

Name _____

Date _____

Simple Machines Study Guide

*Know the definition of each word.

1. motion: _____
2. position: _____
3. speed: _____
4. velocity: _____
5. force: _____
6. friction: _____
7. gravity: _____

*Know the definition of each simple machine.

1. inclined plane: _____
2. screw: _____
3. lever: _____
4. wedge: _____
5. pulley: _____
6. wheel & axle: _____

*Know two examples of each type of simple machine.

1. inclined plane: _____, _____
2. screw: _____, _____
3. lever: _____, _____
4. wedge: _____, _____
5. pulley: _____, _____
6. wheel & axle: _____, _____

*Define *simple machine*: _____

*How do simple machines impact your life? Give an example. _____

Estimate Sums and Differences

Estimate the sum of 477 and 592.

Round each addend to the nearest hundred.

Then add the rounded numbers.

$$\begin{array}{r} 477 \rightarrow 500 \\ +592 \rightarrow +600 \\ \hline 1,100 \end{array}$$

So, $477 + 592$ is *about* 1,100.

You can get a closer estimate by rounding to a lesser place value. Round each addend to the nearest ten. Then add the rounded numbers.

$$\begin{array}{r} 477 \rightarrow 480 \\ +592 \rightarrow +590 \\ \hline 1,070 \end{array}$$

So, $477 + 592$ is *about* 1,070.

Round each number to the nearest ten. Then estimate.

1. $77 + 28$

2. $66 - 31$

3. $196 + 47$

4. $4,042 - 683$

Round each number to the nearest hundred or dollar.

Then estimate.

5. $429 + 518$

6. $703 - 492$

7. $1,443 + 2,689$

8. $4,872 + 6,228$

9. $815 - 602$

10. $545 + 106$

11. $6,013 - 654$

12. $7,842 - 2,928$

13. $273 + 322$

14. $448 - 252$

15. $1,399 - 404$

16. $798 + 136$

17. $\$2.51$
 $+ 4.12$

18. $\$12.95$
 $- 6.58$

19. $\$8.15$
 $- 5.21$

20. $\$7.12$
 $+ 2.85$

Whole Number Rounding Review

NAME: _____

DATE: _____

Use the chart below to answer questions 1 - 4.

County Population in 2006	
Counties	Population
Forsyth	86,394
Gwinnett	146,687
Dawson	8,136
Fulton	248,697

1. The population of Forsyth was about 90,000 in the year 2006. About how many people lived in Dawson that same year rounded to the **greatest place value**? _____
2. What was the population of Gwinnett rounded to the nearest **ten**? _____
3. What was the population of Fulton rounded to the nearest **thousand**? _____
4. If your teacher asked you to round all four counties to the same place value, what place value would you round to and why? _____

5. Give an example of real life situations in which you would need to round the number of people in attendance to the nearest ten, hundred, and thousand. An example of each has been given to you.

Ten

(The number of people at a birthday party)

Hundred

(The number of people in 5th grade)

Thousand

(The number of people at a Georgia Football Game)

6. Mark has **156** video games. Round the number of video games to the nearest **hundred**.

7. 4th grade has **8,456** box tops. Round the number of box tops to the nearest **thousand**.

8. John has **2,579** silly bands. Round the number of silly bands to the nearest **hundred**.

9. Which of the following is the closest **estimate** for the **sum** of $843 + 548$, rounded to the greatest place value? **Show your work.**

10. Which of the following is closest **estimate** for the **difference** of $468 - 127$, rounded to the greatest place value? **Show your work.**

Complete the table below for questions 11 - 13.

Skyscrapers	Height	Height Rounded to Nearest 10	Height Rounded to Nearest 100	Height rounded to Nearest 1,000
Trump Hotel	1,362	1,360	11. _____	1,000
Empire State Building	1,250	12. _____	1,200	1,000
Water Tower Place	859	860	900	13. _____

Use the information in the table to complete questions 14 and 15.

<u>State</u>	<u>Population</u> in 2008	<u>Population</u> rounded to nearest thousand	<u>Persons per</u> <u>square mile</u>	<u>Persons per</u> <u>square mile</u> rounded to nearest ten
Tennessee	6,296,254	14. _____	289	15. _____