SUMMER HOMEWORK PACKET

JAMES N GAMBLE
MONTESSORI HIGH SCHOOL

9/10 Grade

Name ________________

Completed packet is due on the first day of school. See you on Monday, August 19, 2019
Welcome to 9th and 10th Grade at Gamble Montessori High School! This summer homework is meant to help increase your curiosity and keep you thinking & learning throughout the summer. Please do not wait until the end of summer to complete it.

Read all directions carefully because each teacher will have different instructions for submitting the homework.

Only complete homework and buy supplies for the classes that you are enrolled in.

It should be completed before the first day of school.

Supplies that you will need to bring on the first day of school*

<table>
<thead>
<tr>
<th>Community Supplies</th>
<th>Class Supplies</th>
</tr>
</thead>
</table>
| 4 boxes of tissues, 1 clorox wipes, 8 dry erase markers, 1 eraser, 1 bottle hand sanitizer, 1 box of 10 pencils | **Geometry:** notebook, pencil, ruler, calculator, camera  
**Science:** Composition notebook (not spirals), Folder with prongs, Pens and pencils, Glue stick with name on it, Scissors with name on it, Roll of invisible tape with name on it, 2 1\(\frac{1}{2}\) in binders  
**Algebra:** notebook, pencil, calculator  
**English:** folders with prongs & pockets, 1 canvas (8 1/2 X 11 or larger), 2 composition notebooks, 2 packages of glue sticks, 1 package of markers, 1 package of tape (clear scotch), 1 package of colored pencils, 3 packs of Flashcards, 1 pack college bound paper, 1 pack of different color highlighters, 1 Sharpie, 1 roll of paper towels |
Check them off when completed:
Cross out the ones you don’t need

☐ History
☐ Science
☐ Algebra 1
☐ Algebra 2
☐ Geometry
☐ English
☐ Spanish 1
☐ Spanish 2

If you have questions, call the office at 513-363-2600 or email your teachers:

Ms. Chal  chalmar@cpsboe.k12.oh.us  Science
Mr. Duong  duongba@cpsboe.k12.oh.us  Science
Ms. Worrell  worrelle@cpsboke.k12.oh.us  Spanish
Mr. Sulek  suleksc@cpsboe.k12.oh.us  History
Mr. Ulhorn  History
Mr. Roebuck  roebucp@cpsboe.k12.oh.us  Geometry
Mr. Vahue  chadvahue@gmail.com  Math
Mr. Deye  Math
Ms. Trotter  trotted@cpsboe.k12.oh.us  English
Ms. Cain  cainash@cpsboe.k12.oh.us  English
Ms. Terry  terryma@cpsboe.k12.oh.us  Intervention Specialist
Ms. Schneder  schnedm@cpsboe.k12.oh.us  Intervention Specialist
Mr. Favors  favorsg@cpsboe.k12.oh.us  Intervention Specialist
Current Events Summer Homework

It is very important for people to know and understand the events that are happening in their own country and across the globe. Many of these events have been influenced by our past (the things we will be studying this school year), currently impact America and our world today, and will influence our future. Thus, you are going to be asked to keep up with various current events throughout the summer.

You will need to find a credible newspaper article or website that communicates current World or American issues. Choose an article that you find interesting and then create a word or google document that you will turn in during the first week of school. The articles you choose should not be comic or sport stats related. You will need to complete a total of 2 current events throughout the summer.

Each current event must include the following:

1. Article Title
   a. What is the title of the article? Use exact wording

2. Article Source
   a. Where did you get the article?

3. A picture
   a. Provide a picture that represents the events that are being discussed in the article

4. Summary
   a. Briefly, and in your own words, summarize the content of the article
   b. Five (5) sentence minimum

5. World Impact
   a. How has this event been impacted by the past?
   b. How does this event currently impact you, your community, society, America, or the World?
   c. Five (5) sentence minimum.

6. Reaction
   a. Take a position on the issue contained in the article.
   b. How do you feel about the event?
   c. What do you think should be done by people or various political leaders?
   d. What role do you feel you should play?
   e. Five (5) sentence minimum.

This is not a critique of whether the article is good or bad. This assignment is focused on your ability to critically think through various current events, their origin (historically), their current impact, and your attitude/thoughts/beliefs towards these events.

Resources:
Summer Homework Science

This summer homework is for 9th and 10th grade going into Physical Science. Do not wait until the end of summer. You are expected to spend several hours throughout the summer on this work.

Directions: Complete all of the following work on SEPARATE PAPER that is stapled so that you can submit it to Ms. Chal. DO NOT complete in this handbook, because you will not be able to turn it in. Ms. Chal will ask you to complete separately. You may write NEATLY or type and print your work. No email submissions. You MUST include a cover page and headings for each section.

Cover page should look like this:

![Cover page template]

Materials Needed on the 1st day of Physical Science Class and EVERY DAY throughout year:

- Composition notebook (not spirals)
- Folder with prongs
- Pens and pencils
- Glue stick with name on it
- Scissors with name on it
- Roll of invisible tape with name on it
**Intro:** Reading, writing, asking questions, and designing experiments are going to be essential to your success in Physical Science this year. This summer we are going to get a little head start practicing these important skills. You are asked to be creative, collaborative, and hard working as you grapple with all types of science.

**Part 1. “Discovery” Article & Seminar**  
Read and annotate this article. Be prepared for a seminar in the first week of school.

**Focus Question:** What is science?

Discovery: The spark for science “Eureka!” or “aha!” moments may not happen frequently, but they are often experiences that drive science and scientists. For a scientist, every day holds the possibility of discovery—of coming up with a brand new idea or of observing something that no one has ever seen before. Vast bodies of knowledge have yet to be built and many of the most basic questions about the universe have yet to be answered: • What causes gravity? • How do tectonic plates move around on Earth’s surface? • How do our brains store memories? • How do water molecules interact with each other?

We don’t know the complete answers to these and an overwhelming number of other questions, but the prospect of answering them beckons science forward. Scientific questions can seem complex (e.g., what chemical reactions allow cells to break the bonds in sugar molecules), but they don’t have to be. You’ve probably posed many perfectly valid scientific questions yourself: how can airplanes fly, why do cakes rise in the oven, why do apples turn brown once they’re cut?

You can discover the answers to many of these “everyday” science questions in your local library, but for others, science may not have the answers yet, and answering such questions can lead to astonishing new discoveries. For example, we still don’t know much about how your brain remembers to buy milk at the grocery store. Just as we’re motivated to answer questions about our everyday experiences, scientists confront such questions at all scales, including questions about the very nature of the universe.

Discoveries, new questions, and new ideas are what keep scientists going and awake at night, but they are only one part of the picture; the rest involves a lot of hard (and sometimes tedious) work. In science, discoveries and ideas must be verified by multiple lines of evidence and then integrated into the rest of science, a process which can take many years. And often, discoveries are not bolts from the blue. A discovery may itself be the result of many years of work on a particular problem, as illustrated by Henrietta Leavitt’s stellar discovery.

Astronomers had long known about the existence of variable stars—stars whose brightness changes over time, slowly shifting between brilliant and dim—when, in 1912, Henrietta Leavitt announced a remarkable (and totally unanticipated) discovery about them. For these stars, the length of time between their
brightest and dimmest points seemed to be related to their overall brightness: slower cycling stars are more luminous. At the time, no one knew why that was the case, but nevertheless, the discovery allowed astronomers to infer the distances to far-off stars, and hence, to figure out the size of our own galaxy. Leavitt’s observation was a true surprise—a discovery in the classic sense—but one that came only after she’d spent years carefully comparing thousands of photos of these specks of light, looking for patterns in the darkness.

The process of scientific discovery is not limited to professional scientists working in labs. The everyday experience of deducing that your car won’t start because of a bad fuel pump, or of figuring out that the centipedes in your backyard prefer shady rocks shares fundamental similarities with classically scientific discoveries like working out DNA’s double helix. These activities all involve making observations and analyzing evidence—and they all provide the satisfaction of finding an answer that makes sense of all the facts. In fact, some psychologists argue that the way individual humans learn (especially as children) bears a lot of similarity to the progress of science: both involve making observations, considering evidence, testing ideas, and holding on to those that work.

Develop at least two questions for discussion. Be sure your questions are open-ended (don’t have a one word answer) and would lead to deeper discussion in the class.

Question 1:

Why is this a good question for seminar?

Question 2:

Why is this a good question for seminar?

Part 2. Experimental Design

Directions: Read over the parts of an experiment below. Copy the “answer section” in your submission packet, filling in the answers as you go. Don’t forget to put your heading.

1. The independent variable is the variable that is intentionally changed in the experiment, such as the type of liquid that you place on a plant that you are growing.

2. The levels of the independent variable are the different values of the independent variable, such as using water, juice, and cola. The levels of the independent variable can also be thought of as the experimental groups that are set up.
3. The **dependent variable** is the variable that responds to the changes in the independent variable. For example, the height that the plant grows depending on the different temperatures of water is the dependent variable.

4. The **control variable** is the standard against which the researcher compares the results from each treatment group (level) in the experiment. For example, the control might be the room temperature water. In many cases, there will not be a true control. The researcher could then set one of the groups as the standard and measure the other groups against that standard.

5. The **repeated trials** are the number of times the experiment is repeated to determine how the independent variable affected the results. For example, if the researcher tried. If 10 different plants are used for each treatment, then there are 10 repeated trials.

6. **Constants** are the things that are kept the same each time one of the trials in the experiment is repeated. For example, constants could include the amount of liquid used, the type soil used, the amount of light the plant received, and the type of water used. As many outside factors as possible should be kept constant in an experiment so that the researcher can be sure that any changes that occur do so because of the independent variable.

7. The **Hypothesis** is a proposed explanation for the natural phenomena being observed.

**ANSWER SECTION: (write this part out and fill in the blanks on your hand-in packet)**

_________ the variable that is changed by the scientist. Determines the outcome of the other variable.

_________ the variable that “depends” on the other. It is what is measured in the experiment.

_________ the parts of the experiment that stay the same in all trials.

_________ multiple repetitions to ensure that the results are accurate.

_________ the predicted outcome of the experiment/answer to the scientific question asked.

_________ the standard used as a point of comparison for the independent variables in the experiment.

**Part 3. Becoming a Scientist at Home (Field Experience)**

**Choose 1 of the following:**

- Determine what makes the gooey-ist brownies?
  - Buy three boxes of brownie mix and choose one variable to change as you back each box (number of eggs, amount of oil, water). Remember only change one variable the others must remain constant.
- Determine how salt affects the speed of ice melting?
  - Use 3 ziplock baggies with water and various amounts of salt. Freeze them. When you take them out of the freezer, time how long it takes for the ice to melt.
- Develop your own scientific question about something you’re curious about and set up an experiment to test it.

Complete these for whichever experiment you chose:
  - Write an introduction that explains your experiment. Be sure it states your scientific question, your variables, how you will test it, etc.
  - Record your data in a table like this:

<table>
<thead>
<tr>
<th>Independent Variable 1</th>
<th>Dependent Variable Trial 1</th>
<th>Dependent Variable Trial 2</th>
<th>Dependent Variable Trial 3</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent Variable 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Variable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

  - Conclusion in CER Statement form: Claim (answers the question), Evidence (explains what you found in your data, Reasoning (provides scientific explanation for why your claim and data make sense)

<table>
<thead>
<tr>
<th>Lab Rubric</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Title (1)</strong></td>
<td>Provides a title for lab</td>
</tr>
<tr>
<td><strong>Introduction (4)</strong></td>
<td>Explains the scientific question, each variable and constant in the experiment, how you tested it, etc.</td>
</tr>
<tr>
<td><strong>Data (4)</strong></td>
<td>Accurate data is recorded in data table and averages recorded for multiple trials</td>
</tr>
<tr>
<td><strong>CER Statement (5)</strong></td>
<td>Statement or conclusion that answers question or identifies a trend.</td>
</tr>
<tr>
<td></td>
<td>Scientific data that supports the claim. The data needs to be appropriate and sufficient to support the claim.</td>
</tr>
<tr>
<td></td>
<td>Justification that links the claim and evidence and includes sufficient scientific principles. Shows understanding of content.</td>
</tr>
<tr>
<td><strong>Conclusion (1)</strong></td>
<td>Summarize findings and any mistakes, errors, ideas for what you might do differently next time.</td>
</tr>
</tbody>
</table>
Science and Engineering Practices

- Asking questions (for science) and defining problems (for engineering)
- Developing and using models
- Planning and carrying out investigations
- Analyzing and interpreting data
- Using mathematics and computational thinking
- Constructing explanations (for science) and designing solutions (for engineering)
- Engaging in argument from evidence
- Obtaining, evaluating, and communicating information

Hope you enjoy your summer! I look forward to reviewing all your interesting work! See you in August! :) -
Ms. Chal & Mr. Duong
# 9th Grade Algebra I

## Summer Homework Instructions

**Mr. Duong**

<table>
<thead>
<tr>
<th>Email</th>
<th><a href="mailto:duongba@cpsboe.k12.oh.us">duongba@cpsboe.k12.oh.us</a></th>
<th>Phone</th>
</tr>
</thead>
</table>

### Materials Needed:

- Composition Journal
- Graphing Paper
- Pencils and pens
- Color pencils or markers
- Ruler

In order to be successful in Algebra I right from day 1, it is important to review and practice several foundational skills that we will be using daily in Algebra. Please complete the following assignments before the first day of school. The summer homework is designed to take several hours, so give yourself plenty of time and do not try to finish everything in one sitting (or even one week). If you have questions, please email or text Mr. Duong using the contact information above. I look forward to meeting you for the upcoming school year!

### Part One

Each of the skills covered in this summer homework is listed below. Next to each skill, please list the rules or steps needed to perform this skill. You may write out the rules or steps from memory, or you may look online for instructions. Google is a good resource for this, especially Khan Academy!

<table>
<thead>
<tr>
<th>Skill</th>
<th>Rules or Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adding integers (positive and negative)</td>
<td></td>
</tr>
<tr>
<td>Subtracting integers</td>
<td></td>
</tr>
<tr>
<td>Multiplying integers</td>
<td></td>
</tr>
<tr>
<td>Dividing integers</td>
<td></td>
</tr>
</tbody>
</table>
### Order of operations with integers

<table>
<thead>
<tr>
<th>Skill</th>
<th>Rules or Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparing Integers</td>
<td></td>
</tr>
<tr>
<td>Place value and rounding</td>
<td></td>
</tr>
<tr>
<td>Comparing decimals</td>
<td></td>
</tr>
<tr>
<td>Converting fractions and decimals</td>
<td></td>
</tr>
<tr>
<td>Solving one-step and two-step equations</td>
<td></td>
</tr>
</tbody>
</table>

**Part Two**

The rest of this packet includes 1-2 pages of practice problems for each of the skills above. Please complete each problem **without using a calculator**. Show all work whenever possible. If you like to use a calculator to check your answers afterward you finish that is encouraged, but if it appears that you used a calculator while doing the week you will not receive credit. In addition, we will practice these skills more during first quarter with calculators!
Part Three

By signing below, I certify that I did all of the work for this assignment using maximum effort and without the use of a calculator.

Printed Name ___________________________ Signature ___________________________ Date ___________________________

**Naming parts of an expression**

Match the vocabulary to the correct definition. Write the answer in the blank on the left side of that paper.

1. Algebraic Expression
   - A. Each part of an expression separated by an operation

2. Coefficient
   - B. A number that stands by itself

3. Constant
   - C. A number that does not stand by itself. It is attached to the variable.

4. Term
   - D. A letter that stands for a particular numerical value

5. Variable
   - E. A number sentence without an equal sign, has at least one two terms and one operation

Identify each part of the algebraic expression as the coefficient, constant, or variable.

1. $4x - 12$

   $4$ is a(n) _________

   $x$ is a(n) _________

   $12$ is a(n) _________

2. $a + 3b$

   $a$ is a(n) _________

   $3$ is a(n) _________

   $b$ is a(n) _________

3. $6y$

   $6$ is a(n) _________

   $y$ is a(n) _________
Adding Positive and Negative Numbers

Find each sum.

1) \((-5) + 3\)
2) \((-4) + (-3)\)

3) \((-2) + 4\)
4) \((-5) + 7\)

5) \((-8) + (-6)\)
6) \(12 + (-5)\)

7) \(49 + (-23)\)
8) \((-17) + 12\)

9) \((-55) + 49\)
10) \((-73) + 60\)

11) \(44 + (-10)\)
12) \(2 + (-1) + 1\)
13) (-4) + 4 + 5  

14) 12 + 13 + (-4)

15) (-5) + 7 + 9  

16) (-2) + (-3) + 10

Adding Positive and Negative Numbers

Find the difference

1) (-5) - 2  

2) (-4) - (-6)

3) (-2) - 4  

4) (-5) - (-5)

5) (-8) - (-6)  

6) 12 - (-5)

7) 49 - (-23)  

8) (-17) - 12

9) (-55) - 49  

10) (-73) - 60

11) 44 - (-10)  

12) 2 - (-1) - 3
13) \((-4) - 4 - 5\)  
14) \(12 - 13 - (-4)\)

15) \((-5) - (-3) - (-9)\)

Multiplying Integers

Find the product.

1) \((-5) \times 3\)  
2) \((-4) \times (-3)\)

3) \((-2) \times 4\)  
4) \((-5) \times 7\)

5) \((-8) \times (-6)\)  
6) \(12 \times (-5)\)

7) \(9 \times (-12)\)  
8) \((-11) \times 7\)

9) \((-5) \times 4 \times 9\)  
10) \((-7) \times 6\)

11) \(4 \times (-10)\)  
12) \(2 \times (-10) \times (-3)\)
13) \((-4) \times 4 \times 5\)  \hspace{1cm} 14) \(6 \times 10 \times (-4)\)

15) \((-5) \times 7 \times 9\)  \hspace{1cm} 16) \((-2) \times (-3) \times 10\)

**Dividing Integers**

Find each quotient.

1) \((-6) \div 3\)  \hspace{1cm} 2) \((-12) \div (-3)\)

3) \((-4) \div 4\)  \hspace{1cm} 4) \((-77) \div 7\)

5) \((-72) \div (-6)\)  \hspace{1cm} 6) \(12 \div (-4)\)

7) \(-132 \div (-11)\)  \hspace{1cm} 8) \((-60) \div 3\)

9) \((-105) \div 7\)  \hspace{1cm} 10) \((-4) \div 1\)

11) \(4 \div (-10)\)  \hspace{1cm} 12) \(2 \div (-10)\)
13) \((-144) \div (-12)\)  
14) \(24 \div 12\)

15) \((-70) \div 25\)  
16) \((-150) \div (-50)\)

Order of Operations with Integers

Evaluate each expression

1) \((-5) \times 3 - 2\)  
2) \((-4) + (-3) \times 2\)

3) \((-2) \times 4 - 5\)  
4) \((-5) \times 7 + 1\)

5) \((-8) \times (-6) + 10\)  
6) \(12 - (8 + 5 - (-5))\)

7) \(7 (8 + 5) - (-7)\)  
8) \((-11) + 7 \times 2 + 5\)

9) \((-5) + 4 \times 9 - 2\)  
10) \((-7) \times 6 + 2 \times 5\)

Evaluate each using the values given.

11) \(x + z + \frac{y + z}{4}\), use \(x = 5\), \(y = -4\), and \(z = -4\)
12) \(-4(j - 6 - (j + k))\); use \(j = -7\), and \(k = -2\)

Write the Correct Comparison Symbol (> , < or =) in each box.

1) \(-40 \quad\) -77

2) 44 \quad\) 32

3) -3965 \quad\) -2345

4) 15 \quad\) 75

5) -219 \quad\) -513

6) 6555 \quad\) 9313

7) 55 \quad\) 45

8) 34 \quad\) 73

9) -1134 \quad\) 405

10) -12 \quad\) -10

11) -23434 \quad\) 15

12) 15 \quad\) -15

13) -3 \quad\) -5

14) -7 \quad\) 9

15) -345 \quad\) -405

16) -678 \quad\) -500

17) -6899 \quad\) -1515

18) 78 \quad\) 81
19) 550 ____ 653
20) -15 ____ -14

Rounding Numbers

Round each in the place indicated.

1) 8,632,051
2) 25,952,939
3) 803,119
4) 73,693
5) 2,461,612,242
6) 789,132,377
7) 9,885,659,269; billions
8) 2,628,259; thousands
9) 347,168; ten thousands
10) 74.91
11) 0.72091
12) 8.121; hundredths
13) 1.495485; thousandths
14) 8.121; hundredths
15) 6.9788; tenths
16) 23.0368
17) 1.4567556; ten-thousandths
18) 8.544567; thousandths

19) 5.78644; tenths
20) 1.2234 thousandths

Write the Correct Comparison Symbol (>, < or =) in each box.

1) -3.09 ____ -3.1
2) -4.44 ____ -0.444

3) -3.77 ____ -3.84
4) 1.5 ____ 7.5

5) -2.19 ____ -513
6) -65.55 ____ -9.313

7) 5.5 ____ 4.5
8) -3.4 ____ -7.3

9) -1134 ____ 405
10) -12 ____ -10

11) -2.3434 ____ 1.5
12) 1.49 ____ 1.54

13) -0.17 ____ -0.2
14) -7.1 ____ -7.9

15) -3.45 ____ -40.5
16) -6.78 ____ -5.500

17) -68.99 ____ -151.5
18) 1.55 ____ 1.55
19) 5.51 _____ 0.551
20) 1.456 _____ -1.456

Fractions and Decimals

Write each as a decimal. Use repeating decimals when necessary.

1) \[ \frac{3}{4} \]
2) \[ \frac{3}{5} \]
3) \[ -2 \frac{3}{4} \]
4) \[ \frac{5}{8} \]
5) \[ \frac{7}{200} \]
6) \[ \frac{8}{33} \]
7) \[ \frac{6}{11} \]
8) \[ \frac{27}{125} \]

Write each as a fraction.

9) 2.2
10) 1.6
11) 0.08
12) 0.25
Write the Correct Comparison Symbol (>, < or =) in each box.

1) \(\frac{3}{4}\) _____ .85
2) \(\frac{3}{5}\) _____ .55

3) \(-2\frac{3}{4}\) _____ -2.8
4) \(\frac{5}{8}\) _____ 2/3

5) \(\frac{7}{200}\) _____ 14/200
6) \(\frac{8}{33}\) _____ 0.0456

7) \(\frac{6}{11}\) _____ 0.55
8) \(\frac{3}{7}\) _____ 0.304

9) \(-\frac{2}{6}\) _____ -0.333
10) \(\frac{1}{2}\) _____ 0.4785

11) \(\frac{3}{8}\) _____ 0.3
12) \(\frac{4}{5}\) _____ 0.65

13) 0.33 _____ \(\frac{6}{11}\)
14) -0.211 _____ \(-\frac{1}{9}\)
15) $0.005 \frac{1}{11}$  
16) $-0.75 \frac{3}{4}$

Solving One-Step and Two-Step Equations

Solve each equation.

1) $7x = 77$  
2) $5b = 45$

3) $x - 2 = -12$  
4) $x + 5 = 10$

5) $1 = -2 - x$  
6) $-19 = -23 - m$

7) $3 - 4r = 7$  
8) $5x - 3 = 42$

9) $11(-12 + n) = -297$  
10) $\frac{p}{10} + 1 = 3$
11) $4x + 4 = 20$

12) $5 + \frac{a}{3} = 3$
Name: ____________________ Class: ________________ Date: __________
Show work neatly for each problem (even the multiple choice problems), attach additional paper if needed. Packet is due the first day of school.

Algebra 2 Summer HW

Multiple Choice
Identify the letter of the choice that best completes the statement or answers the question.

Solve the inequality. Graph the solution set.

____ 1. \(2 + 2k \leq 8\)
   a. \(k \geq 3\)
   ![Graph a]
   b. \(k \leq 5\)
   ![Graph b]
   c. \(k \leq 3\)
   ![Graph c]
   d. \(k \geq 5\)
   ![Graph d]

____ 2. \(2r - 9 \geq -6\)
   a. \(r \leq \frac{1}{2}\)
   ![Graph a]
   b. \(r \geq \frac{7}{2}\)
   ![Graph b]
   c. \(r \geq \frac{1}{2}\)
   ![Graph c]
   d. \(r \leq -\frac{7}{2}\)
   ![Graph d]

____ 3. \(2(4y - 5) < -10\)
   a. \(y > 0\)
   ![Graph a]
   b. \(y < \frac{5}{8}\)
   ![Graph b]
   c. \(y < 0\)
   ![Graph c]
   d. \(y > \frac{5}{8}\)
   ![Graph d]

____ 4. Lynn and Dawn tossed a coin 60 times and got heads 33 times. What is the experimental probability of tossing heads using Lynn and Dawn’s results?
   a. \(\frac{20}{11}\)
   ![Graph a]
   b. \(\frac{9}{20}\)
   ![Graph b]
   c. \(\frac{11}{20}\)
   ![Graph c]
   d. \(\frac{9}{11}\)
   ![Graph d]
5. This is a spinner used in a board game. What is the probability that the spinner will land on a multiple of 3 and 4?

![Spinner Diagram]

a. \( \frac{1}{4} \)  

b. \( \frac{1}{2} \)  

c. \( \frac{1}{8} \)  

d. \( \frac{3}{8} \)

6. A spinner is numbered from 1 through 10 with each number equally likely to occur. What is the probability of obtaining a number less than 2 or greater than 7 in a single spin?

a. \( \frac{2}{5} \)  

b. \( \frac{1}{2} \)  

c. \( \frac{3}{10} \)  

d. \( \frac{3}{10} \)

7. A bag contains 6 red marbles, 6 white marbles, and 4 blue marbles. Find \( P \) (red or blue).

a. \( \frac{3}{5} \)  

b. \( \frac{3}{2} \)  

c. \( \frac{5}{8} \)  

d. \( \frac{3}{4} \)

8. If a dart hits the target at random, what is the probability that it will land in the shaded region?

![Dart Target Diagram]

a. \( \frac{1}{4} \)  

b. \( \frac{1}{16} \pi \)  

c. \( \frac{1}{16} \)  

d. \( 16\pi \)

9. The day before the parade, the school band’s starting point was changed. The band director called three band members. Each of these band members called 4 other band members. Then all of these band members called three members. How many band members, including the band director, are notified of the new starting point?

a. 40 band members  

b. 51 band members  

c. 36 band members  

d. 28 band members
10. A triangle has an angle of 108°, which is twice the measure of another angle in the triangle. What are the measures of the three angles?
   a. 28°, 54°, 113°
   b. 18°, 54°, 108°
   c. 28°, 54°, 108°
   d. 54°, 108°, 162°

11. The total number of horses and people at the riding academy for the Sunday session was 39. The total number of legs at the academy that day was 124. How many people were at the riding academy that Sunday?
   a. 27 people
   b. 16 people
   c. 23 people
   d. 12 people

12. Mimo and Stan went out for some frozen yogurt. They want to leave the server a tip. Mimo has 5 coins in his pocket: a penny, a nickel, a dime, a quarter, and a half-dollar. If he uses exactly three coins for the tip, how many different tips are possible?
   a. 20 tips
   b. 10 tips
   c. 5 tips
   d. 15 tips

13. Suppose you roll a red number cube and a blue number cube. How many different rolls will have a sum of seven?
   a. 3 rolls
   b. 12 rolls
   c. 1 rolls
   d. 6 rolls

14. What is the perimeter of the fifth square in this pattern?

```
   Area = 16  Area = 64  Area = 144
```
   a. 60 units
   b. 80 units
   c. 400 units
   d. 256 units

15. There are 8 students in Mr. Alvarez’s art class. Throughout the year, each student must pair up with every other student to complete a project. How many different pairs of students are there?
   a. 30 pairs
   b. 28 pairs
   c. 66 pairs
   d. 56 pairs

16. A gardener builds a fence for a square garden that is 10 yd by 10 yd. A fence post is positioned at every corner and every 5 ft. How many fence posts will the gardener need?
   a. 24 posts
   b. 9 posts
   c. 28 posts
   d. 12 posts

17. Aaron, Bob, Charles, and Daniel live in Tulsa, Portland, Miami, and Michigan. Bob is the brother of the man who lives in Portland. Daniel is not Bob’s brother and does not live in Michigan. Either Aaron or Charles lives in Tulsa. Aaron is an only child. Which person lives in which city?
   a. Aaron, Miami; Bob, Michigan; Charles, Tulsa; Daniel, Portland
   b. Aaron, Tulsa; Bob, Michigan; Charles, Portland; Daniel, Miami
   c. Aaron, Portland; Bob, Miami; Charles, Michigan; Daniel, Tulsa
   d. Aaron, Tulsa; Bob, Portland; Charles, Miami; Daniel, Michigan

18. Robert spent \( \frac{3}{5} \) of his money on lunch and \( \frac{1}{6} \) of the money he had left on a snack and some juice. He left the house with $24. How much money did Robert return with?
   a. $8
   b. $6
   c. $10
   d. $12
19. One grade has 60 students.
   • 29 students have cats and 39 have dogs.
   • 16 students have both cats and dogs, but no gerbils.
   • 6 students have only gerbils.
   • 4 students have both dogs and gerbils, but no cats.
   • 3 students have both cats and gerbils, but no dogs.
   • Only 3 students have all three pets.
   How many students have no cats, dogs, or gerbils?
   a. 55 students  
   b. 5 students  
   c. 7 students  
   d. 57 students

20. Which number does not equal \( \frac{27}{30} \)?
   a. 90%  
   b. 0.27  
   c. 0.9  
   d. \( \frac{9}{10} \)

21. Which percent equals 0.69?
   a. 69%  
   b. 610%  
   c. 6.9%  
   d. 6.10%

22. Sales tax in one state is 9%. What is the amount of tax on a $30.95 purchase?
   a. $27.86  
   b. $9.31  
   c. $31.04  
   d. $2.79

23. There are 1,332 people under the age 20 in Pierce City. This represents 14% of the total population. What is the total population?
   a. 18,648 people  
   b. 13,320 people  
   c. 9,664 people  
   d. 9,514 people

Short Answer

Graph the number on a number line.

24. \( \sqrt{11} \)

25. \( \frac{10}{7} \)

Insert <, >, or = to make the sentence true.

26. \( \frac{1}{3} \)  \( \frac{2}{5} \)

27. \( \sqrt{3} \)  \( \sqrt{7} \)

28. 20.28  \( \sqrt{256} \)

29. \(-16\)  \( |5| \)
30. \[|18 + 20| = |-5 - 2|\]

Find the opposite and the reciprocal of the number.

31. 500
32. 3
33. \(-1.74\)
34. \(4 - \pi\)
35. Simplify \([-11 + 3]\).

Evaluate the expression for the given value of the variable(s).

36. \(5a + 5b; a = -6, b = -5\)
37. \(\frac{4(3h - 6)}{1 + h}; h = -2\)
38. \(|4b - 4| + |3 - b^2| + 2b^3; b = 2\)
39. \(-x^2 - 4x - 4; x = -3\)
40. \(-2x^3 - x^2 + 5x + 2; x = -3\)
41. The expression \(-16t^2 + 1800\) models the height of an object \(t\) seconds after it has been dropped from a height of 1800 feet. Find the height of an object after falling for 4.8 seconds.

Simplify by combining like terms.

42. \(4c - 4d + 8c - 3d\)
43. \(-3(-4y + 3) + 7y\)
44. \(\frac{x + x^2}{2} - \frac{x}{3} - \frac{x^2}{5} - \frac{x^2}{4}\)

Solve the equation.

45. \(3y + 20 = 3 + 2y\)
46. \(-5y - 9 = -(y - 1)\)
47. \(6(x - 0.8) - 0.2(5x - 4) = 6\)
48. Find the perimeter of the figure. Simplify the answer.

\[ x + y \\
4x \quad 2x \\
x \quad 2x \quad y \]

Solve the equation or formula for the indicated variable.

49. \( T = \frac{2U}{E} \), for \( U \)

50. The formula for the time a traffic light remains yellow is \( t = \frac{1}{8}s + 1 \), where \( t \) is the time in seconds and \( s \) is the speed limit in miles per hour.
   \( a. \) Solve the equation for \( s \).
   \( b. \) What is the speed limit at a traffic light that remains yellow for 4.5 seconds?

Simplify (by hand).

51. \( \frac{1}{8} \cdot \frac{1}{7} \)

52. \( \frac{7}{8} + \frac{1}{6} \)

Divide (by hand).

53. \( \frac{2}{3} \div \frac{3}{6} \)

54. \( \frac{1}{7} \div \frac{9}{21} \)

55. Len has 4 coins in his pocket, all dimes and nickels. The total value is $0.30. What combination of coins does Len have?

56. There are two children in the Brown family. The sum of the children’s ages is 28 and the product of their ages is 195. What are the ages of the children?
57. Yolande returned home from mowing lawns at 2:24 P.M. It took \(1\frac{3}{4}\) hours to mow the first lawn. The second and third lawns she mowed took \(1\frac{1}{5}\) hours each. She took only a 45-min break. When did Yolande begin mowing the first lawn?

58. Starting at 5:35 A.M., buses stop at the corner of Oak Street every 20 minutes. You arrive at the stop at 8:45 A.M. How long will you have to wait for the next bus?

59. Write 0.54 as a percent.

60. On three successive days, Jack completed \(\frac{1}{9}\), \(\frac{3}{8}\), and \(\frac{5}{24}\) of a job. How much work does he have left to do on day 4?

61. Monica needs \(1\frac{1}{3}\) cups of flour for a batch of cookies. How many batches can she make with 10 cups of flour?

62. A bowl contains green, red, and white marbles in the ratio 3 : 4 : 8. Based on this information, what does the ratio 11 : 15 represent?

63. Find the slope of the line.

64. Solve the proportion \(\frac{5}{8} = \frac{h}{40}\).

65. If \(\frac{16}{9} = \frac{80}{n} = \frac{P}{27}\), what are \(n\) and \(P\)?
Geometry Summer Homework
Exploring the Golden Ratio

"The Laws of Nature are written by the hand of God in the language of mathematics."
-Galileo Galilei

Happy summer! I am looking forward to beginning our work together in August. This assignment is designed to pique your curiosity—to make you wonder, to cause you to ask questions, and hopefully to inspire you to dig deeper into the mystery of mathematics. It should take you about two hours to complete. Please follow these directions as you work:

1. Complete all sections of the homework in order.
2. You may write in this packet as you work, but please record all measurements, calculations, answers, and quick writes in your notebook. It is your notebook that you will turn in when you return to school.
3. Please label all work in your notebook with the part (1-5), activity, problem number, and quick write number.

Materials Needed:
- Notebook – spiral or composition both acceptable
- Pencil
- Ruler with metric (centimeter) units
- Calculator
- Camera
- A way to create a google document, load a photo to it, and share it with Mr. Roebuck

I would like to acknowledge Barb Scholtz, whose work served as the starting point for this assignment.
Which rectangle is the most pleasing or best-looking rectangular shape?

A B C D E F G H
Part Two

What was special about the rectangles that Fechner studied? Clearly it was not their size. It was their proportions. Let’s see if we can determine what that proportion is. As you read through each step, refer to my example (Rectangle A) below. Complete all work, clearly labeled, in your notebook.

1. Measure the length of the sides of each rectangle to the nearest tenth of a centimeter. Write the measurements down beside the side. Record each rectangle letter and its dimensions in your notebook.

2. Set up a ratio (the length of the longer side to the length of the shorter side) for each rectangle. Set this equal to $x/1$.

3. Calculate the unit ratio (what $x$ equals).

You should get the same result for rectangles C and D, approximately $1.6$. If you didn’t, try again and find your error.

Example:

![Diagram](image)

Fechner found rectangles with this ratio were preferred by 75% of the people he surveyed. The ratio, 1.6 to 1 is the famous Golden Ratio of the ancient Greeks. Rectangles with the ratio 1.6 to 1 are called Golden Rectangles because the ratio of their sides is approximately the Golden Ratio.

Golden Rectangles can be found in the shape of playing cards, windows, book covers, file cards, ancient buildings, and modern skyscrapers. Many artists, including Renaissance artist Leonardo da Vinci and modern artist Piet, have incorporated the Golden Rectangle into their works because of its aesthetic appeal. It is believed that classical Greek sculptures of the human body were proportioned so that the ratio of the total height to the height of the bellybutton was the Golden Ratio. Golden Rectangles and Golden Ratios can be found in the famous Greek temple, the Parthenon.

On the pages that follow you will find three examples that explore the Golden Ratio. **Please complete all three.**
Activity A

Here's a picture of the statue, Doryphoros, the Spearbearer, created by Polycleitos (c. 450-440 BC). Let's see if we can find the Golden Ratio in this statue. Record your work in your notebook.

1. Measure the height (feet to head) to the nearest tenth of a centimeter.

2. Measure the distance from the feet to the bellybutton (also to the nearest 0.1 cm).

3. Set up a proportion and calculate for x, as you did before.
Activity B

Here is a picture of the Parthenon (a building from ancient Rome). Select two of the identified rectangles and follow the same steps as before, measuring the sides in each rectangles and set up a ratio to find the proportion.

![Parthenon Image]

**Rectangle 1:** Please trace and label the rectangle you are using. Mark the sides with your measurements. Show your calculations below AND in your notebook.

<table>
<thead>
<tr>
<th>Ratio...</th>
<th>Quotient (to 5 decimal places)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length of longer side:</td>
<td></td>
</tr>
<tr>
<td>Length of shorter side:</td>
<td></td>
</tr>
</tbody>
</table>

**Rectangle 2.**

*Do the same work as you did with Rectangle 1.*
Activity C

Here are some faces of some famous (or infamous) people you should be familiar with. Which of them are close to being “ideal” as defined by the Greeks?

Measure each from the head-to-chin (length) and from side-to-side (width). Ignore the hairlines; you may need to “guess” at where the head/shape actually is. Actually draw in the lines where you’re measuring, over the top of each face. Measure to the nearest .1 cm. Then set up a ratio of length to width \(\frac{L}{W}\) and divide. Show your measurements and calculations.

\[
\begin{align*}
\text{Mona Lisa} & \\
L &= \\
W &= \\
\text{Ratio} &= \\
\text{Signore Sulek} & \\
L &= \\
W &= \\
\text{Ratio} &= \\
\text{Signore Roebuck} & \\
L &= \\
W &= \\
\text{Ratio} &= \\
\text{Mona Dana} & \\
L &= \\
W &= \\
\text{Ratio} &= \\
\end{align*}
\]

Quick Write 2:

What have you noticed so far? What are you wondering? According to the Golden Ratio, which face is the most ideal? Do you agree?
Part Three

The Golden Ratio can be approximated with the help of a famous set of numbers. Can you determine the next number in this pattern?

1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, ______

In words, how would you explain the pattern/sequence? Please copy the sequence above and answer this question in your notebook.

☐ If you need a hint, search for the video The Fibonacci Sequence: Nature's Code on YouTube.

Activity F.

This set of numbers is called the Fibonacci sequence. The numbers in the Fibonacci sequence occur in many branches of mathematics. They also appear in nature and in art. To determine a decimal approximation of the Golden Ratio, you can calculate the ratio of any two consecutive Fibonacci numbers. Use a calculator to approximate the ratios of the following pairs of consecutive Fibonacci numbers as decimals accurate to four decimal places. Record each problem and your answer in your notebook.

1. 13 / 8
2. 21 / 13
3. 34 / 21
4. 144 / 89
5. 377 / 233
6. 610 / 377
7. 987 / 610
8. 1597 / 987

9. What do you notice is happening to your ratios as you move further along the Fibonacci Sequence?

Quick Write 3:

The sculpture shown above is called Golden Ratio by Andrew Rogers and is located in Jerusalem. How is it related to the Golden Ratio?
Part Four:

Use the graph paper provided on the next page as you follow the directions below. Please cut or carefully tear this page out of your summer homework packet and tape or staple it into your notebook.

1. Start by drawing a 1 x 1 block square. Label one dimension on this square with a 1.
2. Add a square to the right of the previous one to make a 2 x 1 rectangle. Label one dimension on this second square with a 1.
3. Using the length of this new rectangle (2) as the length of one side, draw a 2 x 2 square above this one. Label one dimension on this square with a 2.
4. Look at the left side of this new figure. Its length is 3. Draw a 3 x 3 square on the left side of this figure, and label one dimension on this square with a 3.
5. Continue the pattern, as shown, until you run out of space.

Quick Write 4:

In your notebook, list the dimensions you wrote down for each square from smallest to largest. What do you notice?

6. Starting with the first square you drew, draw an arc that runs diagonally across the square from top left to bottom right. Continue this arc diagonally across the second 1 x 1 square, then do the same across the 2 x 2 square, the 3 x 3 square, and so on.
Part Five

The picture you just drew is called the Fibonacci spiral, because the dimensions of each successive square creates the Fibonacci sequence. And because the ratio between each successive pair of numbers gets closer and closer to the Golden Ratio, the ratio between the dimensions of each square in the Fibonacci spiral does the same, creating a “Golden Spiral.” And this Golden Spiral shows up in nature ALL THE TIME!

Final Assignment

Put your math detective skills to work!

1. Find an example of either the Golden Ratio or the Golden Spiral in your home, neighborhood, or around town.
2. Take a picture of the example and load it into a google doc.
3. If you found an example of the Golden Ratio, measure and label the dimensions and divide the ratio to show how close it is to the Golden Ratio.

If you found an example of the Golden Spiral, copy an image of the Fibonacci spiral off the internet and paste it next to your picture to show how close it is to the Golden Spiral.

4. Title your google doc “YourLastName Geometry SHW” and share with Mr. Roebuck – roebucp@cpsboe.kl2.oh.us

Quick Write 5:

In your notebook, write a reflection on what you learned during this assignment. You may write about anything, but please include at least 5-6 sentences. You may use the following questions to help you:

- What stood out to you as you completed these investigations?
- What piqued your curiosity?
- What do you want to learn more about?
- How has this assignment compared to other work you’ve done in math? Did you like it more? Less? The same?

Thank you for taking the time to do this assignment! I look forward to working with you this year!
0.5 cm Graph Paper

Two lines per centimeter. Black lines.
ENGLISH SUPPLY LIST

- 2 folders with prongs & pockets
- 1 canvas (8 1/2 X 11 or larger)
- 2 composition notebooks
- 2 packages of glue sticks
- 1 package of markers
- 1 package of tape (clear scotch)
- 1 package of colored pencils
- 3 packs of Flashcards
- 1 Sharpie
- 1 roll of paper towels

The work for the upcoming 2019/2020 school year begins with this summer homework assignment. Please take this assignment seriously and do your best work. You are tasked to purchase, highlight and annotate William Golding’s Lord of the Flies. You can also access the book online at https://1.cd.in.edl.io/FDFUNZ73QsRbLiPsUk4JXjvTjZpLd3Jmk2DIVxkm1iAOEF.pdf If you choose to use the online version make sure you take notes for your annotations. As you read, highlight and annotate various aspects in the novel such as: interesting facts, character descriptions, character thoughts, and character development. You may want to add annotation you make. come up with symbols for In addition to your annotations you will write an explanatory essay about characters in the novel. The essay should be typed, double spaced, Times New Roman, font size 12. Follow the MLA formatting style. Please bring your typed essay to hand in the first day of school. This is formal writing so do not use contractions, “I” or 1st person, abbreviations, jargon or informal language. The essay should be at least 2 pages in length. Make sure your essay has an engaging introduction, bridge and thesis. Provide plenty of examples for your body paragraphs and a compelling conclusion. In your conclusion, restate your thesis, provide a bridge, restate your main points and end with a universal idea (one that can appeal to anyone). Please reference the included rubric for how your essay will be scored. You can always google an audio version of the book.

Address the following prompt in an explanatory essay:

Compare and contrast the characters of Jack and Ralph, Simon and Piggy, or Jack and Roger. Be sure to address both similarities and differences in your paper and use transitions throughout. If you need more help reference this website:

https://owl.english.purdue.edu/
<table>
<thead>
<tr>
<th>Score</th>
<th>Purpose, Focus and Organization</th>
<th>Evidence and Elaboration</th>
<th>Conventions of Standard English (starts at 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>The response is fully sustained and consistently focused within the purpose, audience, and task; and it has a clear controlling idea and effective organizational structure creating coherence and completeness. The response includes most of the following: • A strongly maintained controlling idea with little or no loosely related material • Skillful use of a variety of transitional strategies to clarify the relationships between and among ideas • Logical progression of ideas from beginning to end with a satisfying introduction and conclusion • Appropriate style and objective tone established and maintained</td>
<td>The response provides thorough and convincing support, citing evidence for the controlling idea or main idea that includes the effective use of sources, facts, and details. The response includes most of the following: • Smoothly integrated, thorough, and relevant evidence, including precise references to sources • Effective use of a variety of elaborative techniques (including but not limited to definitions, quotations, and examples), demonstrating an understanding of the topic and text • Clear and effective expression of ideas, using precise language • Academic and domain-specific vocabulary clearly appropriate for the audience and purpose • Varied sentence structure, demonstrating language facility</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>The response is adequately sustained and generally focused within the purpose, audience, and task; and it has a clear controlling idea and evident organizational structure with a sense of completeness. The response includes most of the following: • A maintained controlling idea, though some loosely related material may be present • Adequate use of a variety of transitional strategies to clarify the relationships between and among ideas • Adequate progression of ideas from beginning to end with a sufficient introduction and conclusion</td>
<td>The response provides adequate support, citing evidence for the controlling idea or main idea that includes the use of sources, facts, and details. The response includes most of the following: • Generally integrated and relevant evidence from sources, though references may be general or imprecise • Adequate use of some elaborative techniques • Adequate expression of ideas, employing a mix of precise and general language • Domain-specific vocabulary generally appropriate for the audience and purpose • Some variation in sentence structure</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>The response is somewhat sustained within the purpose, audience, and task but may include loosely related or extraneous material; and it may have a controlling idea with an inconsistent organizational structure. The response may</td>
<td>The response provides uneven, cursory support/evidence for the controlling idea or main idea that includes partial use of sources, facts, and details. The response may include the following: • Weakly integrated evidence from sources; erratic or irrelevant references or citations • Repetitive or ineffective use of elaborative techniques • Imprecise or simplistic expression of ideas • Some use of</td>
<td>The response demonstrates an adequate command of basic conventions. The response may include the following: • Some minor errors in usage but no patterns of errors • Adequate</td>
</tr>
<tr>
<td>Score</td>
<td>Response Description</td>
<td>Inappropriate Domain-Specific Vocabulary</td>
<td>Use of Punctuation, Capitalization, Sentence Formation, and Spelling</td>
</tr>
<tr>
<td>-------</td>
<td>----------------------</td>
<td>-----------------------------------------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>1</td>
<td>The response is related to the topic but may demonstrate little awareness of the purpose, audience, and task; and it may have a limited controlling idea or discernible organizational structure. The response may include the following: • Confusing or ambiguous ideas • Few transitional strategies • Frequent extraneous ideas that impede understanding • Too brief to demonstrate knowledge of focus or organization</td>
<td>The response provides minimal support/evidence for the controlling idea or main idea, including little use of sources, facts, and details. The response may include the following: • Minimal, erroneous, or irrelevant evidence or citations from the source material • Expression of ideas that is vague, unclear, or confusing • Limited and often inappropriate language or domain-specific vocabulary • Sentences limited to simple constructions</td>
<td>The response demonstrates a partial command of basic conventions. The response may include the following: • Various errors in usage • Inconsistent use of correct punctuation, capitalization, sentence formation, and spelling</td>
</tr>
</tbody>
</table>
| 0     | The response is unrelated to the topic and displays little awareness of the purpose, audience and/or task. There is no controlling idea and it has no focus or discernible organizational structure. The response may: • Be blank or show a written refusal to answer • Be presented in a language other than English • Include only a restatement of the stem • Consist of random keystroke characters • Include only bulleted points • Include no transitional strategies | The response provides no support/evidence related to a main idea and includes no use of sources, facts or details. The response may include: • Only direct copy of part of the reading selection • No citations from the source material • No relevant domain-specific vocabulary • No evidence from the support material(s) | The response demonstrates a lack of command of conventions, with frequent and severe errors often obscuring meaning.
Directions:
A. Research:
As a first year Spanish I student, we will need to learn about the countries in Latin America, Europe and Africa. You will do a PowerPoint presentation or you can use your google account to create your presentation.

1. You will need to choose a country from the following list:
   - Mexico
   - Guatemala
   - Republica Dominicana
   - El Salvador
   - Costa Rica
   - Puerto Rico
   - Panama
   - Honduras
   - Venezuela
   - Nicaragua
   - Cuba
   - Colombia
   - Ecuador
   - Peru
   - Bolivia
   - Chile
   - Paraguay
   - Argentina
   - Uruguay
   - Spain
   - Guinea Ecuatorial

2. After you choose your country you will need to go to the following website: (if this website doesn't work you can search in google the information you need):


   Once you are there you will find a Map to your right. You will click on Central America, South America, Europe or Africa. Another map will open, then you will click on the country you choose to do your report on. It will take you to another window. Below the flag and map you will see some facts you can research on. You will need to click on the plus (+) sign to open it to read it and have the information you need.

   After you find your country and its information you will need to collect the following information to put in your PowerPoint or google presentation, every slide have to have a picture of what you are showing in it.
   - Country Flag and official name.
   - Capital city.
   - Form of government.
   - Current leader of country (position, name, and picture).
   - Population.
   - Languages (all the languages spoken in the country).
   - Religions.
   - Climate.
   - Official currency.
   - A fun factor about the culture.
   - A short video (no more than 2 min.) in the last slide.

At the end you will have to have 11 slides to present to class.

B. Vocabulary:
The Spanish alphabet is not quite the same as the English one. For this reason we will need to know how to pronounce the alphabet letters. You will need to go to this website to hear the sounds of the alphabet in Spanish:

   http://www.spanishspanish.com/alfabeto_ipower.html

   We will have a little quiz on the alphabet. I will spell some letters and you will write them down.

Materials Needed:
- Internet access (if you do not have internet access you can always go to a friend's house or to the library)

Assignment:
Create a power point presentation or in your google account following steps from directions (above).
Present your work first week of school.
Total possible points: 100
A. Research
   • 11 slides in presentation with the correct information. (22 pts.)
   • Presentation: Clear presentation of your country. (22 pts.)
   • Work on time. (16 points)
Total possible points: 60%

B. Vocabulary: Know the alphabet. (40%)
Nombre ___________________________  Fecha __________________

**Complete the following patterns of numbers.**

1. cero, cinco, diez, ______, veinte

2. diez, veinte, treinta, ______, cincuenta

3. ochenta, ochenta y cinco, noventa, noventa y cinco, ______

4. diez, doce, ______, dieciséis, dieciocho, veinte

**Write the time in Spanish.**

Write the time in Spanish and write if it is in the morning, afternoon, or night.

5. 7:30AM

6. 2:20PM

7. 4:45PM

8. 10:17PM

**For each of the following statements, circle the letter of the most appropriately response.**
****Circle only ONE answer

   A. Hola
   B. Hasta Luego
   C. Estoy bien
   D. Soy de Lima

10. ¿Cómo estás tú?
    A. Soy de Guatemala
    B. Regular
    C. Hasta Luego
    D. Mañana a las dos

11. ¿Cuántos años tienes tú?
    A. Buenos días
    B. Hasta pronto
    C. Soy de Quito
    D. Tengo catorce años

12. ¿Cómo está Ud., Srta. Miranda?
    A. Buenas tardes
    B. Muy bien
    C. Soy de Colombia
    D. Hasta Luego

Fill in each blank with the most appropriate word.

13. Me _____ Sara. ¿Y tú? ¿Cómo te llamas?

14. ¡_____ tardes, Alejandro!

15. ¿______ años tienes tú?

16. Hola! ¿______ estás tú?
Felix received this email from a new key pal. Use your knowledge of cognates to read the email and answer the questions. Answer in English.

Me llamo Ricardo y tengo veinte años. Soy un estudiante en la Universidad Nacional de Bolivia. Estoy en la capital, La Paz. Yo tomo clases interesantes. Tengo Inglés, literatura y biología. Tengo clases por la mañana y por la tarde.

17. What is the author’s name?

18. How old is the author?

19. What does the author do?

20. What classes does the author take?

21. When does the author have classes?

Using complete sentences, answer in Spanish the following questions about yourself.

22. ¿Cuántos años tienes tú?

23. ¿Cómo te llamas?

24. ¿De dónde eres tú?

25. ¿Cómo estás tú?
Your sister is practicing colors in Spanish. Complete her sentences by writing the correct color.

26. Las camisetas son ____.
   A. rojo
   B. roja
   C. rojas

27. El teléfono es ____.
   A. blancos
   B. blanco
   C. blanca

Daniela is writing to a new friend. Complete her message with the correct form of the verb in parenthesis.

Hola mi nuevo amigo,
Hasta Pronto,
Carolina

28. (A)

29. (B)

30. (C)

31. (D)
32. (E)

33. (F)

34. (G)

35. (H)

36. (I)

**Conjugate and then choose ONE answer.**

37. Mis amigos y yo ___ con el profesor de biología. (hablar)
   A. hablo
   B. hablas
   C. hablamos

38. Ella no ___ la tarea. (terminar)
   A. terminas
   B. termino
   C. termina

39. Luisa y Jorge ___ unos lapicés. (necesitar)
   A. necesitamos
   B. necesitan
   C. necesito

40. Tú ___ en la clase. (estar)
   A. estoy
   B. estás
   C. está

41. Martin y Ud. ___ en las Vegas. (estar)
   A. están
42. Yo ___ al cine. (ir)
   A. voy
   B. vas
   C. va

43. Claudia y yo ___ al parque en bicicleta. (ir)
   A. van
   B. vamos
   C. va

44. ¿___ Alfredo y Ud. pizza? (comer)
   A. comemos
   B. comen
   C. come

45. ¿___ tú el monumento de Benito Juárez? (ver)
   A. veo
   B. ves
   C. ve

46. Yo ___ dónde está el Zócalo? (saber)
   A. sabes
   B. sabe
   C. sé

Choose the expression from the options that best fits the situation described.

47. Elena no está contenta, ella está ___.
   A. feliz
   B. triste
   C. nerviosa

48. Mi café no está caliente, está ___.
   A. cansado
   B. libre
   C. frío

49. La puerta está ___.
   A. cerrada
   B. cerrado
   C. cerradas
50. Los refrescos están ____.
   A. frías
   B. fríos
   C. frío

Choose the best option to create a sentence to say what the following people like or like to do.

51. Marcos y yo / el correo electrónico
   A. A Marcos y yo gustan el correo electrónico.
   B. A Marcos y yo nos gusta el correo electrónico.
   C. A Marcos y yo les gusta el correo electrónico.

52. Amalia y Mateo / las clases de historia
   A. A Amalia y Mateo les gustan la clase de historia.
   B. A Amalia y Mateo les gusta la clase de historia.
   C. A Amalia y Mateo te gustan la clase de historia.

53. Ud. / ir de compras
   A. A Ud. le gusta ir de compras.
   B. A Uds. les gusta ir de compras.
   C. A Ud. ir de compras.

Choose the best option for the number shown.

54. 567
   A. quientos y sesenta y seite
   B. quinientos sesenta y siete
   C. quinientos sesenta siete

55. 3,479
   A. tres y cuatrocientos setenta y nueve
   B. tres mil cuatrocientos setenta y nueve
   C. tres mil cuatrocientos y setenta y nueve

56. 1,101
   A. mil ciento uno
   B. uno mil cien uno
   C. uno mil ciento

57. 286
   A. doscientos ochenta seis
   B. doscientos ochenta y seis
   C. doscientos ocho y seis
Choose the best option.

58. El __ es en los meses de septiembre, octubre, y noviembre.
   A. verano
   B. invierno
   C. otoño

59. En la primavera puede ___ mucho.
   A. nevar
   B. calor
   C. lllover

60. El ___ es en los meses de diciembre, enero, y febrero.
   A. otoño
   B. verano
   C. invierno