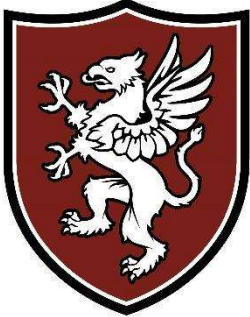


GreatHearts

Northern Oaks



Distance Learning Packet

April 6 - 10, 2020

6th grade

Mrs. Sharp

Mrs. Scholl

Mr. Lucero

Ms. Rogers

Mrs. Boyd

Student Name: _____ Section: __



Table of Contents

Sixth Grade Letter

Student Attendance Affidavit

Weekly Schedule

Monday student Instructions

Monday student pages

Tuesday student Instructions

Tuesday student pages

Wednesday student Instructions

Wednesday student pages

Thursday student Instructions

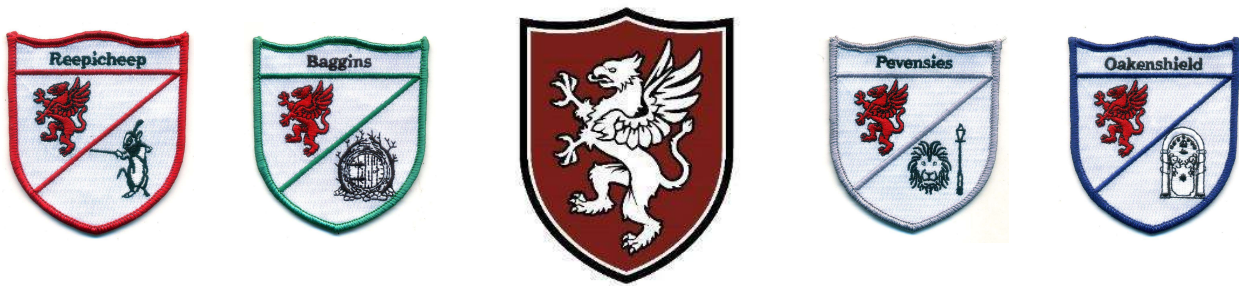
Thursday student pages

Friday April 10th – School Holiday

Grade level Reading log

Appendices

Applicable Answer Keys



The noblest pleasure is the joy of understanding.

Leonardo da Vinci

To our Sixth Grade Griffins,

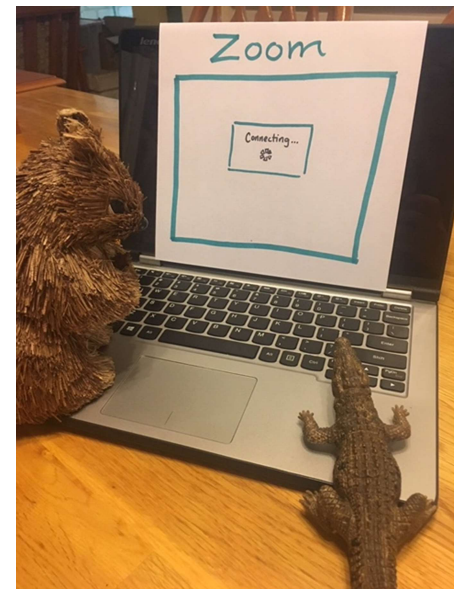
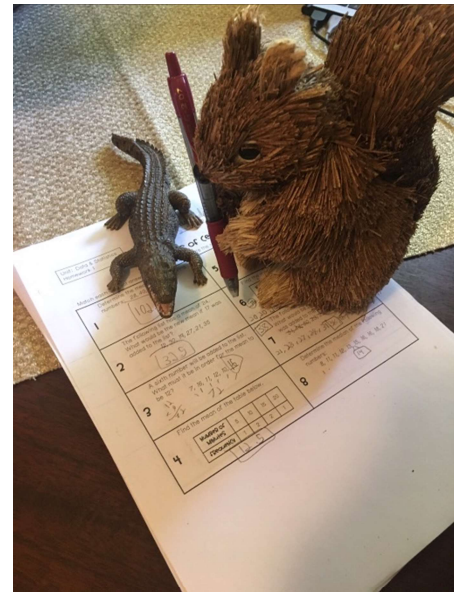
As I thought about a quote to share with all of you this week. The words of Leonardo da Vinci struck me as particularly joyful in this situation. One of the most joy filled moments that any of us can have is that moment of comprehension when an idea that we've fought to master finally clicks. There's a feeling of victory and accomplishment in that instant. No amount of quarantine or school closure has to deprive us of that joy.

We can continue to rejoice in the victory of learning in our academics when we figure out how to read a graph, diagram a sentence, or how to describe an atom. Asparagus and Potato, struggled a bit with mean, median, mode and range recently, but with time and patience, they are getting better! And they enjoyed that feeling of victory when they finally got the answer right!

However, we can have these moments of victory in so many areas of life. For example, we feel that sense of victory when we learn how to have a zoom meeting, or solve a riddle, or make a new recipe, or build the perfect pillow fort, or balance the soccer ball just right, or finally win that game of speed.

I want to encourage all of you this week to look for those moments when, like da Vinci said, you find pleasure in the joy of understanding. There is a victory to celebrate in every moment of learning, whether it's academic or the ordinary things of life.

We are here to support you!
 Drop us a line if you need help or even just to say "Hi!".
 Our days are not the same without you!
 Love, Your Teachers





Student Attendance Affidavit

April 6 - April 9, 2020

My GHNO student, _____, to the best of my knowledge attended to his/her distance learning studies on the following days:

Monday, April 6, 2020

Tuesday, April 7, 2020

Wednesday, April 8, 2020

Thursday, April 9, 2020

Student Name: _____ Grade/Homeroom: _____

Parent Name: _____ (printed)

Parent Signature: _____ Date: _____

Daily Student Instruction Sheet - MONDAY

MONDAY – 4/6/20	
ELA Poetry (15 Minutes) Literature (30 Minutes) Grammar/Writing (30 Minutes) Reading (20+ minutes)	Poetry Goal/Objective: Students will begin learning “Nothing Gold Can Stay” by Robert Frost Materials needed: “Nothing Gold Can Stay” Specific Instructions (I=independent; PA=dependent): <ul style="list-style-type: none"><input type="checkbox"/> Read the poem aloud at least twice (I)<input type="checkbox"/> Focus on committing the first three lines to memory (I) Literature Goal/Objective: Begin reading Chapter 6 of <i>The Wind in the Willows</i> Materials needed: The Wind in the Willows , Teacher Notes Specific Instructions (I=independent; PA= Parent assistance): <ul style="list-style-type: none"><input type="checkbox"/> Read through Chapter 6 vocabulary (I)<input type="checkbox"/> Read the first half of Chapter 6 (pgs. 65-70), ending with “...he grew apparently languid and depressed.” (I)<input type="checkbox"/> Answer the check for understanding questions (I) Grammar/Writing Goal/Objective: Review Dependent and Independent Clauses Materials needed: Teacher Notes, Check for Understanding Worksheet, Answer Key Specific Instructions (I=independent; PA= Parent assistance): <ul style="list-style-type: none"><input type="checkbox"/> Read teacher notes page (I)<input type="checkbox"/> Complete check for understanding worksheet (I)<input type="checkbox"/> Check your answers to question 2 with the answer key (I)
MATH (30 Minutes)	Math Goal/Objective: The student will be able to interpret and create histograms. Materials needed: Teacher’s Notes, Independent Practice, Instructional Video, Answer Key Specific Instructions: <ul style="list-style-type: none"><input type="checkbox"/> (I) Read the teacher notes.<input type="checkbox"/> (I or PA) If possible, watch the supporting video.<input type="checkbox"/> (I) Complete the independent practice<input type="checkbox"/> (I) Check the odds using the answer key at the back and rework any missed problems
HISTORY (30 Minutes)	History Goal/Objective: Students will learn about some of the changes that led to the Industrial Revolution. This week, we will focus on The Enclosure Movement.

Daily Student Instruction Sheet - MONDAY

	<p>NOTE: We are skipping Ch. 2 (pp.12-19). Students do <u>not</u> need the information in Ch.2 to understand or succeed in Ch. 3, but are welcome to read it as a supplement.</p> <p>Materials needed: Textbook pp. 20-23, supplemental video, vocabulary notes and teacher notes for Monday 4/6</p> <p>Specific Instructions (I=Independent; PA= Parent assistance):</p> <ul style="list-style-type: none"> <input type="checkbox"/> (I) - Read the beginning of Chapter 3: Moving Toward the Industrial Age in the textbook (Pp. 20-23). STOP before reading “New Ways of Mining”. <input type="checkbox"/> (I) - Review teacher vocabulary notes and notes on Enclosure <input type="checkbox"/> (I) - For additional information on Enclosure, watch the supplemental video from Mrs. Scholl
<p>LATIN (15 Minutes)</p>	<p>Latin</p> <p>Goal/Objective: Students will: 1) practice Q4U1 vocabulary; 2) continue translating “Sulla”</p> <p>Materials needed: 1) “W3 Monday Translation” worksheet; 2) Q4U1 flashcards, or 3) access to the Internet</p> <p>Specific Instructions (I=Independent; PA= Parent assistance):</p> <ul style="list-style-type: none"> <input type="checkbox"/> (I) Practice Q4U1 vocabulary for five minutes using either <ul style="list-style-type: none"> <input type="checkbox"/> Q4U1 flashcards from last week, or <input type="checkbox"/> Quizlet set at https://quizlet.com/_87ufzg?x=1jqt&i=25j8cs <input type="checkbox"/> (I) Complete “W3 Monday Translation” worksheet <ul style="list-style-type: none"> <input type="checkbox"/> You can hear the text at https://bit.ly/W3D1_6th <input type="checkbox"/> Make sure to write your name and section on the worksheet
<p>OPTIONAL PE (15 minutes) Art (10 minutes)</p>	<p>PE</p> <p>Goal/Objective: Progress in strength, building upon your baseline</p> <p>Materials needed: W2 Log, W3 Log</p> <p>Specific Instructions: (I = Independent; PA = Parent Assisted)</p> <ul style="list-style-type: none"> <input type="checkbox"/> I: Warmup (optional) <input type="checkbox"/> I: Find 10% of your baseline (Baseline X 0.1) <input type="checkbox"/> I: Add that 10% to your baseline <input type="checkbox"/> I: Complete Log <input type="checkbox"/> I: Lie-down and Breathe <input type="checkbox"/> I: Save log in safe place <p>Art</p> <p>Goal/Objective: Start shading with colored pencil on still life</p> <p>Materials needed: colored pencils (dark blue, blue, light blue, white, black [if you don't have all 3 blues, follow the same guidelines with another color])</p> <p>Specific Instructions: (I = Independent; PA = Parent Assisted)</p> <ul style="list-style-type: none"> <input type="checkbox"/> I: Watch instructional video on blog. <input type="checkbox"/> I: Color in the first 2 layers.

W3
MON

CLAUSES REVIEW

Clause: a group of words containing a subject and a predicate

Subordinating/
Dependent Clause:
a clause which can not stand on its own and functions as one part of speech.

Main/
Independent Clause:
a clause which can stand on its own and does not function as one part of speech.

Subordinating conjunction: introduces a dependent clause

^{S.C.}
[Before he went to the lake,] Badger bought a boat.
dependent clause independent clause

^{S.C.}
I did not notice [that] he had crashed his car.
independent clause dependent clause

^{S.C.}
[Whoever paints the boat] will eat for free.
dependent clause independent clause

^{S.C.}
Otter spoke to the hedgehog [who was lost in the woods].
Independent clause dependent clause

Using today's teacher notes, complete the following worksheet.

1. Copy down the definition of independent clause, dependent clause, and subordinating conjunction:

Dependent/Subordinate Clause:

Independent/Main Clause:

Subordinating Conjunction:

2. For each of the following sentences, underline the independent clause, bracket the dependent clause, and box the subordinating conjunction.

a. Toad is not a good driver because he refuses to learn the basics of operating a car.

b. Mole does not remember what Badger told him.

c. Rat, who lives near the river, dislikes the Wide World.

d. Whatever you cook will taste good to the hedgehogs.

e. I did not know that you travelled into the woods.

1. Chapter 6 Vocabulary, part 1

Habiliments: Clothing

Gaiters: A garment worn to cover or protect the ankle and lower leg

Blustering: Talking in a loud, aggressive, or indignant way

Squandering: Waste in a reckless and foolish manner

Eloquent: Fluent or persuasive in speaking or writing

2. Read the first half of Chapter 6 (pgs. 65-70), ending with "...he grew apparently languid and depressed."

- An online version of *The Wind in the Willows* can be found on Google Books at no charge.
- If you would like to read along with an audio version of the book, it is available at: <https://librivox.org/the-wind-in-the-willows-by-kenneth-grahame-2/>

3. On loose-leaf paper, answer the following questions with 1-2 complete sentences, direct quotations are not required (be sure to title your page with your name, the date, and "Chapter 4 Understanding Questions"):

1. Why do Rat, Mole, and Badger go to Toad Hall?
2. How does Toad respond to their concerns?
3. What is Badger's plan to overcome the Toad's problem?

HISTOGRAMS

HISTOGRAMS

- Histograms show data in intervals or ranges.
- They are similar to bar graphs, but each bar touches the other, and they are similar to a dot plot because they represent the overall spread and shape of the data.

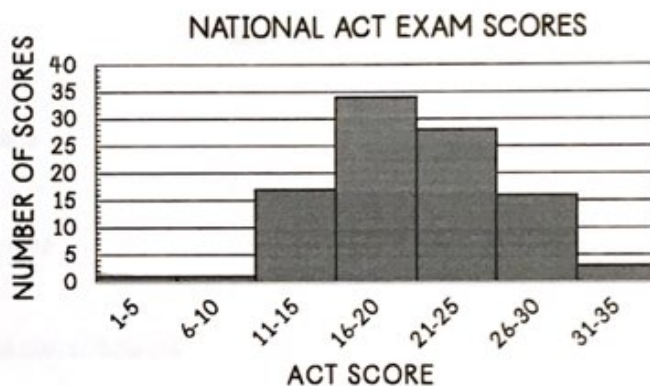
Ex: decades, age ranges

Data from the National ACT Exam is shown in the histogram at right.

a. How many scores were included in the data set? 100

b. List the number of scores for each range:

1-5: <u>1</u>	21-25: <u>28</u>
6-10: <u>1</u>	26-30: <u>16</u>
11-15: <u>17</u>	31-35: <u>3</u>
16-20: <u>34</u>	



1. Which range of scores represents 17% of the data?

$$\frac{17}{100} = 17\%$$

ACT scores 11-15

2. What percent of the scores are included in the 21-25 range?

$$\frac{28}{100} = 28\%$$

28%

3. What two ACT score ranges make up more than 60% of the sample?

$$\frac{34 + 28}{100} = \frac{62}{100} = 62\%$$

ACT score ranges 16-20 & 21-25

4. How does the number of scores between 11-15 compare to the number of scores between 26-30? 17 > 16

There is one more score in the 11-15 range than 26-30 range.

5. Write three statements about the graph below, two that are true and one that is false.

True: The number of scores between 1-5 & 26-30 is equal to the number of scores between 11-15. $1 + 16 = 17$

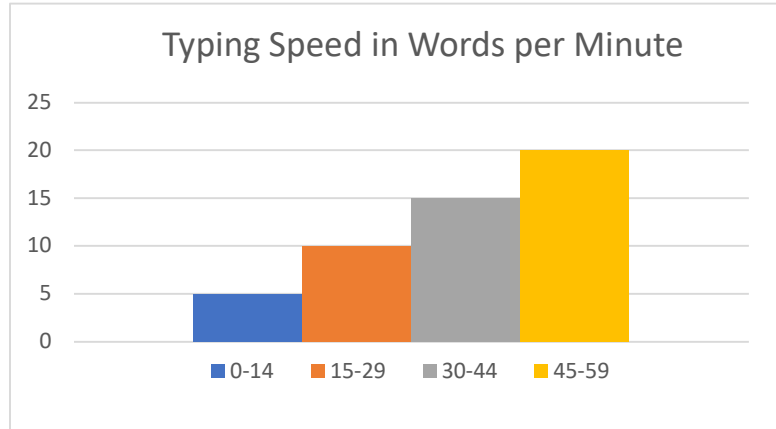
True: The number of scores between 16-20 is double that of 11-15. $34 = 2 \times 17$

False: There are an equal number of scores between 11-15 and 26-30. $17 \neq 16$

Histograms

In a computer class, students took a typing test to determine their speed. The histogram at right shows the scores of the students in the class.

Evaluate if the following are true or false and write a reason for your answer.



1. **True or False** A total of 40 students can type from 0-59 words per minute.

2. **True or False** The number of students who typed from 45-59 words per minute is equal to the total number of students who typed 15-29 added to the number who typed 0-14.

3. **True or False** The number of students who typed 30-44 words per minute accounted for 28% of the students.

4. **True or False** Less than 15% of the students type 0-14 words per minute.

5. What percent of students type less than 30 words per minute? Box your answer.

MON
4/6

ENCLOSURE

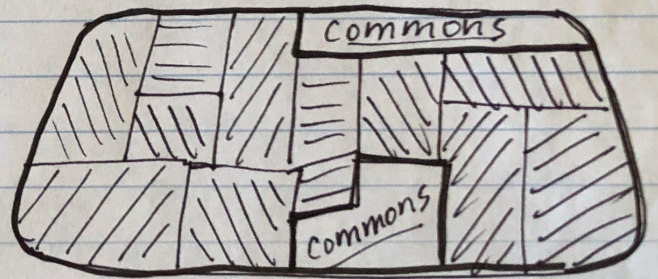
Before ENCLOSURE: There were very few private farms.



Poorer farmers could use land from "The Commons" to grow crops and let animals graze.

This is the Life!

After ENCLOSURE: Land was sold to individuals and the common areas became so small that they could not sustain the crops or animals of poorer farmers.



Hey! Move over!



Whose foot is this?

ENCLOSURE forced the lifestyles of poorer people to change. Many worked for rich landowners, but ~~to~~ even more went to larger towns and cities to find work.

ENCLOSURE ACTS AFTER 1720 GOT RID OF THE OPEN FIELDS ALL OVER BRITAIN. MORE MONEY COULD BE MADE BY LESS PEOPLE

The BAD GEORGIAN days of ENCLOSURE

Fields fenced off so one Londoner can make more money.

Unhappy Peasant has to find work in town.

Unhappy Peasant's wife has to work in miserable mill.

Happy Lord in Manor House owns the lot.

Unhappy Peasant children have to work in seedy slums, foul factories or murky mines.

Happy pig and sheep with flocks of friends.

ENCLOSURE MADE 'BRITAIN' RICHER... AND MOST OF HER PEOPLE POORER. NOW, CALL ME AN IDIOT, BUT I WONDER IF IT WAS WORTH IT?

MON
4/6

Industrial Revolution Ch. 3 Vocabulary

productivity: the rate at which goods are made or work is completed

efficient: achieving maximum productivity with minimum wasted effort or expense

Enclosure: the division of communal lands into individually owned farm plots

Name: _____

Section: _____

W3 Monday Translation

“Sulla”

Instructions

Translate the following text under “Your Translation”. Use <https://en.wiktionary.org> or <https://translate.google.com> to look up any word you don’t remember.

Lines 15-20

Listen to this text at http://bit.ly/W3D1_6th

“Lūcia! Quīnte! intrō īte!” clāmāvit Sulla. “cōnsilium optimum habeō.”

postquam iuvenēs villam intrāvērunt, Sulla celeriter rem cōnfēcit.

duōs titulōs in mūrō scripsit. tum Quīntum et Lūciam ē villā vocāvit.

Vocabulary

intrō īte – go inside (*īte* is a plural imperative of *eō* meaning “go (pl.)!”; *intrō* is an adverb meaning “inside”)

clāmō – I shout (perfect tense *clāmāvī*)

cōnsilium – plan

habeō – I have (perfect tense *habuī*)

intrō – I enter (perfect tense *intrāvī*)

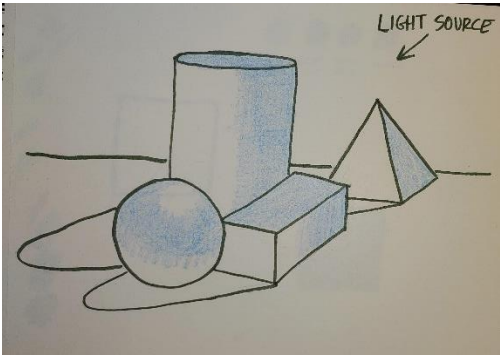
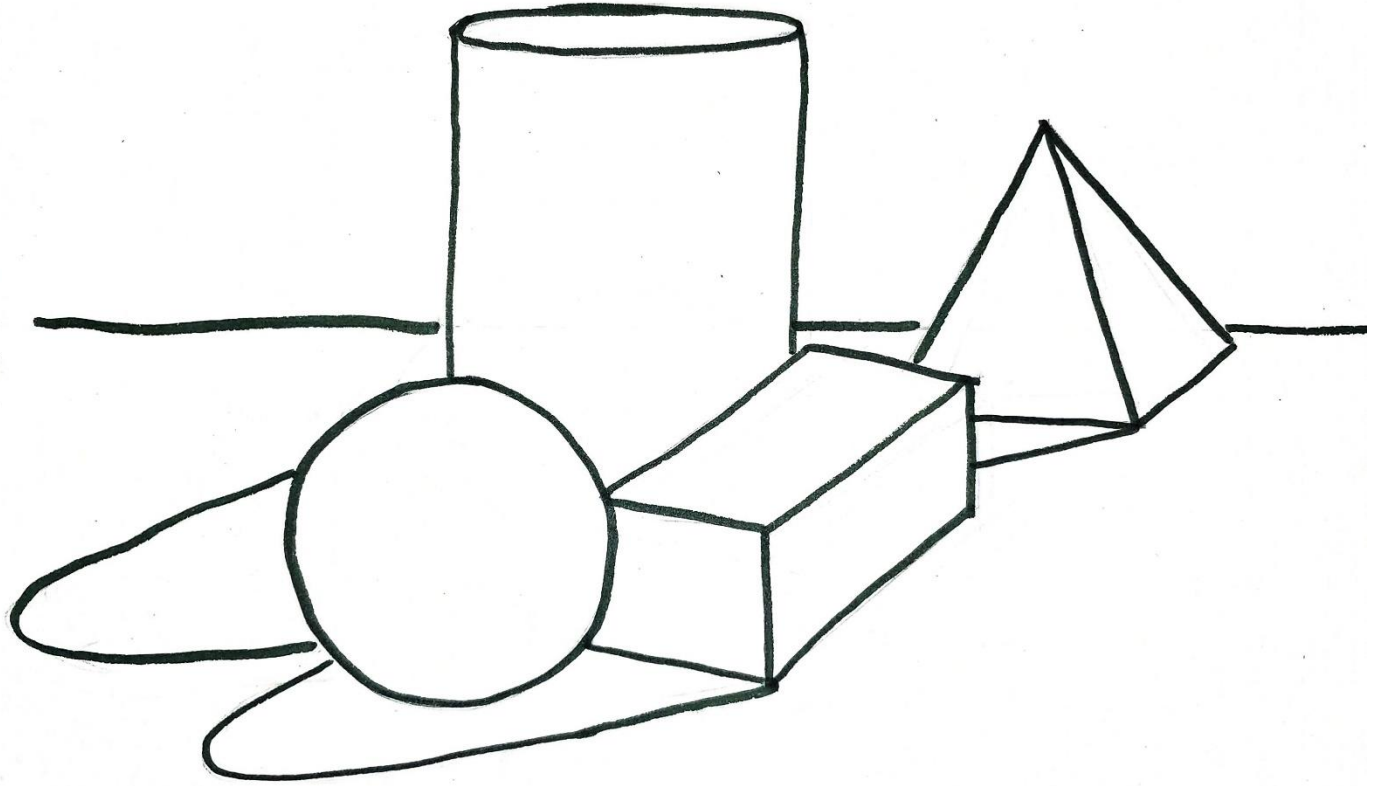
cōnficiō – I finish (perfect tense *cōnfēcī*)

scribō – I write (perfect tense *scripsī*)

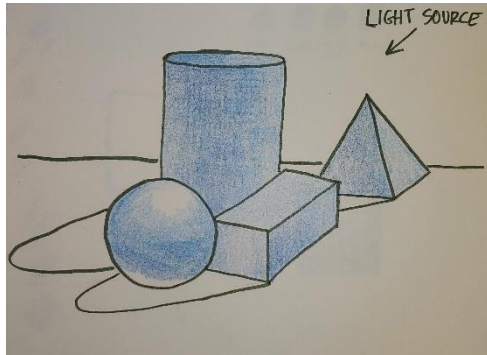
vocō – I call (perfect tense *vocāvī*)

Your Translation

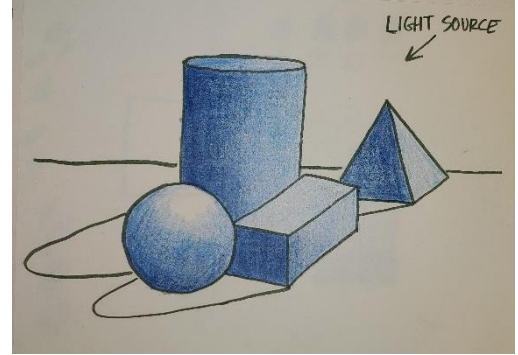
6th Grade Still Life – MONDAY/WENESDAY



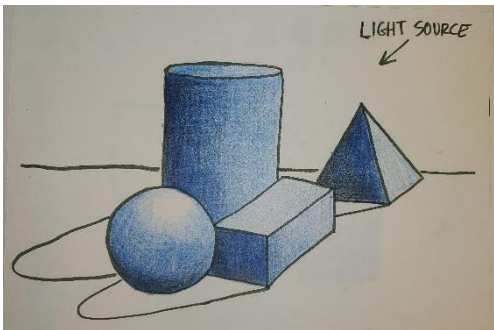
Step 1



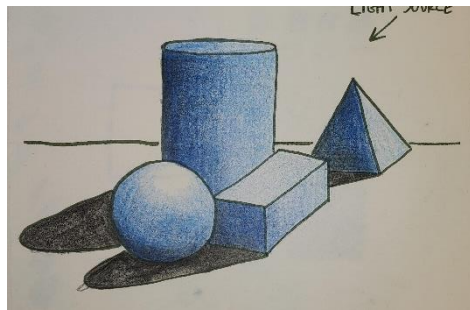
Step 2



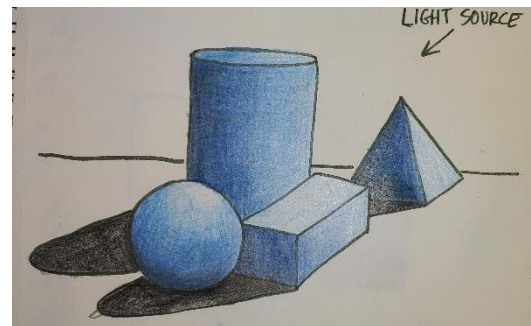
Step 3



Step 4



Step 5



Step 6

W3 LOG

NAME: _____

WEEK: April 06-10

PE – Corcoran

Exercise	MONDAY	TUESDAY OPTIONAL	WEDNESDAY	THURSDAY OPTIONAL	FRIDAY OPTIONAL
Jumping Jacks OPTIONAL	Reps:	Reps:	Reps:	Reps:	Reps:
Burpees OPTIONAL	Reps:	Reps:	Reps:	Reps:	Reps:
Pushups REQUIRED	Reps:	Reps:	Reps:	Reps:	Reps:
Planks REQUIRED	Time:	Time:	Time:	Time:	Time:
Air Squats REQUIRED	Reps:	Reps:	Reps:	Reps:	Reps:
Jumping Jacks OPTIONAL	Reps:	Reps:	Reps:	Reps:	Reps:
Lie down and Breathe REQUIRED	5 minutes	5 minutes	5 minutes	5 minutes	5 minutes

Now that you have found and practiced your baseline, it is now time to start building upon that baseline.

My goal is to increase my repetitions every week by 10% + 1 rounded up. For example, if my baseline for pushups was 15, I will do 18 pushups this week.

$(15 \times 0.1) + 1 = 2.5$
2.5 rounded up = 3
 $15 + 3 = 18$ pushups

My schedule is as follows.
W1: 15 - baseline
W2: 18
W3: 24
W4: 27
W5: 31
Etc.

NOTES: You do not record how long you lie down and breathe. You must do a minimum 5 minutes on Monday and

Tuesday.

Record plank time in seconds. Otherwise, you will be trying to hold planks far longer of planks than you can handle when you increase by 10% + 1 minute.

Also, the increase of 10% + 1 each week is a GOAL not a requirement! If you try to do more than your baseline but you feel weak and in bad form, then just do your baseline. You are not failing. Some days, you cannot even reach your baseline! That's just how we are. But no matter what: JUST DO SOMETHING! Do half of your baseline if you are having a down day. If you want to do more after that, then do more.

Mr. Eberlein, Mrs. Lopez, and I will be competing with you. We are pushing each other. Though all this remember: "Do not compare yourself to somebody else today, but compare yourself to who you were yesterday." - JBP

Daily Student Instruction Sheet - TUESDAY

TUESDAY – 4/7/20	
<p>ELA</p> <p>Poetry (15 Minutes)</p> <p>Literature (30 Minutes)</p> <p>Grammar/Writing (30 Minutes)</p> <p>Reading (20+ minutes)</p>	<p>Poetry</p> <p>Goal/Objective: Students will continue learning “Nothing Gold Can Stay” by Robert Frost</p> <p>Materials needed: “Nothing Gold Can Stay”</p> <p>Specific Instructions (I=independent; PA=dependent):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Read the poem aloud at least twice (I) <input type="checkbox"/> Focus on committing the fourth through sixth lines to memory (I) <p>Literature</p> <p>Goal/Objective: Finish reading Chapter 6 of <i>The Wind in the Willows</i></p> <p>Materials needed: The Wind in the Willows, Teacher Notes</p> <p>Specific Instructions (I=independent; PA= Parent assistance):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Read through Chapter 6 vocabulary (I) <input type="checkbox"/> Read the second half of Chapter 6 (pgs. 70-76), beginning with “One fine morning the Rat...” (I) <input type="checkbox"/> Answer the check for understanding questions (I) <p>Grammar/Writing</p> <p>Goal/Objective: Understand the definition and function of noun clause</p> <p>Materials needed: Teacher Notes, Student check for understanding</p> <p>Specific Instructions (I=independent; PA= Parent assistance):</p> <ul style="list-style-type: none"> <input type="checkbox"/> If possible, watch Introduction to Noun Clauses with Miss Rogers (I) <input type="checkbox"/> Read through the remainder of the teacher notes page (I) <input type="checkbox"/> Complete student check for understanding page (I) <input type="checkbox"/> Check your answers to number 2 with the answer key (I)
<p>MATH</p> <p>(30 Minutes)</p>	<p>Math</p> <p>Goal/Objective: The student will be able to interpret a box plot.</p> <p>Materials needed: Teacher’s Notes, Supporting Video, Independent Practice, Answer Key</p> <p>Specific Instructions:</p> <ul style="list-style-type: none"> <input type="checkbox"/> (I) Review the Interquartile Range song (verse and chorus) <input type="checkbox"/> (I) Read the teacher notes. <input type="checkbox"/> (I or PA) If possible, watch the supporting video. <input type="checkbox"/> (I) Complete the independent practice <input type="checkbox"/> (I) Check the odds using the answer key at the back and rework any missed problems
<p>HISTORY</p> <p>(Minutes)</p>	<p>Goal/Objective: Students will learn about some of the changes that led to the Industrial Revolution. This week, we will focus on The Enclosure Movement.</p> <p>Materials needed: Textbook pp. 20-23, vocabulary and teacher notes from Monday 4/6, Worksheet: Chapter 3 Reading Check A</p> <p>Specific Instructions (I=independent; PA= Parent assistance):</p>

Daily Student Instruction Sheet - TUESDAY

	<ul style="list-style-type: none"> <input type="checkbox"/> (I) - Review yesterday's reading from Chapter 3: Moving Toward the Industrial Age in the textbook (Pp. 20-23). <input type="checkbox"/> (I) - Review teacher vocabulary notes and notes on Enclosure <input type="checkbox"/> (I) - Complete comprehension worksheet: Chapter 3 Reading Check A
<p>LATIN (15 Minutes)</p>	<p><i>Latin</i> Goal/Objective: Students will continue translating "Sulla" Materials needed: 1) "W3 Tuesday Translation" worksheet Specific Instructions (I=independent; PA= Parent assistance):</p> <ul style="list-style-type: none"> <input type="checkbox"/> (I) Complete "W3 Tuesday Translation" worksheet <ul style="list-style-type: none"> <input type="checkbox"/> You can hear the text at https://bit.ly/W3D2sixth <input type="checkbox"/> Make sure to write your name and section on the worksheet
<p>OPTIONAL</p> <p>Music (15-20 Minutes)</p> <p>Drama (20 Minutes)</p>	<p><i>Music</i> Goal/Objective: Learn about Ledger Lines in the Treble Clef Materials needed: Treble Clef Ledger Line Worksheet</p> <p>Specific Instructions (I=independent; PA= Parent assistance): I</p> <ul style="list-style-type: none"> <input type="checkbox"/> I: Please read the intro. to Ledger Lines at the top of your worksheet. If you have ANY questions, please see the Music Blog for support or send an email to get clarification. <input type="checkbox"/> Ledger lines show pitches above and below the staff. These notes extend the regular range of the Treble Clef. <input type="checkbox"/> Please complete the included worksheet carefully. Remember the sentences for the Treble Clef lines and spaces: <ul style="list-style-type: none"> <input type="checkbox"/> Spaces spell F A C E from bottom to top <input type="checkbox"/> Lines spell Every Girl/Boy Deserves Fudge from bottom to top <input type="checkbox"/> The ledger lines continue the musical alphabet and repeat no matter how high you go. A B C D E F G A etc. <p><u>Drama (Oakenshield and Baggins)</u> Goal/Objective: Students will learn about William Shakespeare as a young man. Materials needed: Biography and Worksheet titled William Shakespeare as a Young Man</p> <p>Specific Instructions (I=independent; PA= Parent assistance):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Read the passage about William Shakespeare as a Young Man(I) <input type="checkbox"/> Use the information in the passage to answer the questions on the worksheet (I)

1. Chapter 6 Vocabulary, part 2

Nuisance: A person, thing, or circumstance causing inconvenience or annoyance.

Caustic: Sarcastic in a scathing and bitter way.

Crestfallen: Sad and disappointed.

Turbid: Confused or obscure in meaning

Incorrigible: Not able to be corrected, improved, or reformed.

Cheeking: Rude talk or behavior.

Gaoler: "Jailer"; A person in charge of the prisoners in a jail.

2. Read the second half of Chapter 6 (pgs. 70-76), beginning with "One fine morning the Rat..."

- An online version of *The Wind in the Willows* can be found on Google Books at no charge.
- If you would like to read along with an audio version of the book, it is available at: <https://librivox.org/the-wind-in-the-willows-by-kenneth-grahame-2/>

3. On loose-leaf paper, answer the following questions with 1-2 complete sentences, direct quotations are not required (be sure to title your page with your name, the date, and "Chapter 4 Understanding Questions"; you may continue on the same page used yesterday):

1. How does Toad trick Rat so that he may escape Toad Hall?
2. What does Toad encounter at the inn and how does he respond?
3. At the end of the chapter, what is Toad's consequence for his actions?

WB
TUES

Noun Clauses

Start Miss Rogers's video

Mother:
Independent
Clause

Joey:
Noun
Clause



S.C. SN

Whoever brings food, is welcome at the party
subordinate Noun clause

Main/Independent clause

Stop video

Definition of NOUN CLAUSE

- must have a subject and a verb
 - the whole clause functions as a noun.
- This means that the entire noun clause will be a direct object, subject, object of a preposition, predicate nominative, or indirect object [in the larger main clause.] *
- Subordinating conjunctions which will introduce a noun clause.

What	When	Everything	Whoever	Whose
Who	How	Nothing	Whether	Whatever
Whatever	Where	Anything	Something	Why
That	* These conjunctions will also do a job <u>within</u> the noun clause.			

Noun Clauses Check for Understanding

Directions: Use the teacher notes and video to complete the assignment. When you are finished check the answer key for question 2.

1. List three things that are essential to the definition of a noun clause:

a.

b.

c.

2. In each sentence, bracket the noun clause and circle the subordinate conjunction. It may be helpful to use your notes from Monday as well.

a. Whoever brings food is welcome at the party.

b. I think that the tacos were my favorite appetizer.

c. Jerry’s mother believed everything Lucy said.

d. Brandon will eat whatever he pleases.

3. How is a noun clause like a baby kangaroo? (2 complete sentences)

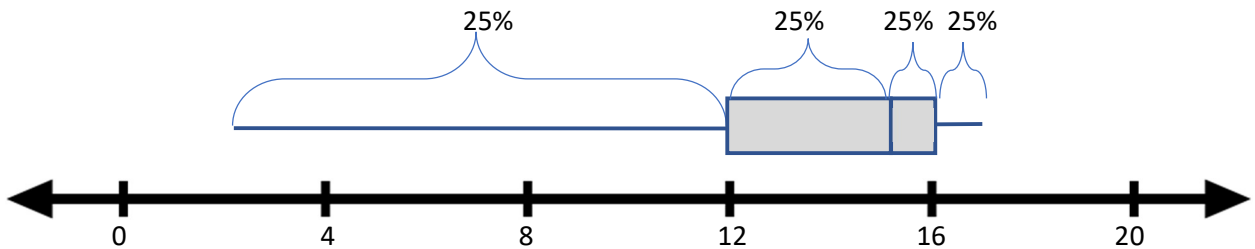
NAME _____ NUMBER _____ DATE _____

Industrial Revolution
Chapter 3: Reading Check A (Pages 20-23)

1. Productivity is the _____ at which goods are made or _____ is completed.
2. Efficient means to achieve _____ productivity with _____ wasted effort or expense.
3. _____, which helped farmers turn over looser and deeper soil, and _____, which helped mills ground more flour, were two tools that saw improvement and helped farmers . (See p.22)
4. What was enclosure (in your own words), and how did it change life in England in the 1600s and 1700s? Answer in complete sentences.

Reading Box Plots

A box plot groups data into sections of **25%** each.



Box plots show **5 key numbers**. They are defined below with an answer matching the example above.

Vocabulary

Minimum: The smallest number

First quartile: The median of the lower half of the data

Median: The middle of the entire data set

Third Quartile: The median of the upper half of the data

Maximum: The largest number

Example

Min: 2

Q1: 12

Median: 15

Q3: 16

Max: 17

Mark these 5 numbers on the box plot to help you remember their location.

Finding Mean, Median, Mode, Range, and Interquartile Range (IQR)

Median: This is easy to spot since it's always the line in the middle of the box. 15

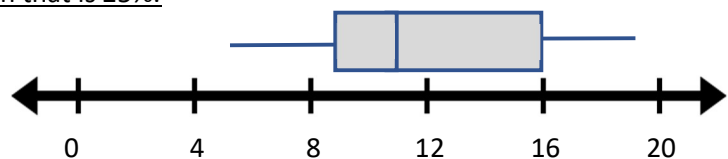
Range: The difference between the minimum and the maximum is 15. $17 - 2 = 15$

IQR: The IQR for this data is 4, because the difference between Q1 and Q3 is 4. $16 - 12 = 4$

Box Plots only give us 5 key numbers and show where the data is in 4 equal groups.

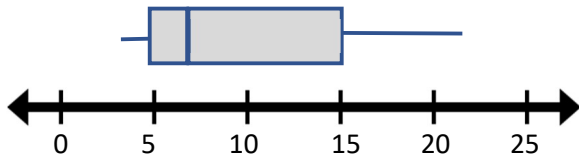
Practice: The average monthly rainfall during the summer is shown below. Evaluate why each is true or false.

1. The range in rainfall in summer was 14 inches. **True.** 19, the highest, minus 5 the lowest, is 14.
2. The median rainfall in summer was 3 inches. **False.** The Summer median line is at 11.
3. For half of the months in summer the rainfall was more than 11 inches. **True.** The median is at 11 so everything on either side is 50%.
4. There is more than 16 inches for 25% of the summer. **True.** The Q3 is at 16 so everything more than that is 25%.

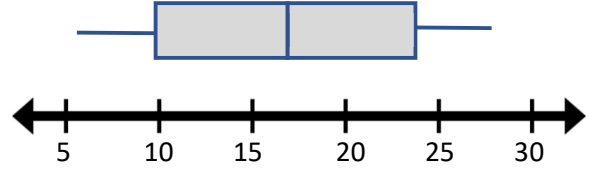


Use the two box plots below to determine if questions 1-6 are true or false statements. Circle your choice and then write a reason for your answer under each problem.

Number of Guests at Thanksgiving Dinner



Number of Guests at New Year's Eve Dinner



1. **True** or **False** The range of guests at New Year's Eve was 15.

2. **True** or **False** About 50% of Thanksgiving dinners had 17 or more people.

3. **True** or **False** Everyone had at least one guest over for dinner at Thanksgiving.

4. **True** or **False** The IQR of Thanksgiving dinner was 20.

5. **True** or **False** The median number of people at New Year's Eve dinner was 15.

6. **True** or **False** Three-fourths of New Year's Eve dinners had five or more people.

Name: _____

Section: _____

W3 Tuesday Translation

“Sulla”

Instructions

Translate the following text under “Your Translation”. Use <https://en.wiktionary.org> or <https://translate.google.com> to look up any word you don’t remember.

Lines 21-26

Listen to this text at <http://bit.ly/W3D2sixth>

scrīptor iuvenibus m̄urum ostendit. ecce! Lūcia hunc titulum v̄idit: “Lūcia Āfrō favet. Āfer est candidātus optimus.”

“euge! hic titulus mē valdē dēlectat,” inquit Lūcia.

Quīntus alterum titulum in mūrō cōspexit:

“Quīntus Holcōniō favet. Holcōnius est candidātus optimus.”

Quīntus quoque laetissimus erat.

Vocabulary

ostendō – I show (perfect tense *ostendī*)

videō – I see (perfect tense *vīdī*)

faveō – I favor, I support (perfect tense *fāvī*)

hic – this

dēlectō – I please (perfect tense *dēlectāvī*)

inquit – he/she said (*inquit* is both present and perfect tense)

cōspiciō – I catch sight of (perfect tense *cōspexī*)

Your Translation

NAME _____ NUMBER _____ DATE _____

WILLIAM SHAKESPEARES AS A YOUNG MAN

William Shakespeare became an adult quickly – he married at the age of eighteen. His wife, Anne Hathaway, was several years older than he was. By the time William was twenty-one he was the father of three children – Their first child was Susanna, born in 1583, and twins, named Hamnet and Judith, arrived in 1585. Tragically, Hamnet Shakespeare died of unknown causes at the age of eleven. The events of his short life are unrecorded.

William’s activities in the years just before and after his marriage are unknown other than he appears in a legal document that shows he was still in Stratford-upon-Avon in 1586. There have been a number of theories, but there is no real evidence to show what he was doing during those years to support himself and his family.

It is not known what drew William to London and away from his family; experts have suggested he was drawn there after acting companies visited Stratford-upon-Avon. The plague years meant that many people left the city and lived in the rural areas – and actors continued to make a living by putting on performances in villages and towns.

In 1592, a London writer named Robert Greene published an attack on Shakespeare, calling him an “upstart crow” and accusing him of plagiarism. This is the first evidence that William had arrived in London and begun his writing career. In his attack on Shakespeare, Greene mentions *Henry IV: Part III*, so it is likely Shakespeare had already written Parts I and II. William had penned at least one other play and possibly several more. *Two Gentlemen of Verona* was written between 1588 and 1590. The career of one of the world’s greatest writers was just beginning.



After reading the passage “William Shakespeare as a Young Man”, answer the questions below:

1. List three things you learned from the passage that you did not already know about William Shakespeare:

- a. _____
- b. _____
- c. _____

2. What were the names of Shakespeare’s children?

- a. _____
- b. _____
- c. _____

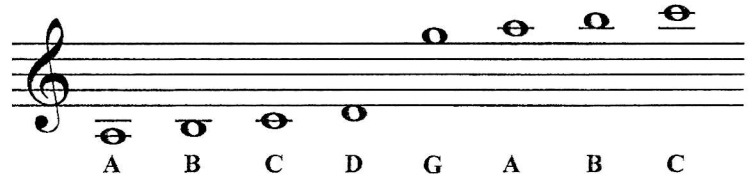
Name _____

Date _____

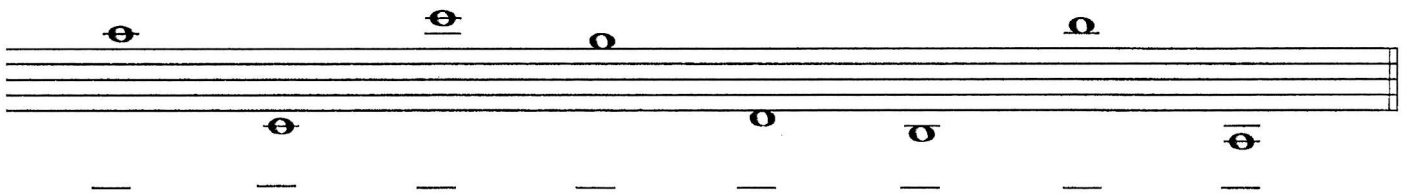
Treble Clef - Ledger Lines

Ledger lines can be used to extend the upper and lower ranges of a staff.

This example includes notes which can be written above and below the treble clef using ledger lines.



1. Draw a treble clef at the beginning of the staff and write the letter name of each note.

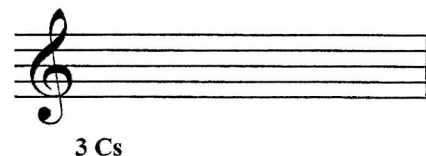
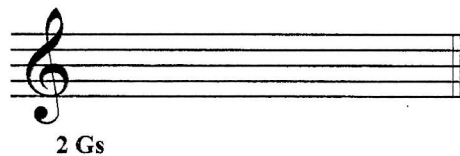
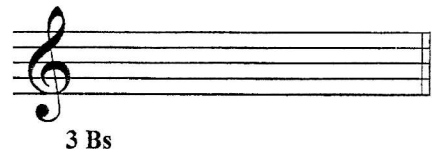
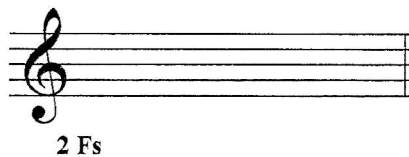
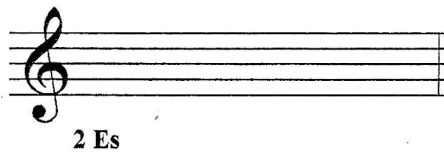
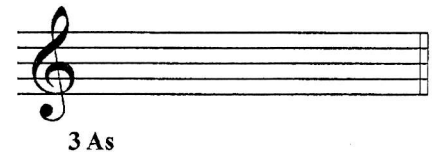
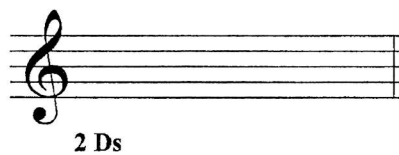
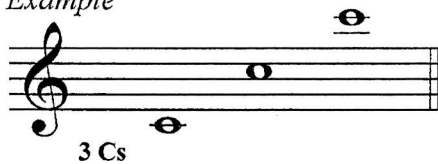


2. Draw a treble clef at the beginning of the staff and write the letter name of each note.



3. Draw the indicated notes. Use ledger lines to draw the specified number of pitches without duplication.

Example



Daily Student Instruction Sheet - WEDNESDAY

WEDNESDAY – 4/8/20	
<p>ELA</p> <p>Poetry (15 Minutes)</p> <p>Literature (30 Minutes)</p> <p>Grammar/Writing (30 Minutes)</p> <p>Reading (20+ minutes)</p>	<p>Poetry</p> <p>Goal/Objective: Students will continue learning “Nothing Gold Can Stay” by Robert Frost</p> <p>Materials needed: “Nothing Gold Can Stay”</p> <p>Specific Instructions (I=independent; PA=dependent):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Read the poem aloud at least twice (I) <input type="checkbox"/> Focus on committing the final two lines to memory (I) <p>Literature</p> <p>Goal/Objective: Begin reading Chapter 7 of <i>The Wind in the Willows</i></p> <p>Materials needed: The Wind in the Willows, Teacher Notes</p> <p>Specific Instructions (I=independent; PA= Parent assistance):</p> <ul style="list-style-type: none"> • Read through Chapter 7 vocabulary (I) • Read the first half of Chapter 7 (pgs. 77-82), ending with “...those who were called and chosen.” (I) • Answer the check for understanding questions (I) <p>Grammar/Writing</p> <p>Goal/Objective: Diagram noun clauses</p> <p>Materials needed: Notes from Tuesday, Student Assignment, supplemental notes and answer key (for those without video access)</p> <p>Specific Instructions (I=independent; PA= Parent assistance):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Flip your teacher notes from yesterday over and diagram a sentence on the back with Miss. Rogers. If you do not have access to the video, read the supplemental notes page. (I) <input type="checkbox"/> Diagram the sentence on the student assignment (I) <input type="checkbox"/> Check your answer with Miss Rogers. If you do not have video access, see supplemental answer key (I) <input type="checkbox"/> Complete the reflection question at the bottom of the student independent assignment (I)
<p>MATH</p> <p>(30 Minutes)</p>	<p>Math</p> <p>Goal/Objective: The student will be able to create a box plot.</p> <p>Materials needed: Teacher’s Notes, Instructional Video, Independent Practice, Answer Key</p> <p>Specific Instructions:</p> <ul style="list-style-type: none"> <input type="checkbox"/> (I) Review the Interquartile Range song <input type="checkbox"/> (I) Read the teacher notes. <input type="checkbox"/> (I or PA) If possible, watch the supporting video. <input type="checkbox"/> (I) Complete the independent practice. <input type="checkbox"/> (I) Check the odds using the answer key at the back and rework any missed problems.

Daily Student Instruction Sheet - WEDNESDAY

<p>Science (30 Minutes)</p>	<p>Science</p> <p>Goal/Objective: To understand what Roger Bosovich means by “points” and how they are different from atoms.</p> <p>Materials needed: Teacher notes, independent practice sheet, answer key (optional: loose leaf paper or spiral)</p> <p>Specific Instructions (I=independent; PA= Parent assistance):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Watch Mrs. Sharp’s lecture video as an introduction to the lesson (I). <input type="checkbox"/> Carefully read through the teacher notes (I). OPTIONAL: copy down any parts of the notes that help your understanding. <input type="checkbox"/> Complete Part I of the independent practice sheet (I). <input type="checkbox"/> Check answers with answer key (I). <input type="checkbox"/> Complete Part II of the independent practice sheet (I).
<p>LATIN (15 Minutes)</p>	<p>Latin</p> <p>Goal/Objective: Students will: 1) practice Q4U1 vocabulary; 2) finish translating “Sulla”</p> <p>Materials needed: 1) “W3 Wednesday Translation” worksheet; 2) Q4U1 flashcards, or 3) access to the Internet</p> <p>Specific Instructions (I=independent; PA= Parent assistance):</p> <ul style="list-style-type: none"> <input type="checkbox"/> (I) Practice Q4U1 vocabulary for five minutes using either <ul style="list-style-type: none"> <input type="checkbox"/> Q4U1 flashcards from last week, or <input type="checkbox"/> Quizlet set at https://quizlet.com/_87ufzg?x=1jqt&i=25j8cs <input type="checkbox"/> (I) Complete “W3 Wednesday Translation” worksheet <ul style="list-style-type: none"> <input type="checkbox"/> You can hear the text at https://bit.ly/W3D3_6th <input type="checkbox"/> Make sure to write your name and section on the worksheet
<p>OPTIONAL</p> <p>Music (Minutes)</p> <p>Drama (Minutes)</p> <p>Art (Minutes)</p> <p>PE (Minutes)</p>	<p>Music</p> <p>Goal/Objective:</p> <p>Materials needed:</p> <p>Specific Instructions (I=independent; PA= Parent assistance):</p> <p>Drama</p> <p>Goal/Objective:</p> <p>Materials needed:</p> <p>Specific Instructions (I=independent; PA= Parent assistance):</p> <p>Art</p> <p>Goal/Objective:</p> <p>Materials needed:</p> <p>Specific Instructions (I=independent; PA= Parent assistance):</p>

Daily Student Instruction Sheet - WEDNESDAY

PE

Goal/Objective: Repeat Monday's exercises

Materials needed: W3 Log

Specific Instructions: (I = Independent; PA = Parent Assisted)

- I: Warmup (optional)
- I: Complete Log (Stay within your 10% increase that you found Monday)
- I: Lie-down and Breathe
- I: Save log in safe place

Art

Goal/Objective: Continue shading with colored pencil on still life

Materials needed: colored pencils (dark blue, blue, light blue, white, black [if you don't have all 3 blues, follow the same guidelines with another color])

Specific Instructions: (I = Independent; PA = Parent Assisted)

- I: Complete the rest of the shading steps

1. Chapter 7 Vocabulary, part 1

Selvedge: An area of altered rock.

Raiment: Clothing.

Imperious: Arrogant and domineering.

2. Read the first half of Chapter 7 (pgs. 77-82), ending with "...those who were called and chosen."

- An online version of *The Wind in the Willows* can be found on Google Books at no charge.
- If you would like to read along with an audio version of the book, it is available at: <https://librivox.org/the-wind-in-the-willows-by-kenneth-grahame-2/>

3. On loose-leaf paper, answer the following questions with 1-2 complete sentences, direct quotations are not required (be sure to title your page with your name, the date, and "Chapter 4 Understanding Questions"; you may continue on the same page used yesterday):

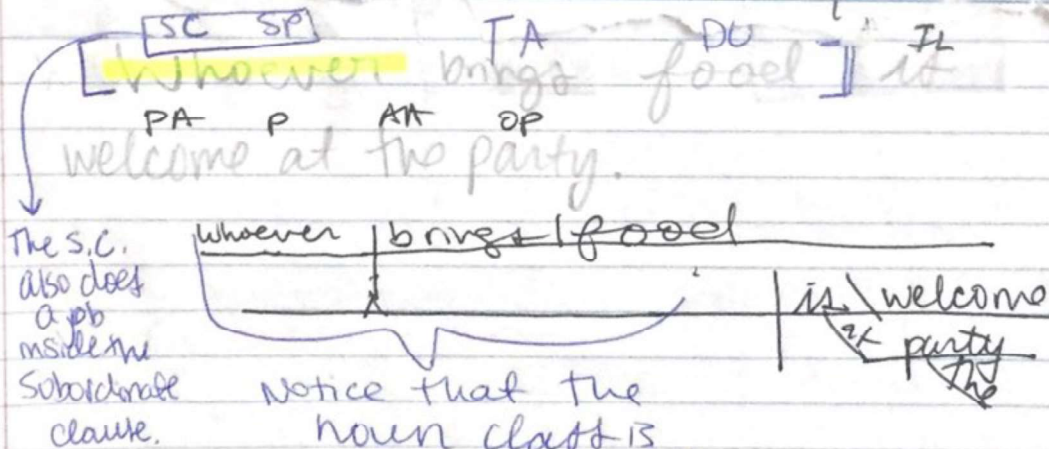
1. What problem is Rat told about during his visit with Otter?
2. How does Mole respond when he learns of it?
3. On pages 80 and 81, what do Rat and Mole hear and begin following?

Diagramming Noun Clauses - key

*This is for those families without access to Tuesday Week 3's instructional video. If you can, I highly recommend watching the video.

When diagramming a Noun clause:

- 1) find the beginning and end of the clause
 - 2) Label all verbs in the sentence
 - 3) Label the independent clause
 - 4) Label what the noun clause is doing in the independent clause. All words in the dependent clause will be working together to fulfill one noun job in the independent clause
 - 5) Label the individual words in the dependent clause
 - 6) Diagram the independent clause
- Diagram the dependent clause.
 The entire noun clause is functioning as the SN of the sentence

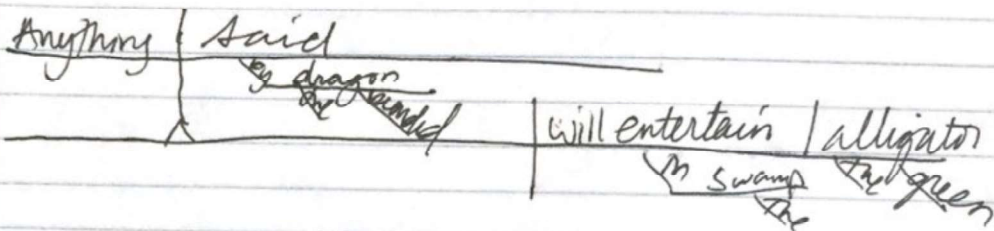


Notice that the noun clause is diagrammed on a platform WIM the main clause NOT underneath

key for Wednesday Student Practice

*Note: this is for families without access to the video.

This entire clause is functioning as the SN of
 SC-SP the main clause P AA Adj OP
 [Anything said by the bearded dragon]
 IV TA AA Adj DO P AA
 will entertain the green alligator in the
 OP
 Swamp.



After watching the first instructional video for Wednesday, label and diagram the following sentence. When you finish, watch the second instructional video to check your answer.

Anything said by the bearded dragon will entertain the green alligator in the swamp.

Hints for diagramming:

- *Know where your noun clause starts and ends
- *Circle your subordinating conjunction
- *Remember, a noun clause can contain its own prepositional phrases

After watching the video, answer the following question in 1-2 complete sentences:

Describe the function of the noun clause in the above sentence.

Graphing Box Plots

Box plots are made of 5 key numbers: Minimum, First Quartile, Median, Third Quartile, and Maximum. We can use the data given below to create this five number summary and the graph it in a box plot.

1. The following data set represents the number of hours a candle will burn.

9, 7, 11, 16, 11, 19, 9, 10, 15, 14, 8, 12, 15

Step 1: Reorder from smallest to greatest

7, 8, 9, 9, 10, 11, 11, 12, 14, 15, 15, 16, 19

Step 2: Identify the minimum and maximum in the list

7, 8, 9, 9, 10, 11, 11, 12, 14, 15, 15, 16, 19

Step 3: Find the median. There are 13 numbers so I can split it into 2 equal parts with 11 in the middle.

7, 8, 9, 9, 10, 11, (11), 12, 14, 15, 15, 16, 19

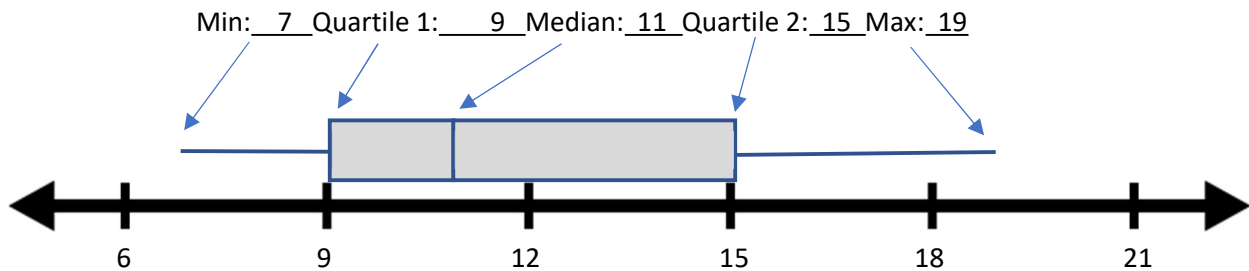
Step 4: Find the 1st and 3rd quartile. Look at the two halves. Find the middle of each half or the mean of those two middle numbers.

7, 8, 9, 9, 10, 11
(11)
12, 14, 15, 15, 16, 19

^
^

9
15

Now we have our 5 key numbers and we can make the box plot!

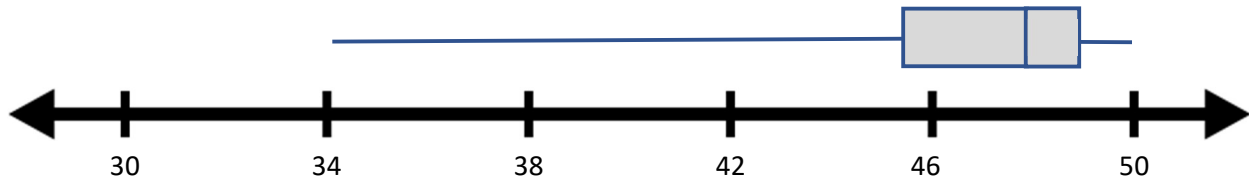


Here's another example.

2. PRACTICE: The following data set represents the number of animal crackers in the snack size box. I already put them in order for you!

34,
 (45),
 47,
 (48),
 48,
 (49),
 50

min
Q1
median
Q3
max



Sixth Math Week 3 April 8 Independent Practice Name: _____

Use the data given below to create a five number summary and a box plot.

1. The following data set represents the number of hours a candle will burn.
7, 18, 11, 13, 19, 7, 12, 8, 16, 8, 16

Min: _____ Quartile 1: _____ Median: _____ Quartile 3: _____ Max: _____



2. The following data set represents the number of animal crackers in the snack size box.
34, 35, 37, 38, 42, 45, 49

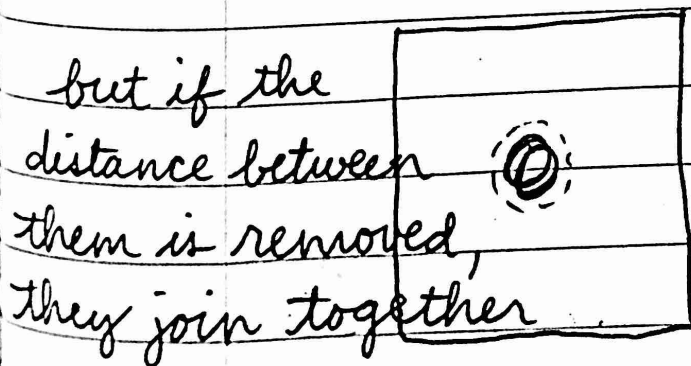
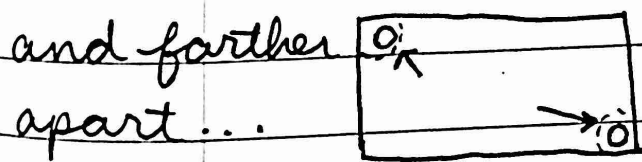
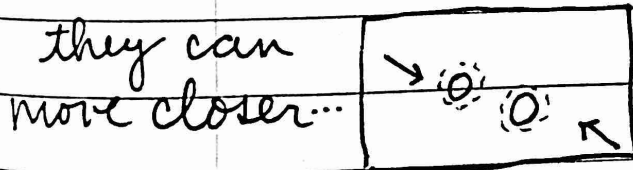
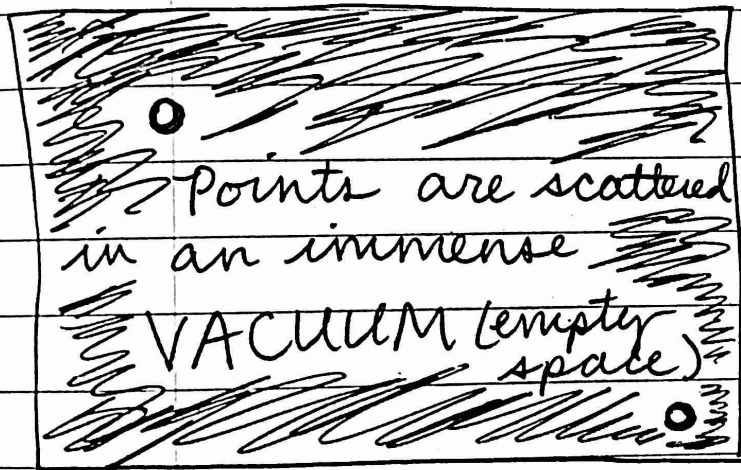
Min: _____ Quartile 1: _____ Median: _____ Quartile 3: _____ Max: _____



Boskovich's Theory of Natural Philosophy

MATTER = POINTS (NOT atoms; smaller)
 ("materia"; basic material out of which everything is made)

- perfectly simple (do not have parts)
- indivisible
- do not have length/width/depth (no extension)
- separated from one another
- inertia
- "mutual active force"—have the forces of ATTRACTION(+) and REPULSION(-) acting upon them constantly



= compenetration

Roger Boscovich's Theory of Natural Philosophy

Use complete sentences.

Part I - Comprehension

1. How do Boscovich's points compare to atoms?

2. What are some of the characteristics of Boscovich's points?

3. In this context, what does "vacuum" mean?

Part II - Reflection

1. Recently, we learned about Lucretius and his idea that VOID is between atoms. How does this compare to Boscovich's theory?

Name: _____

Section: _____

W3 Wednesday Translation

“Sulla”

Instructions

Translate the following text under “Your Translation”. Use <https://en.wiktionary.org> or <https://translate.google.com> to look up any word you don’t remember.

Lines 27-29

Listen to this text at http://bit.ly/W3D3_6th

iuvenēs Sullae trīgintā dēnāriōs dedērunt. Sulla rīdēbat.
postquam Lūcia et Quīntus discessērunt, tertium titulum
addidit: “Lūcia et Quīntus sunt liberālissimī.”

Vocabulary

trīgintā – 30

dō – I give (perfect tense *dedī*)

rīdeō – I laugh, I smile (perfect tense *rīsī*)

discēdō – I catch sight of (perfect tense *discessī*)

tertium – third

addō – I add (perfect tense *addidī*)

liberālissimus – very generous

Your Translation

Daily Student Instruction Sheet - THURSDAY

THURSDAY – 4/9/20	
<p>ELA</p> <p>Spalding (Minutes)</p> <p>Literature (Minutes)</p> <p>Grammar/Writing (30 Minutes)</p> <p>Reading (20+ minutes)</p>	<p>Poetry</p> <p>Goal/Objective: Students will continue learning “Nothing Gold Can Stay” by Robert Frost</p> <p>Materials needed: “Nothing Gold Can Stay”</p> <p>Specific Instructions (I=independent; PA=dependent):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Review the poem (I) <input type="checkbox"/> Recite the poem from memory to a parent or guardian and ask them to sign the Parent Signature Sheet (PA) <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> <input type="checkbox"/> Record a video reciting the poem from memory and ask your parent or guardian to email it to your teacher (PA) <p>Literature</p> <p>Goal/Objective: Finish reading Chapter 7 of <i>The Wind in the Willows</i></p> <p>Materials needed: The Wind in the Willows, Teacher Notes</p> <p>Specific Instructions (I=independent; PA= Parent assistance):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Read through Chapter 7 vocabulary (I) <input type="checkbox"/> Read the second half of Chapter 7 (pgs. 82-86), beginning with “Slowly, but with no doubt or hesitation...” (I) <input type="checkbox"/> Answer the check for understanding questions (I) <p>Grammar/Writing</p> <p>Goal/Objective: Practice your personal narrative skills using experiences from your own life</p> <p>Materials needed: Journaling instructions page, separate sheet of paper,</p> <p>Specific Instructions (I=independent; PA= Parent assistance):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Follow Instructions on journaling instruction page (I)
<p>MATH</p> <p>(30 Minutes)</p>	<p>Math</p> <p>Goal/Objective: The student will be able to define categorical data and interpret a percent bar graph.</p> <p>Materials needed: Teacher’s Notes, Instructional Video, Independent Practice, Answer Key</p> <p>Specific Instructions:</p> <ul style="list-style-type: none"> <input type="checkbox"/> (I) Read the teacher notes. <input type="checkbox"/> (I or PA) If possible, watch the instructional video <input type="checkbox"/> (I) Complete the independent practice <input type="checkbox"/> (I) Check the odds using the answer key at the back and rework any missed problems
<p>SCIENCE</p> <p>(30 Minutes)</p>	<p>Science</p>

Daily Student Instruction Sheet - THURSDAY

	<p>Goal/Objective: To understand the significance of Roger Boscovich in the development of atomic theory.</p> <p>Materials needed: Teacher notes, independent practice sheet, answer key (optional: loose leaf paper or spiral)</p> <p>Specific Instructions (I=independent; PA= Parent assistance):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Watch Mrs. Sharp's lecture video as an introduction to the lesson (I). <input type="checkbox"/> Read p. 26-28 of the supplemental Boscovich reading; stop at the diagrams on p. 28 (I). (Click here to read along with Mrs. Sharp.) <input type="checkbox"/> Carefully read through the teacher notes (I). OPTIONAL: copy down any parts of the notes that help your understanding. <input type="checkbox"/> Complete the independent practice sheet (I). <input type="checkbox"/> Check answers with answer key (I).
<p>4-6 LATIN (Minutes)</p>	<p><i>Latin</i></p> <p>Goal/Objective: Students will correct their translations of “Sulla”</p> <p>Materials needed: 1) “W3 Translation Answer Key”; 2) (optional) access to the Internet</p> <p>Specific Instructions (I=independent; PA= Parent assistance):</p> <ul style="list-style-type: none"> <input type="checkbox"/> (I) Check your translation from this week’s worksheets using either: <ul style="list-style-type: none"> <input type="checkbox"/> “W3 Translation Answer Key” or <input type="checkbox"/> Guided translation video at https://bit.ly/W3GuidedTranslation (under heading “6th Grade Text ‘Sulla’ (part 2)”) <ul style="list-style-type: none"> <input type="checkbox"/> Mark corrections in red ink or pencil
<p>OPTIONAL</p> <p>Music (20 Minutes)</p> <p>Drama (20 Minutes)</p>	<p><i>Music</i></p> <p>Goal/Objective: Learn about Ledger Lines in the Bass Clef</p> <p>Materials needed: Bass Clef Ledger Line Worksheet</p> <p>Specific Instructions (I=independent; PA= Parent assistance): I</p> <ul style="list-style-type: none"> <input type="checkbox"/> I: Please read the intro. to Ledger Lines at the top of your worksheet. If you have ANY questions, please see the Music Blog for support or send an email to get clarification. <input type="checkbox"/> Ledger lines show pitches above and below the staff. These notes extend the regular range of the Bass Clef. <input type="checkbox"/> Please complete the included worksheet carefully. Remember the sentences for the Bass Clef lines and spaces: <ul style="list-style-type: none"> <input type="checkbox"/> Spaces spell A C E G from bottom to top <input type="checkbox"/> Lines spell Girls/Boys Do Fine Always from bottom to top <input type="checkbox"/> The ledger lines continue the musical alphabet and repeat no matter how low you go. G F E D C B A G etc. <p><i>Drama</i></p>

Daily Student Instruction Sheet - THURSDAY

Goal/Objective: Students will learn about William Shakespeare's Early Writing Career.

Materials needed: Biography and Worksheet titled William Shakespeare's Early Writing Career.

Specific Instructions (I=independent; PA= Parent assistance):

- Read the passage about William Shakespeare's Early Writing Career. (I)
- Use the information in the passage to answer the questions on the worksheet (I)

1. Chapter 7 Vocabulary, part 2

August: Respected and impressive.

Capricious: Given to sudden changes of mood or behavior.

2. Read the second half of Chapter 7 (pgs. 82-86), beginning with “Slowly, but with no doubt or hesitation whatever...”

- An online version of *The Wind in the Willows* can be found on Google Books at no charge.
- If you would like to read along with an audio version of the book, it is available at: <https://librivox.org/the-wind-in-the-willows-by-kenneth-grahame-2/>

3. On loose-leaf paper, answer the following questions with 1-2 complete sentences, direct quotations are not required (be sure to title your page with your name, the date, and “Chapter 4 Understanding Questions”; you may continue on the same page used yesterday):

1. When they first arrive on the island, what do Rat and Mole feel?
2. Who do they find there?
3. At the end of the chapter, what feelings are Rat and Mole left with? Why?

CATEGORICAL DATA

CATEGORICAL DATA

- Categorical data is a data set where the response is not a numeric value.

Ex: favorite color, favorite genre of books

RELATIVE FREQUENCY TABLE

- A table is a common way to display categorical data because it is easy to tally the responses. When the _____ percent _____ of each category is calculated, it is called a relative frequency table.

2. Mr. Carpenter's fifth grade social studies class participates in a mock election. Complete the table below.

CANDIDATE	NUMBER OF VOTES	PERCENT OF VOTES
Candidate A	12	$\frac{12}{30} = 40\%$
Candidate B	3	$\frac{3}{30} = 10\%$
Candidate C	6	$\frac{6}{30} = 20\%$
Candidate D	9	$\frac{9}{30} = 30\%$

a. What percent of voters did not vote for Candidate C? $40\% + 10\% + 30\%$

80%

b. Which candidate got the least number of votes?

Candidate B

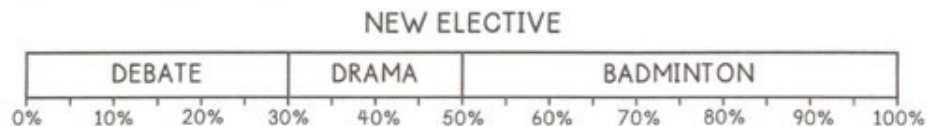
c. Exactly 60% of voters choose which two candidates? $40\% + 20\% = 60\%$
Candidate A and C



PERCENT BAR GRAPHS

- A percent bar graph displays categorical data based on the _____ percentage _____ or (relative frequency). It can be found by:
 - Calculating the percent of each category
 - Representing each percent with a bar on a number line

3. Morton Middle School took a survey to determine which new elective should be added to the class offerings. The results are shown below.



a. What percent of students chose debate? 30% Drama? 20% Badminton? 50%

b. If 300 students were surveyed, then how many chose drama?

60 students

$$20\% \text{ of } 300 = \frac{20}{100} \times 300 = 60$$

c. If 300 students were surveyed, then how many chose badminton?

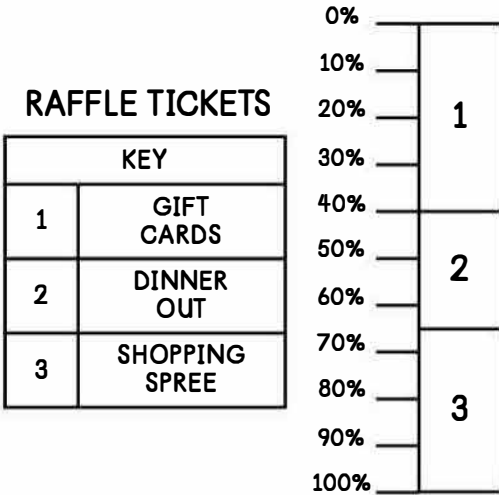
150 students

$$50\% \text{ of } 300 = \frac{50}{100} \times 300 = 150$$

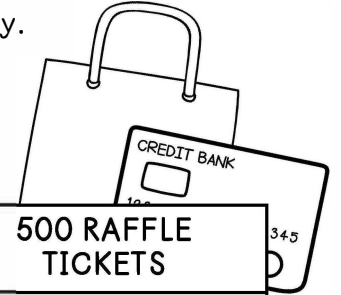
CATEGORICAL DATA

Eastview Junior High holds a fundraising raffle for three different prizes. They are using the past data to estimate how many tickets will be entered in each category.

Use the percent bar graph to complete the table.



	200 RAFFLE TICKETS	500 RAFFLE TICKETS
GIFT CARDS	1.	4.
DINNER OUT	2.	5.
SHOPPING SPREE	3.	6.



THE CONTRIBUTION of Boscovich's Theory

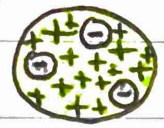
3/17/20

→ Modern atomic theory is contributed mostly to Thomson, Rutherford, Bohr, and Dalton, but sadly leaves out Roger Boscovich

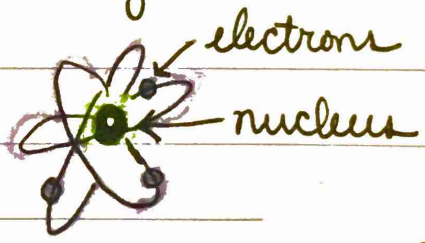


Roger Boscovich 1711-1787

THOMSON: "plum pudding" model



"planetary model" (supported by **KELVIN**)



BOSCOVICH: repulsive and attractive forces allow the electrons to go in different orbits

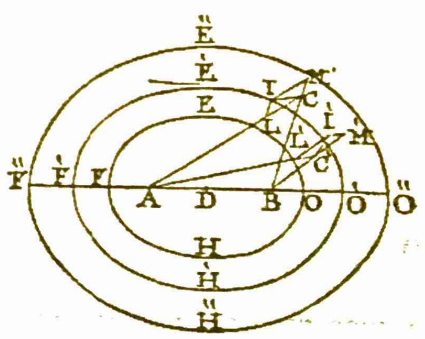
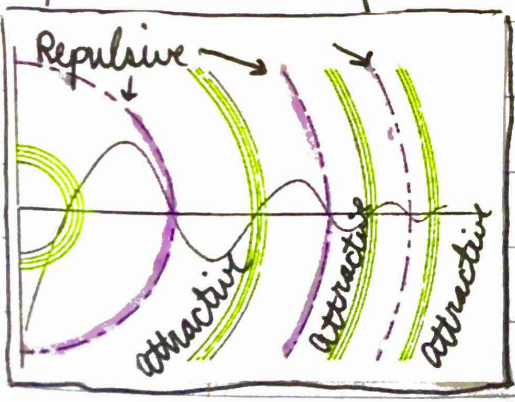


Figure 3. Boscovich's orbitals /8/

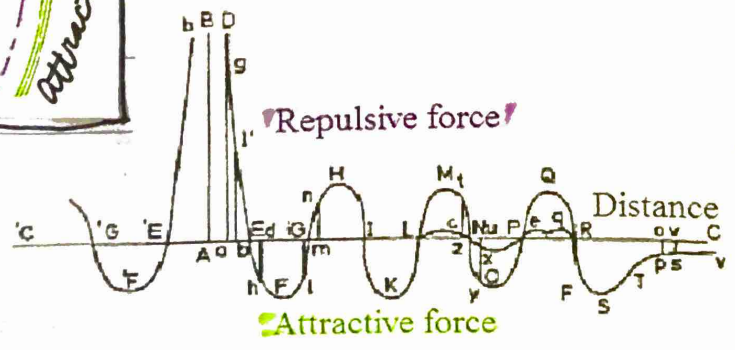
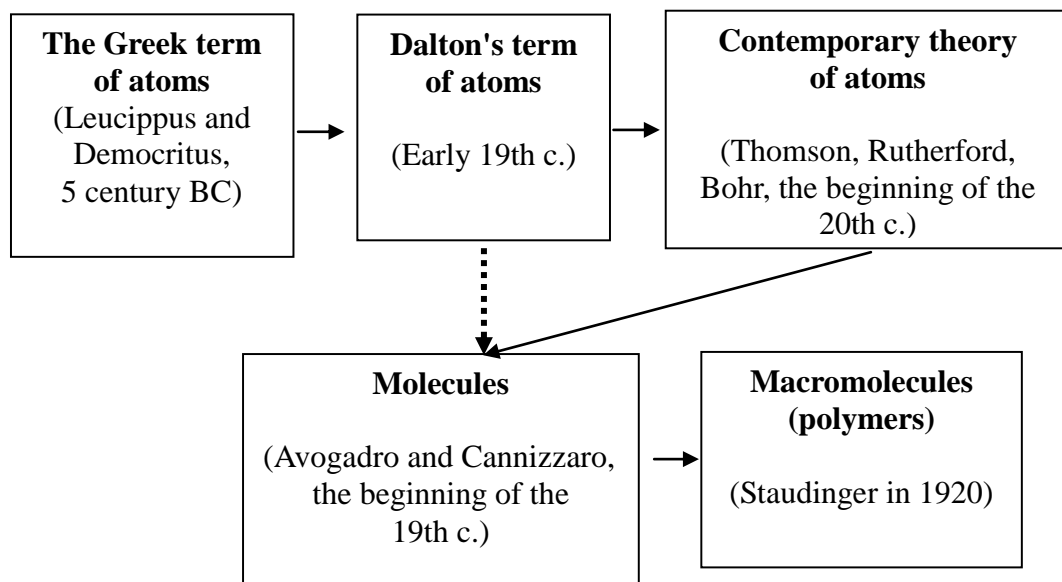


Figure 2. Boscovich's curve⁴⁶ Force vs. distance of two points (or particles) /8/

4. CONTRIBUTION OF BOSCOVICH'S THEORY TO MODERN COMPREHENSION OF THE STRUCTURE OF MATTER

4.1. Common view of the historical journey for the discovery of structure of atoms, molecules and macromolecules

It is often said that the ancient Greek philosophers Leucippus and Democritus first came to idea that all was made of atoms, tiny indivisible particles. Their thought was religiously prohibited and dormant for more than 1500 years. During this period, there were a few people who thought about the atomic structure, but in the period to 19th century, there was a great preparation that formed the basis for further work on it. It is often said, that John Dalton at the beginning of the 19th century came up with the idea that each chemical element has its smallest particles. Believing that these particles are indivisible, Dalton, following the example of the Greeks, called them atoms (Scheme 4-1.).



Scheme 4-1. A common view of the historical journey of discovery structure of atoms, molecules and macromolecules

A little later it turned out that these Dalton atoms must be divisible, i.e. the atom had a structure, and the atom was made up of smaller particles, the atomic nucleus and electrons. This truth of atoms was revealed in the 19th and 20th century and many famous scientists contributed to finding out the structure of atoms are usually named as: Faraday, Maxwell, William Thomson (better known as Lord Kelvin), J. J. Thomson, Rutherford and Bohr. The remarkable contributions of the last three scientists are emphasized; according to the usual contemporary story for the historical journey of the discovery of the atomic structure looks like shown in scheme 4-1. Then, usually are listed the names of A. Avogadro and A. Cannizzaro who in 19th century indicated that atoms are combined into molecules, and then its stated that H. Staudinger in 1920 first introduced the hypothesis that the molecules combine into even larger entities - macromolecules.

However, it was not quite so. A part of the story was left out. It is undeniable that these scientists contributed highly to the interpretation of the structure of matter. It is important to note, however, that these achievements are based on the ideas of Roger Boscovich, which is not known enough to the wider scientific community.

Earlier in western literature it was regularly cited the importance of Boscovich to the discovery of the structure of atoms, but since 1920, his name is usually omitted /6a/. It is commendable that some of our scholars in Serbia and Croatia typically cite the name of this great scientist, but unfortunately do not give enough information on his impact on the discovery of the structure of atoms. Therefore, we would like here to briefly introduce the reader to the contribution of Boscovich to the discovery of atomic structures, and more detailed views can be found in the literature /2, 6a, 7, 15, 17, 18/.

4.2. Contribution of Boscovich's Theory to the discovery of the structure of atoms

At the end of the 19th century, the more mature conviction (i.e. point-of-view) was that Dalton's atoms of chemical elements were still divisible and consisted of positively charged particles and negatively charged electrons. The question was - how were these particles located in the atom.

At the end of the 19th century, J. J. Thomson (from Cavendish Laboratory in Cambridge) discussed various models of atoms. According to one of them, which is most frequently cited in contemporary literature as by Thomson, is that of positive charge filling the entire atom forming a ball, where negative electrons are deployed like plum grains in pudding. (Hence, it is named "plum-pudding model" as well as "Thomson model".) However, Lord Kelvin, in the period 1902-1907, published several works which emphasized his belief that the issue of atomic structure can be resolved by Boscovich's Theory and proposed a "planetary model of the atom".

J. J. Thomson also thoroughly discussed the "planetary model of the atom", under which the positive charge is located in the nucleus of atom and the electrons orbit the nucleus /2, 7/. Seeking a theoretical foundation for the idea that electrons can move only at certain paths around the nucleus of atoms, Thomson concluded that for this purpose only Boscovich's Theory would serve. In 1907 Thomson wrote in his work "The corpuscular theory of matter" /90/: "Suppose we regard the charged ion as a Boscovichian atom exerting a central force on a corpuscle which changes from repulsion to attraction and from attraction to repulsion several times... such a force, for example, as is represented graphically in Figure 4-1 where the abscissa represent distances from the atom, and the ordinates the forces exerted by the atom on a corpuscle..." It is obvious that Figure 4-1 actually combines Boscovich's curve (Fig. 3-1) and Boscovich's orbitals (Fig. 3-2).

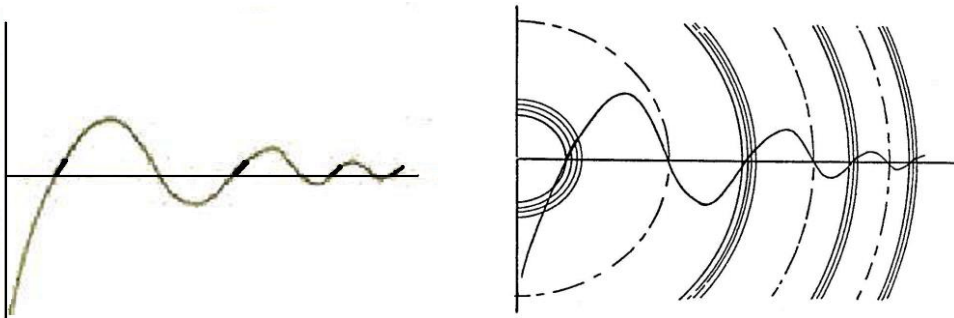


Figure 4-1. Left curve as stated by Thomson /90/: A positively charged nucleus of the atom is at coordinate's origin and the positions of electron orbits are at bolded part of the curve. Following Thomson's opinion, Gill /7/ presented "permissible" (solid line) and "forbidden" (dashed line) orbitals (right curve). The abscissa shows the distance of the electron from nucleus and the ordinates show the force: repulsive (below) and attractive (above) /7/.

The doubt, over what model of the atom was correct, the "plum-pudding" or "planetary", was solved by Rutherford, who was a former student and collaborator to Thomson. Rutherford in 1907 transferred to the Department of Physics, University of Manchester, and in the next year confirmed that alpha particles are actually helium nuclei, i.e. positively charged particles which are composed of two protons and two neutrons. Thin sheets of metal were bombarded with alpha particles, and thus Rutherford in 1911 experimentally confirmed the "planetary model of the atom". This model is commonly called a "Rutherford model".

In 1912, after seven months spent with Thomson in Cambridge and four months spent with Rutherford in Manchester /19/, Niels Bohr in 1913 calculated the possible paths of electrons, taking into account that electrons can move from one orbital to another only if they receive or lose a certain amount of (quantum) energy - as Boscovich said a century and a half earlier (Section 3.3). Today, this model of the atom is called "Bohr model", which is not fully justified to call it that.

The Contribution of Boscovich to the Development of Atomic Theory

1. Modern atomic theory generally leaves out which scientist?

2. The ideas and achievements of Roger Boscovich contributed to the discovery of _____ structures, or what made up an atom.
3. J.J. Thomson came up with the “_____” model of the atom.
4. Later, Lord Kelvin and J.J. Thomson discussed the “planetary model of the atom,” which was based on the theory of which scientist? _____
5. Boscovich’s Theory about _____ and _____ Forces acting on the particles or electrons paved the way for the theory of orbits in the “planetary model”.

W3 Translation Answer Key

Lines 15-20

“Lucia! Quintus! Go inside!” shouted Sulla. “I have an excellent plan.”

After the young people entered the house, Sulla quickly finished the job.

He wrote two notices on the wall. Then he called Quintus and Lucia out from the house.

Lines 21-26

The signwriter showed the wall to the young people. Look! Lucia saw this notice:

“Lucia supports Afer. Afer is the best candidate.”

“Hurray! This notice pleases me greatly,” said Lucia.

Quintus caught sight of the other notice on the wall:

“Quintus supports Holconius. Holconius is the best candidate.”

Quintus was also very happy.

Lines 27-29

The young people gave Sulla 30 denarii. Sulla laughed.

After Lucia and Quintus departed, he added a third notice:

“Lucia and Quintus are very generous.”

Name _____

Date _____

Bass Clef - Ledger Lines

Ledger lines can be used to extend the upper and lower ranges of a staff.

This example includes notes which can be written above and below the bass clef using ledger lines.

C D E F B C D E

1. Draw a bass clef at the beginning of the staff and write the letter name of each note.

C D E F B C D E

2. Draw a bass clef at the beginning of the staff and write the letter name of each note.

C D E F B C D E

3. Draw the indicated notes. Use ledger lines to draw the specified number of pitches without duplication.

Example

3 Cs

3 Ds

2 As

2 Bs

2 Fs

2 Bs

2 Gs

3 Cs

NAME _____ NUMBER _____ DATE _____

William Shakespeares's Writing Career

Although it is known that Shakespeare had begun writing plays before 1592, there is no evidence to prove he worked for a theatrical company early in his career. Even four hundred years ago, writers could work as freelancers, and many London writers did. Some Shakespeare experts think he was working collaboratively with other writers, and it is accepted that he, along with two other writers, wrote a play called *Sir Thomas More*, about a statesman executed by Henry VIII for disagreeing with his divorce.

It wasn't long before Shakespeare's early plays attracted the attention of several theatrical companies. One of the companies, Sussex's Men (their patron was the Earl of Sussex), performed *Titus Andronicus*. Records have survived of several performances of William's early plays. Some Shakespeare experts believe the first company he belonged to was the Queen's Men, sponsored by Queen Elizabeth herself.

The state of theater in London in the 1590s was not stable. Plague was still a threat to the city and many people left the city in the summer of 1592. It is not known if William remained in London but he did have a home to go to in Stratford. The Puritans, a strict new faction of the Church of England, saw the theater as sinful. Pressure from the Puritans, as well outbreaks of plague, led to London theaters being closed for two years.

Shakespeare turned to writing poetry during the plague years and had a patron, the Earl of Southampton, which provided him with steady work. By 1594 he was writing plays again and soon joined a company called Chamberlain's Men. The new company was a success from the start. There was only one other company in the city at the time and between the two companies, they performed all plays staged in London. Shakespeare would stay with the company for many years and wrote about two plays a year for their repertoire.

After reading the passage "William Shakespeare as a Young Man", answer the questions below:

- List three things you learned from the passage that you did not already know about William Shakespeare:

- _____
- _____
- _____

- What are the names of the three theatrical companies Shakespeare belonged to in his early career?

- _____
- _____
- _____

- What did the Puritans think about theatre?

Name: _____ Due Date: _____

Weekly Reading Record

This week I read _____

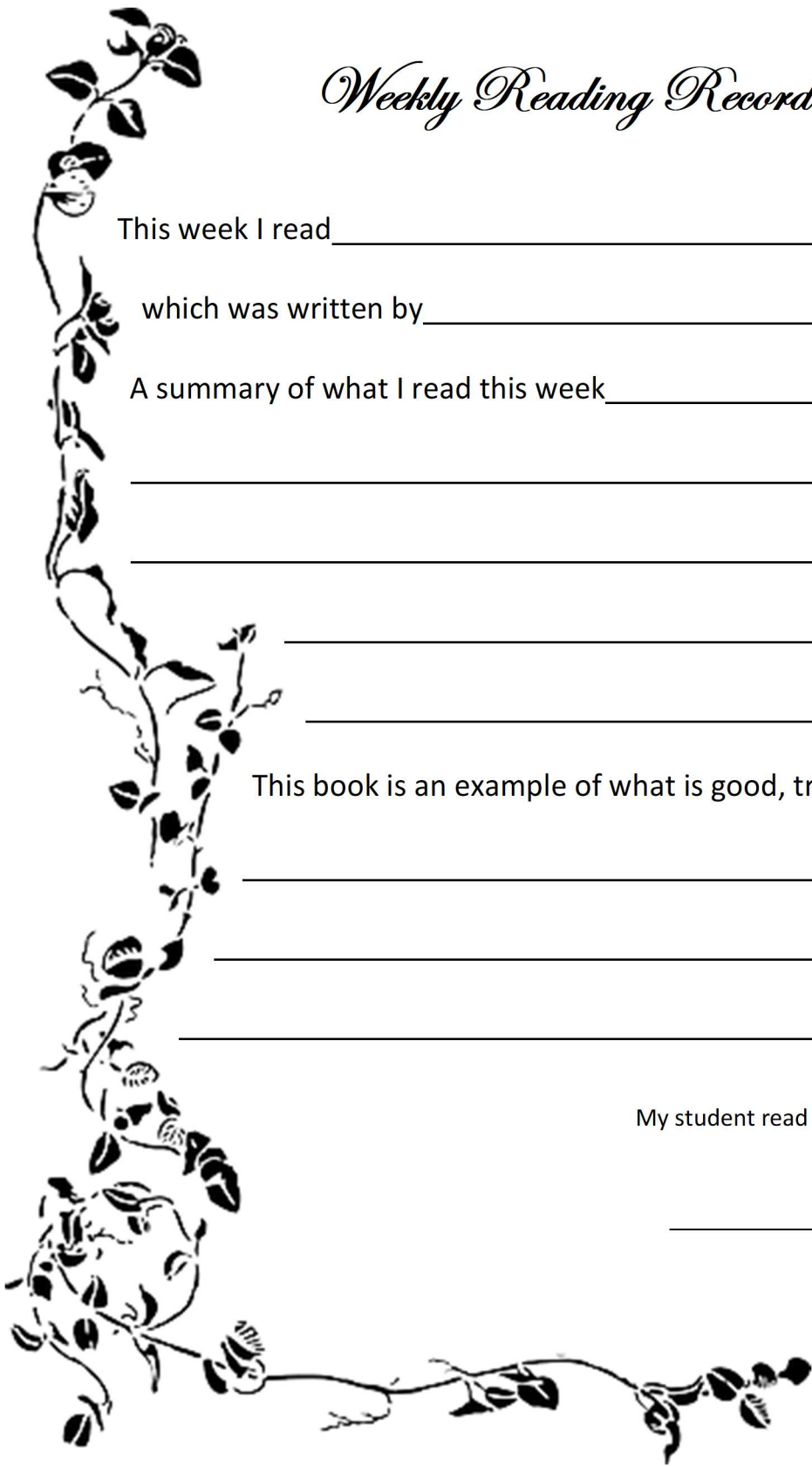
which was written by _____

A summary of what I read this week _____

This book is an example of what is good, true, and beautiful because

My student read for at least 100 minutes this week.

Parent Signature



Using today's teacher notes, complete the following worksheet.

1. Copy down the definition of independent clause, dependent clause, and subordinating conjunction:

Dependent/Subordinate Clause:

Independent/Main Clause:

Subordinating Conjunction:

2. For each of the following sentences, underline the independent clause, bracket the dependent clause, and box the subordinating conjunction.

a. Toad is not a good driver (because) he refuses to learn the basics of operating a car. }

b. Mole does not remember (what) Badger told him.]

c. Rat, (who) lives near the river,] dislikes the Wide World.

d. (Whatever) you cook] will taste good to the hedgehogs.

e. I did not know (that) you travelled into the woods.]

Noun Clauses Check for Understanding KEY

Directions: Use the teacher notes and video to complete the assignment.

1. List three things that are essential to the definition of a noun clause:

a.

b.

c.

2. In each sentence, bracket the noun clause and circle the subordinate conjunction.

a. [Whoever brings food] is welcome at the party.

b. I think [that the tacos were my favorite appetizer].

c. Jerry's mother believed [everything Lucy said].

d. Brandon will eat [whatever he pleases].

3. How is a noun clause like a baby kangaroo? (2 complete sentences)

Week 3 Math Answer Key (Odds only)

Monday

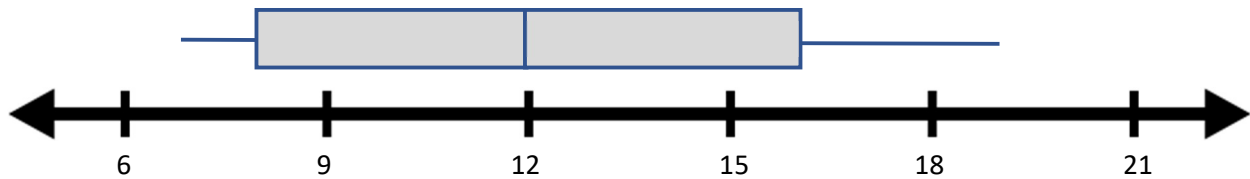
1. **False.** There are 5 in the 0-14 range, 10 in the 15-29 range, 15 in the 30-44 range, and 20 in the 44-59 range. This makes a total of 50 students.
3. **False** There are 15 students in the 30-44 range. There are 50 students total. 15 is 30% of 50.
5. There are 15 students below 30 words per minute. This is 15 per 50 students total.
$$\frac{15}{50} = \frac{30}{100} = 30\%$$

Tuesday

1. **False.** The largest number of guests on New Year's Eve is about 28. The smallest number of guests is about 6. The difference between these number is 22, and much larger than 15.
3. **True.** The Thanksgiving graph does not have any data at 0.
5. **False.** The median line is to the right of the 15.

Wednesday

1. Min: 7 Q1: 8 Med: 12 Q3: 16 Max: 19



Thursday

1. 80 tickets
$$\frac{40}{100} \times 200 \text{ or } 0.4 \times 200$$
3. 70 tickets
$$\frac{35}{100} \times 200 \text{ or } 0.35 \times 200$$
5. 125 tickets
$$\frac{25}{100} \times 500 \text{ or } 0.25 \times 500$$

NAME _____ NUMBER _____ DATE _____

Industrial Revolution
Chapter 3: Reading Check A (Pages 20-23)

1. Productivity is the __ **RATE** __ at which goods are made or _____ **WORK** __ is completed. (See p.22)
2. Efficient means to achieve _____ **MAXIMUM** _____ productivity with _____ **MINIMUM** _____ wasted effort or expense. (See vocabulary)
3. _____ **PLOWS** _____, which helped farmers turn over looser and deeper soil, and _____ **WATERWHEELS** _____, which helped mills ground more flour, were two tools that saw improvement and helped farmers . (See p.22)
4. What was enclosure (in your own words), and how did it change life in England in the 1600s and 1700s? Answer in complete sentences. (use p. 23 and teacher notes)

Enclosure was a movement that changed common farming and grazing land into privately owned farms and pastures. This meant that poorer farmers could no longer feed their families and had to seek work in larger towns or cities.

Wednesday

1. Boscovich's points make up atoms; they are much smaller than atoms.
2. Some characteristics are: perfectly simple (do not have parts), separated from one another, have the forces of attraction and repulsion acting upon them, indivisible
3. Vacuum means empty space.

Thursday

1. Roger Boscovich
2. Atomic
3. Plum-pudding
4. Roger Boscovich
5. Attractive, Repulsive