East Wake Middle School Daily Lesson Plan

Teacher: Hall

Lesson Date: May 7th - May 11th

Subject: Math 6

|  |
| --- |
| **Common Core//Essential Skill Standard(s):** *(What are the skills being taught? Which standards are being specifically addressed in these lessons?*  Monday & Tuesday:  **6.G.2** Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas V = l w h and V = b h to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.  **6.G.4** Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.  Wednesday - Friday:  **6.SP.1** Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in  the answers.  **6.SP.2** Understand that a set of data collected to answer a statistical question has a distribution which can be described by its  center, spread, and overall shape.  **6.SP.3** Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a  measure of variation describes how its values vary with a single number.  **6.SP.4** Display numerical data in plots on a number line, including dot plots, histograms, and box plots.  **6.SP.5** Summarize numerical data sets in relation to their context, such as by:  **a**. Reporting the number of observations.  **b**. Describing the nature of the attribute under investigation, including how it was measured and its units of  measurement.  **c**. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean  absolute deviation), as well as describing any overall pattern and any striking deviations from the overall  pattern with reference to the context in which the data were gathered.  **d**. Relating the choice of measures of center and variability to the shape of the data distribution and the context  in which the data were gathered. |
| **The Learning Targets**: (Written in student friendly language)  **Monday:** Students will complete stations reviewing 6.G.2 and 6.G.4 standards.  **Tuesday:** Students will complete the Unit 12 Assessment on Mastery Connect  **Wednesday:** Students will understand and explain the difference between an statistical question and non-statistical question  **Thursday:** Students will determine the mean, median, and mode of a data set  **Friday:** Students will determine the mean, median, and mode of a data set |
| **Vocabulary:** Monday & Tuesday**:** Base, Edge, Face, Height, Isosceles, Net, Polyhedron, Pyramid, Right rectangular prism, Triangular prism, Vertices, Area, Decomposing,Dimensions, Surface Area, Volume  Wednesday - Friday: Analyzing Data, Box Plot, Center, Cluster, Collecting Data, Continuous Data, Data, Discrete Data, Distribution, Dot Plot, Five-Number Summary, Frequency Table, Gap, Histogram, Inter-Quartile Range, Interpreting Data, Interval, Line Plot, Lower Quartile, Maximum Value, Mean, Mean Absolute Deviation, Measures of Center, Measures of Variability, Median, Minimum Value, Mode, Outlier, Peak, Quartiles, Range, Skewed, Spread, Statistics, Summary Statistics, Symmetrical, Upper Quartile, Variability |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | Monday | Tuesday | Wednesday | Thursday | Friday |
|  | **Engage**  **Greet students with a handshake at the door.**  **“Good Things”** | ~Teacher Greets Students at the Door with a handshake.  ~T/SW do “Good Things” (sw lead this each day/select student leader for the week) | ~Teacher Greets Students at the Door with a handshake.  ~T/SW do “Good Things” (sw lead this each day/select student leader for the week) | ~Teacher Greets Students at the Door with a handshake.  ~T/SW do “Good Things” (sw lead this each day/select student leader for the week) | ~Teacher Greets Students at the Door with a handshake.  ~T/SW do “Good Things” (sw lead this each day/select student leader for the week) | ~Teacher Greets Students at the Door with a handshake.  ~T/SW do “Good Things” (sw lead this each day/select student leader for the week) |
| 5 min | **Xplore**  **Success Starter:** *(What meaningful and relevant activity will students complete as soon as they enter the classroom?)*  **“Good Things” Teacher determines when this will take place, beginning, middle, or maybe end of class if appropriate.** | SW complete Success Starter “Two Daily Word Problem” which requires them to choose a word problem to explain their thinking using writing weekly.  T/SW do “Good Things”  [Quarter 4 Week 3 Spiral Review](https://drive.google.com/open?id=1bGNwnivD5VqKDcray3HeiaOSPjJurWE0)  [Unit 12 Vocabulary](https://drive.google.com/open?id=0B68Rhu0F2PwtU2MtZ0p5Wlg1Z1U) | SW complete Success Starter “Two Daily Word Problem” which requires them to choose a word problem to explain their thinking using writing weekly.  T/SW do “Good Things” | SW complete Success Starter “Two Daily Word Problem” which requires them to choose a word problem to explain their thinking using writing weekly.  T/SW do “Good Things”  [Unit 13 Vocabulary](https://drive.google.com/open?id=1VAvcwr-32wTMaq1m0mBvfhQbOpP9PaQggZie3ogdKC4) | SW complete Success Starter “Two Daily Word Problem” which requires them to choose a word problem to explain their thinking using writing weekly.  T/SW do “Good Things” | SW complete Success Starter “Two Daily Word Problem” which requires them to choose a word problem to explain their thinking using writing weekly.  T/SW do “Good Things” |
| 10 min | **Communicate**  **Whole Group Instruction:** *(Focused lessons [explicit teaching/modeling, strategy demonstration,graphic supports, activate prior knowledge], shared reading, shared writing, video clips, illustrations, discussion, writing process.)* | TW explain that today students will be reviewing for the Unit 12 Assessment.  TW begin the review by having students take out their Unit 12 Study Guide.  TW review the study guide as a whole class.  [Unit 12 Study Guide/Review](https://drive.google.com/open?id=1T-Bj-9JpDEXOYOxsxJ608d20wqwEX6pcYFxWpY_LAik)  TW then explain to students that they will spend the remainder of the time rotating through 4 different stations to review before the assessment tomorrow. | TW read the directions as a whole group for the Unit 12 Assessment.  TW review expectations for taking the math assessment using Mastery Connect.  (About 5 minutes) | TW begin the unit by handing out [**Unit 13 Glossary**](http://cmapp.wcpss.net/uploads/files/ccss-m-ms/6th_grade/6th_grade_unit_10/6ccss_d130_unit_10_glossary_d130.docx) and discussing with students that throughout the unit they will be filling in the glossary as a reference.  TW ask students what words they recognize and discuss what they already know about the words in the glossary. TW give students a few minutes to think on their own, then share with a partner, then with the class.  TW then have students take out their video notes from last night.  TW then review as a whole class the “In Class portion of the notes. (Depending on student level, teacher may select student leaders to model problems)  [Unit 13 Video 1 Notes](https://drive.google.com/open?id=1LSo1v58URdL_3FSGOg9dKiI1a09JzkpW)  TW then begin the new lesson using the following dialogue:  If you want to find out about something, you can ask questions. Some questions have only one answer, such as, “How many people are in your family?” Other questions have multiple answers, such as, asking the people in your class, “What is your favorite video game?” When you ask a question to make a prediction about a larger group, you are asking a statistical question.  Statistics are numerical data relating to a group of individuals; statistics is also the name for the science of collecting, analyzing and interpreting such data. A statistical question anticipates an answer that varies from one individual to the next and is written to account for the variability in the data. Data are the numbers produced in response to a statistical question. Data are frequently collected from surveys or other sources (i.e. documents). (Students will need to differentiate between statistical questions and those that are not.) A statistical question is one that collects information that addresses differences in a population. The question is framed so that the responses will allow for the differences. For example, the question, “How tall am I?” is not a statistical question because there is only one response; however, the question, “How tall are the students in my class?” is a statistical question since the responses anticipates variability by providing a variety of possible anticipated responses that have numerical answers. Questions can result in a narrow or wide range of numerical values. Students might want to know about the fitness of the students at their school. Specifically, they want to know about the exercise habits of the students. So rather than asking "Do you exercise?" they should ask about the amount of exercise the students at their school get per week. A statistical question for this study could be: “How many hours per week on average do students at Jefferson Middle School exercise?”  TW then pass out “Intro to Statistics” page 1 and display the Statistics powerpoint.  [Statistical Questions Powerpoint](https://drive.google.com/open?id=0B68Rhu0F2PwtUndWMVZ1YjZ3YzA)  [Intro to Statistics](https://drive.google.com/open?id=0B68Rhu0F2PwtLTFRMGVFbW5aZ1E)  SW take notes while teacher is reviewing the powerpoint. | TW begin the lesson by having students take out their “Intro to Statistics Notes” from yesterday.  TW have students turn to the 2nd page and review as a whole class mean, median, and mode.  TW then have students take out their video notes from last night and review as a whole class the “You Try” portion.  [Unit 13 Video 2 notes](https://drive.google.com/open?id=1kdewwku6Hmn4GfvxwCo5lkIiVoVVxYan)  TW then have students take out their unit 13 glossary page and update with today’s new vocabulary.  [**Unit 13 Glossary**](http://cmapp.wcpss.net/uploads/files/ccss-m-ms/6th_grade/6th_grade_unit_10/6ccss_d130_unit_10_glossary_d130.docx)  Once students have added their new vocabulary words, TW have students take out their Mean, Median, and Mode notes to work on as a whole class.  [Mean, Median, Mode Notes](https://drive.google.com/open?id=1hTJX0F1SgEXlpp0ZV64OqIKp49sLNPQT) | TW begin the lesson by having students take out their video notes from last night and review as a whole class the “You Try” portion.  [Unit 13 Video 3 Notes](https://drive.google.com/open?id=1cc_onqoQC9XrSiGO8KN39m8Cs0oP2jJ8)  TW explain that SW continue to explore/experiment with median by using index cards with student names. (Connected Mathematics, Data About Us, Statistics book, 1.3 page 12-13)  TW have index cards premade for student pairs containing 10 different names.  TW review the different tasks during this math experiment as well as the directions.  TW then model how to order the cards from shortest name length to longest name length, and identify the median of the data.  SW then work in pairs to complete the exploration/experiment.  [Experimenting with Median page 12](https://drive.google.com/open?id=0B68Rhu0F2PwtRWRGajJDeEtTSk0)  [Experimenting with Median page 13](https://drive.google.com/open?id=0B68Rhu0F2PwtZlVSeEVYeER3YzA)  **2nd Model:** TW model number 1 on “”Mean Story Problems”  [Mean Story Problems](https://drive.google.com/open?id=0B68Rhu0F2PwteFFyU1pkaFkxblU) |
| 25 min | **Empower**  **Group Activity//Small Group Instruction:** (teacher-facilitated group discussion, student learning team activity, re-teaching or intervention) | TW explain to students that they will rotate through math stations to help review for the math test on Monday.  TW review expectations and have a student share-out expectations.  SW work in their assigned groups and use the remaining time to rotate through four different math stations. (Students may not get to all stations)  **Station 1:** Work with teacher. Teacher will have students work on any items they may need help on to better understand the material.  **Station 2:** Computer Station-Khan Academy or Cool Math for volume and surface area review.  **Station 3**: Bucket of Lies  [Bucket of Lies Instructions](https://drive.google.com/open?id=0B68Rhu0F2PwtR09iNmZmbXhOR3c)  [Bucket of Lies](https://drive.google.com/open?id=0B68Rhu0F2PwtbVAtSEU0cHU3ME0)    **Station 4**: Birdhouse Activity  [Birdhouse Activity](https://drive.google.com/open?id=0B68Rhu0F2PwtTk1QUTJjQlVRYk0) | SW discuss in their table groups expectations for taking assessments in the classroom using computers.  TW have various student leaders share out.  (About 5- 7 minutes) | SW work in table groups to complete “Statistical Questions Sort”  TW rotate around the room to listen to student reasoning to their placement.  [Statistical Questions Sort](https://drive.google.com/open?id=0B68Rhu0F2PwtS1lqeDhjSXdJNWs)  TW select student leaders to share out their placements. | (There are two different sheets/teacher can split both sheets in half and have students work together to complete the first half of each. Students then can complete the second half for homework)  SW work with a partner to determine the median of 5 different data sets. (Teacher may want to model the first one or 2 depending on the class).  SW continue to work with their partner to determine the mean of 5 different data sets. (Teacher may want to model the first one or 2 depending on the class).  [Mean Game](https://drive.google.com/open?id=0B68Rhu0F2Pwtc3NVZkQyTk8yLUE)  [Median Madness](https://drive.google.com/open?id=0B68Rhu0F2Pwtc29wTGg3TFU2TFE) | SW work in table groups to complete “Mean Story Problems” numbers 2- 4  [Mean Story Problems](https://drive.google.com/open?id=0B68Rhu0F2PwteFFyU1pkaFkxblU)  **6 Plus Class:** SW work in table groups on “Figure Out the Data” to satisfy the condition stated.  [Figure Out the Data](https://drive.google.com/open?id=0B68Rhu0F2PwtdmpPSkNzSUlicG8) |
| 10 min | **Independent Practice**: *(individual practice, discussion,)* | SW continue to rotate through the math stations as a review of the unit’s lesson.  **Homework:**Continue to study your notes and study guide for Unit 12 Assessment. | SW complete the math assessment using their notes on mastery connect.  **Homework:** SW need to watch Unit 13, Video 1 and complete the homework portion of their notes.  [Unit 13 Video 1](http://bit.ly/2nNIHTY)  [Unit 13 Video 1 Notes](https://drive.google.com/open?id=1LSo1v58URdL_3FSGOg9dKiI1a09JzkpW) | SW individually complete “Asking Statistical Questions Activity” and turn in.  [Asking Statistical Questions Activity](https://drive.google.com/open?id=0B68Rhu0F2PwtN0pVUEpsOUpxdE0)  **Homework:** SW need to watch Unit 13, Video 2 and complete the homework portion of their notes.    [Unit 13 Video 2](https://www.youtube.com/watch?v=J9-3D80zFrc)  [Unit 13 Video 2 notes](https://drive.google.com/open?id=1kdewwku6Hmn4GfvxwCo5lkIiVoVVxYan) | SW individually complete “Mean, Median, and Mode Exit Ticket”  [Mean, Median, and Mode Exit Ticket](https://drive.google.com/open?id=0B68Rhu0F2PwtaEJaVGZnUEd5eTQ)  **Homework:** SW need to watch Unit 13, Video 3 and complete the homework portion of their notes.    [Unit 13 Video 3 Notes](https://drive.google.com/open?id=1cc_onqoQC9XrSiGO8KN39m8Cs0oP2jJ8)  [Unit 13 Video 3](https://www.youtube.com/watch?v=gsUSFyHlXjQ) | SW individually complete “Mean Story Problems” numbers 5 & 6    [Mean Story Problems](https://drive.google.com/open?id=0B68Rhu0F2PwteFFyU1pkaFkxblU)  **Homework:** SW need to watch Unit 13, Video 4 and complete the homework portion of their notes.    [Unit 13 Video 4 Notes](https://drive.google.com/open?id=1nbvkI9rRSPh4CNWIqE2KIoqy6SDiAgzc)    [Unit 13 Video 4](https://www.youtube.com/watch?v=duz41s7cqH0) |
| less than 5 min | **Launch**  **Evaluate Understanding/Assessment:** *(How will I know if students have achieved today’s objective? Exit ticket, performance task, collaborative google doc, rubric, self and peer assessment, grade cam* | Teacher will monitor discussions and address weaknesses noted during work with teacher station | Unit 12 Assessment | Asking Statistical Questions Activity | Mean, Median, and Mode Exit Ticket | Mean Story Problems” numbers 5 & 6 |
| 29  min | **WIN Time**  **(What I Need)** | This will change daily depending on student needs.  ~Students that need enrichment will work on Khan Academy or Project Based Learning Activity  ~PBL: Book Project  ~Students that need intervention will work with the teacher on that particular skill or Mrs. Huff.  **Notes:** | This will change daily depending on student needs.  ~Students that need enrichment will work on Khan Academy or Project Based Learning Activity  ~PBL: Book Project  ~Students that need intervention will work with the teacher on that particular skill or Mrs. Huff.  **Notes:** | This will change daily depending on student needs.  ~Students that need enrichment will work on Khan Academy or Project Based Learning Activity  ~PBL: Book Project  ~Students that need intervention will work with the teacher on that particular skill or Mrs. Huff.  **Notes:** | This will change daily depending on student needs.  ~Students that need enrichment will work on Khan Academy or Project Based Learning Activity  ~PBL: Book Project  ~Students that need intervention will work with the teacher on that particular skill or Mrs. Huff.  **Notes:** | This will change daily depending on student needs.  ~Students that need enrichment will work on Khan Academy or Project Based Learning Activity  ~PBL: Book Project  ~Students that need intervention will work with the teacher on that particular skill or Mrs. Huff.  **Notes:** |

|  |
| --- |
| **Enrichment/Extension/Re-teaching/Accommodations:** *How will my lesson satisfy the needs of all learners? How will you scaffold for your EC and or ESL learners?*  Students will be on iReady and Khan Academy for support and remediation on their devices and at home.  Lessons may change depending on student needs and exit tickets  Math 6+ will have SuperStars on Tuesday and Pull Out PBL Activity with Ms. Forrest weekly during WIN Time.  All classes have Remediation done daily during our intervention block. Remediation is based off of student need.  Other classes have an enrichment activity with Ms. Forrest during WIN Time (Algebra Book Project: Digital)  Mrs. Huff pulls students on Wednesday and Thursday during WIN Time in both 1st and 5th Period for remediation of skills needed. |