non-example: Do you like doing Prodigy math problems?
- A Data Set is the collection of answers to a statistical question. For example, a list of the number of Prodigy problems students in first period did: 45, 30, 28, 45, 67, 49, 51, 67 etc.
- Frequency means how often a certain answer or value shows up in a data set. For example, in the data set above, 45 and 67 show up twice each.
- Some types of data charts show the information in groups, some show it as individual entries. For example, a dot plot would show each entry separately, while a histogram of our Prodigy data above might show number of problems in groups of 10 – how many kids did 21-30 problems, how many kids did 31-40 problems, how many kids did 41-50 problems, etc.
- Some types of data charts don't show the frequency of data, instead they show patterns in the data. For example, a box plot shows

- To find the average (also called the MEAN) of a group of values, add all the values together and divide by the number of values in the list.
- Graphs and tables are a way to organize and display numberic information. They can make the information easier to understand and make it easier to locate patterns in the data.
- In any list of values, when listed in order, there is a value that is in the middle of the list. Ex: 1,3,5,6,8,9,11 – in that list, that is in order, the middle value is 6.

Doing statistics is a different than doing mathematics. It involves a four-step process: formulating questions, collecting data, analyzing results, and interpreting the results. It might seem more like science. ☺ In statistics, we look at the shape that the data makes on charts/graphs to help interpret what the data means.
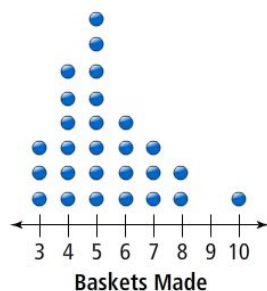
Dot Plot

Histogram

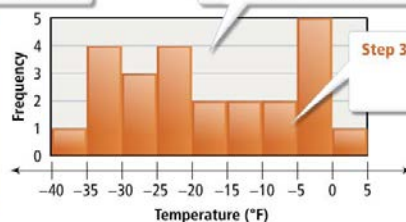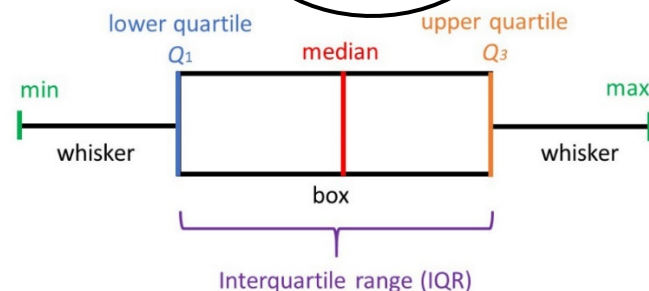Box Plot (this is the most difficult one)
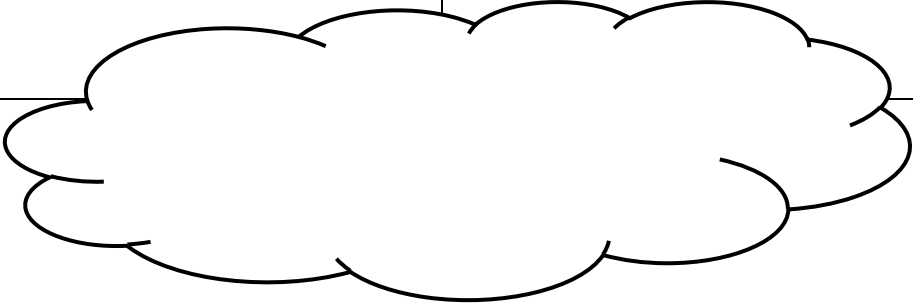
Mixed Review Quiz #4

(open note if necessary)

103.45 • 19.7 =	$4\frac{3}{4} \cdot 12\frac{2}{5} =$	14.56 ÷ 3.2 =
428x = 1365.32	If a triangle has an area of 42 square inches, and the base is 7 inches, what is it's height? (area = ½ b•h)	Use distributive property to write an equivalent expression to: 3.5 (x + 7)
What is the ration of squares to circles in the following picture? What is the ratio of circles to total shapes?	Simplify by combining like terms: 13 + 4x + 7 + 3y + x - 2	What is 40% of 80 *(hint: think about what half or 50% of 80 would be…)*

Which is the correct answer to this problem: 6 + 14x ÷ 2 • 3? 20x ÷ 6 **or** 21x + 6? Explain how you know (explain your steps).

Check when done	Math Assignments for this week
✅	
◯	**10** total practice problems focused on the content focus for the week (problems can come from the Digits practice and Close-and-Checks **OR** from practice work done in the Khan Academy lessons – copied onto paper). **Must show ALL steps in getting to the solution**.
◯	30 Prodigy problems if possible – or, if no internet access, 20 student-created problems with their answers and work. If doing the student-created problems, these need to be mixed types of problems, focusing on the standards we have done this year. As an example, there should be division problems, fractions problems, decimal problems, and algebraic expressions and equations. Hint: Use your math notebook to get ideas about what sorts of problems to include, then make up some of your own. **Every step must be shown in your work**.
✅	No quiz this week! ☺

Content Focus and Materials	Goals for the Practice	Tasks	Check-in and support opportunities	Turning in the Work
<u>Introduction to Ratios</u> Digits workbooks lessons 16-1, 16-2, 16-3, 16-4 *This are difficult concepts, take your time to be sure you really understand them. ☺ **OR** Khan Academy, 6ᵗʰ grade, Mean and Median, Interquartile Range, Box Plots, Mean Absolute Deviation Prodigy **OR** student created problems	By the end of the week, students will: • Understand the concept of "center" as it pertains to statistical data • Recognize that there are multiple ways to analyze data depending on what you need to do with that data	_____ 15 concept practice exercises Digits **OR** Khan Academy: Intro to Ratios, Equivalent Ratios, and Visualize Ratios (15 points) _____30 correct Prodigy problems OR 30 review practice problems that you make up (these must illustrate practice of 6ᵗʰ grade work). *_Hard copy work must show the problem and each step in its solution._ (10 points)	Video/phone office hours: Video/phone office hours: Monday – Thursday: 8:300 AM – 10:30 AM Friday: 8:30-10:00 and 12:12:30 "Lunch with your Teachers" or Digits on line User name is: IDnumbertusd Password is: digits56	No hard-copy work for week 5 will be turned in. Digital work may be turned in through 5/21.

"Concept on a Page" notes				

Critical Notes on a Page guide for Week 5 – Statistical Measures of Center: use these notes to help you do the practice problems in the Close and Checks.

- Variability refers to how much the values in a data set differ (or "vary") from each other. The more spread out the values are, the higher the variability.
- A Range is the distance between data points. For example if the data points in a set were 1, 3, 5,11 and 41, the range would be from 1 to 41.
- An Interquartile Range is the data represented in the box part of a box plot – it is the middle 50% of the data set.

- Mean (also called average) is the measure of one type of "center" in a data set. You find mean by adding all the values in the data set together and then dividing by the number of values in the list.
- Median is another type of "center" in a data set. You find median by first listing the values in order and then finding the middle or center number in the list of data. You use Medians in creating box plots and determining Interquartile Ranges.

The Measures of Center in statistics include: mean, median and mode. Measures of variability include range and mean absolute deviation.

The information in this lesson might seem very complex since we are not doing a project that would make it make sense. Just "play" with the lessons and practice problems, trying to use the correct vocabulary as you go through them. You will get more practice with this information next year. ☺