

# Decimal Projects

Name:

Date:

★ Create a twelve-frame comic strip in which the superhero completes a heroic feat in half the time as he/she did before. For example, the hero could save one town from a gigantic lizard in 3.5 second, but the next town he was able to save in 1.75 seconds. In your comic strip, your hero should complete their first heroic feat in 2.5 seconds (first frame) and every time after that, the hero should cut their time in half (second frame and then so on..) The comic strip should be colorful and neat and easy to understand.

★ Write a  $1\frac{1}{2}$  page story about the captain who won the hard-fought battle in the galaxy and protected Planet Decimal from intruders. In the story, include at least ten different strategies he used that involved a decimal. **For example, "he put .75 of his soldiers behind a large crater to catch the enemy by surprise."** Include two illustrations to accompany your story.



★ Pretend you were asked to design your own "cool kid's office" for the house you will be moving into. You will be given a 10' x 10' room and you will draw your plans on graph paper with one square being equivalent to one square foot. Follow these rules:

- **Your desk needs to take up .15 of your room.**
- **Your chair will take up .05 of your room.**
- **A futon needs to take up .30 of your room.**

Then create a poster by cutting out pictures of at least 6 items you'd like to add to your office. Then glue the pictures neatly on the poster. By each picture, record the dimensions of the item and what decimal of space it will take up in your office.

★ Create a mini-book that shows ten things that are measured in tenths, ten things that are measured in hundredths and ten things that are measured in thousandths. Include an illustration on each page as well as a decimal sentence such as: **"It takes me .8 seconds to sneeze."** Add a cover to your mini-book as well.

★ Create a **"Street Smart Decimals Guide"** that teaches other students why they need to understand decimals to survive. For example, they need to know the difference between getting .1 of a piece candy, to getting a .01 or .001 of a piece of candy. Your guide should include twenty "decimal street smart" examples and a cover. Humor is welcome.

★ Research the average price paid for a gallon of Regular Unleaded gasoline for each year for the past decade in your state. Record the information. Round each price to the nearest tenth. Create an original graph to display the information. (Turn in your original list as well with the actual prices.)



★ You have a \$1000 to plan a class theme party. Go to a website such as [partycity.com](http://partycity.com) and create a table showing exactly what items (ten items or more) you will purchase on the website for your party, how much they will cost rounded to the nearest dollar and what decimal of your \$1000 they will use (rounded to the nearest hundredth). **For example: balloons, \$98.00, .10 of the budget.** The table should look neat and organized

★ Find out the first-place winning times of the top-ten male and female 100-meter dash winners in the last ten Summer Olympics. Round each time to the nearest second. Record your information in two separate graphs and glue the graphs on a poster for better display.

★ As leader of the "Decimal Community" you have been asked to speak at the annual "Fraction Power Convention" in Des Moines, Iowa. Your topic will be "Why Fractions Will Be a Thing of the Past, Because Decimals Are Taking Over." Your two-page speech should include reasons that humans can live without fractions, but not decimals.

Complete three projects in tic tac toe order.

# Decimal Vocabulary

**algorithm:** a step-by-step procedure for solving a problem

**base ten:** our number system in which place values are powers of ten

**compare:** To look at similarities and differences

**decimal:** a number with one or more digits to the right of the decimal point

**decimal point:** a point that separates whole numbers and decimal numbers (for example: 23.5)

**digit:** Any of the symbols used to write numbers (0, 1, 2, 3, 4, 5, 6, 7, 8, 9)

**estimate:** a number that is not exact, but a reasonable amount

**equivalent:** the same value in different forms (for example: .5 and  $\frac{4}{8}$ )

**expanded form:** a number written as the sum of the values of its digits

**hundreds:** the third place left of the decimal point

**hundredth:** the second place value after a decimal point =  $\frac{1}{100}$

**hundred-thousands:** the sixth place left of the decimal point

**ones:** the first place left of the decimal point

**place value:** the value of a digit based on its position within a number

**round** (of numbers) to the nearest ten, hundred, or thousand

**standard form:** a way to write a number using only digits

**tens:** the second place left of the decimal point

**tenths:** the first place value after a decimal point =  $\frac{1}{10}$

**ten thousands:** the fifth place left of the decimal point

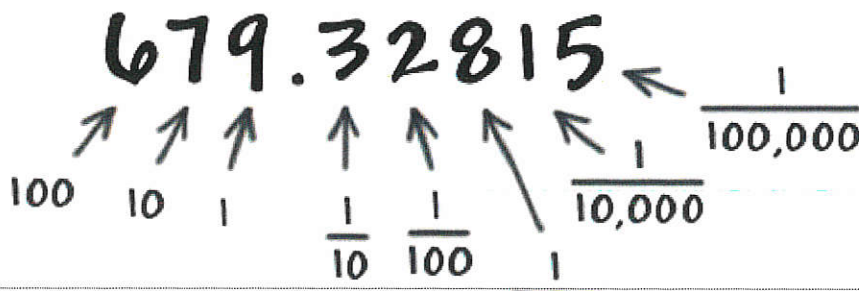
**hundred thousands:** the sixth place left of the decimal point

**millions:** the seventh place left of the decimal point

**thousands:** the fourth place left of the decimal point

**thousandths:** the third place value after a decimal point =  $\frac{1}{1000}$

**whole number:** a positive number, including zero, that does not contain a fraction or decimal.



# Decimal Projects Rubric:

All components are included in your projects as provided in the directions.....30 pts. \_\_\_\_\_

Projects are neat and organized.....25 pts. \_\_\_\_\_

All math concepts presented in your projects are accurate.....25 pts. \_\_\_\_\_

Punctuation, grammar and spelling.....10 pts. \_\_\_\_\_

Projects are neat and professional looking..... 10 pts. \_\_\_\_\_

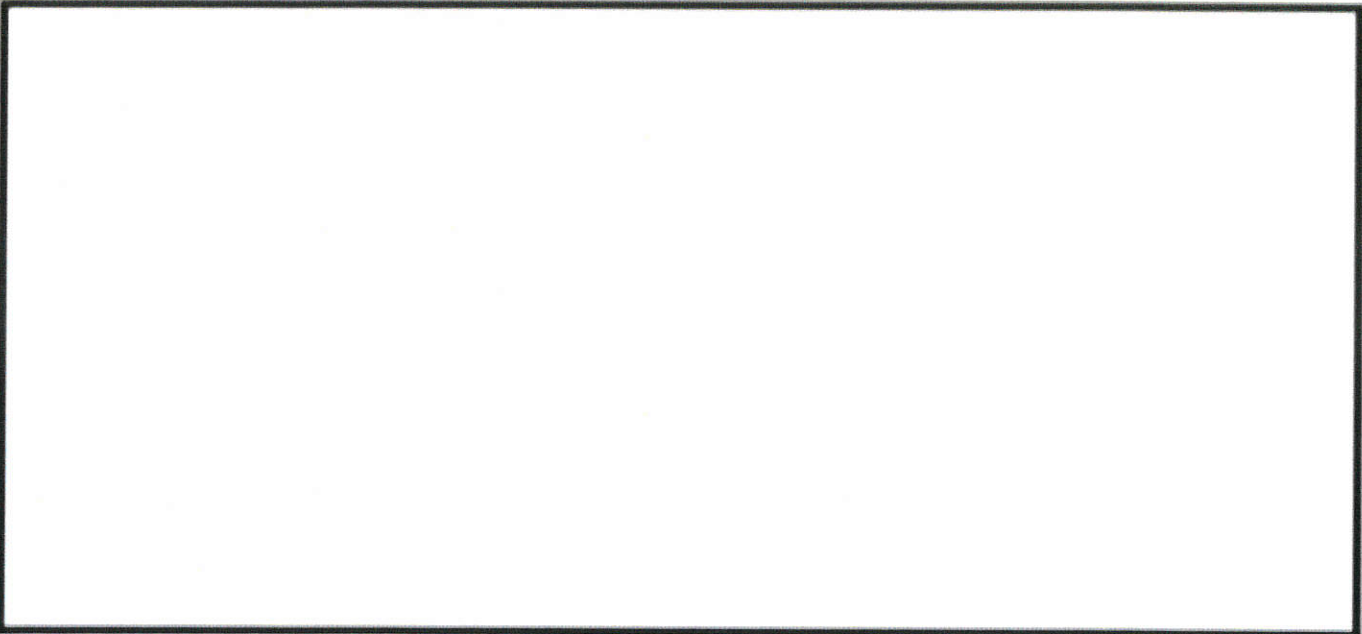
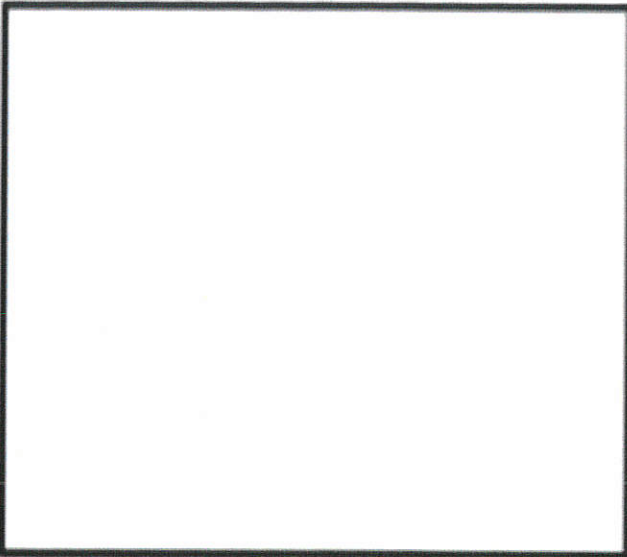
**Total Possible.....100 Points \_\_\_\_\_**

**Student's Name \_\_\_\_\_**

**Total Points \_\_\_\_\_**

**Grade \_\_\_\_\_**





Mini-Book Template

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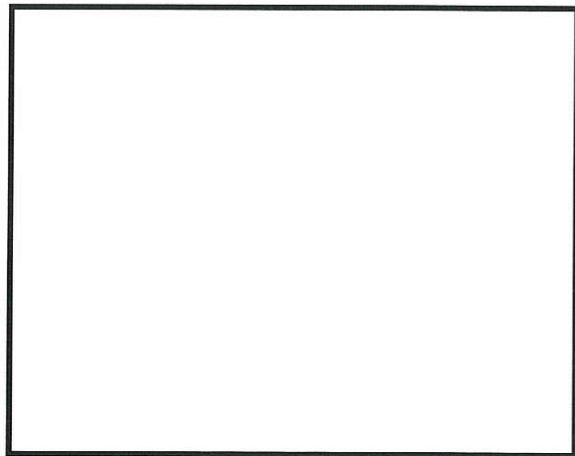
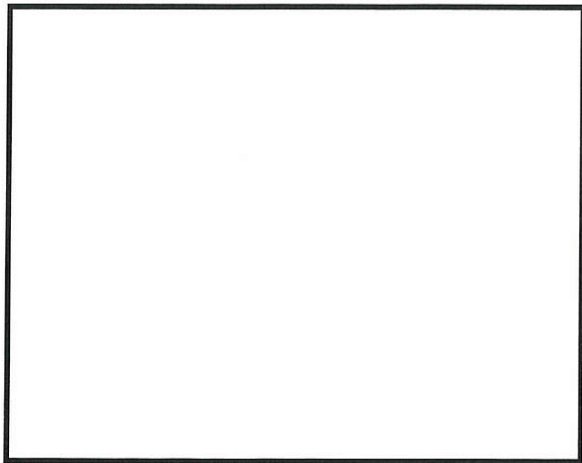
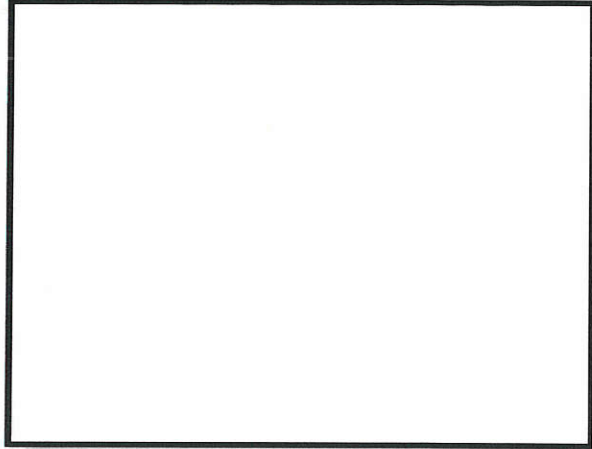
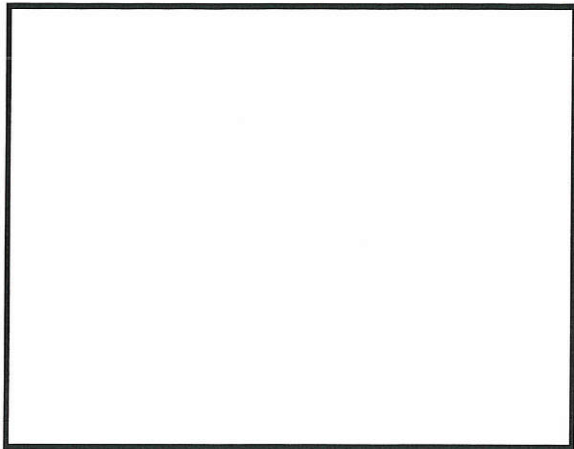
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Mini-Book Template Cover

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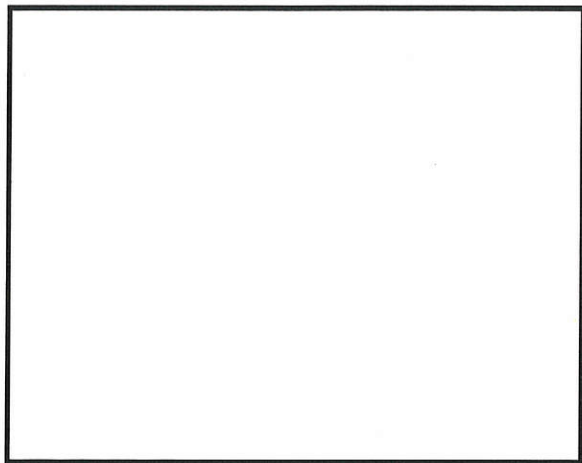
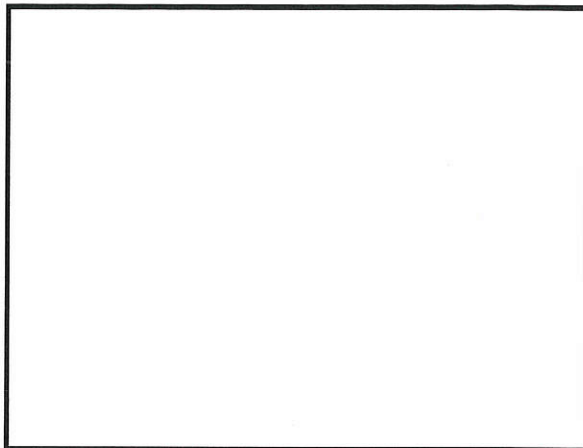
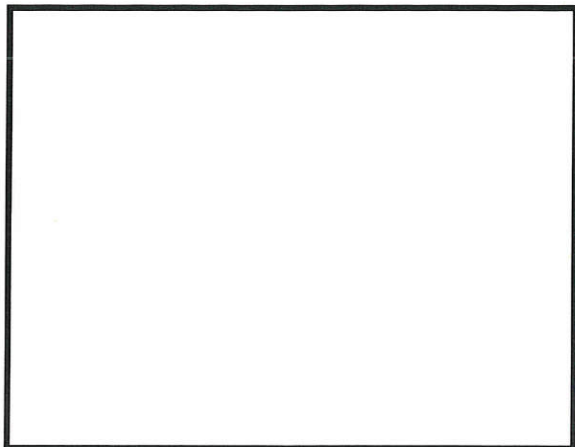
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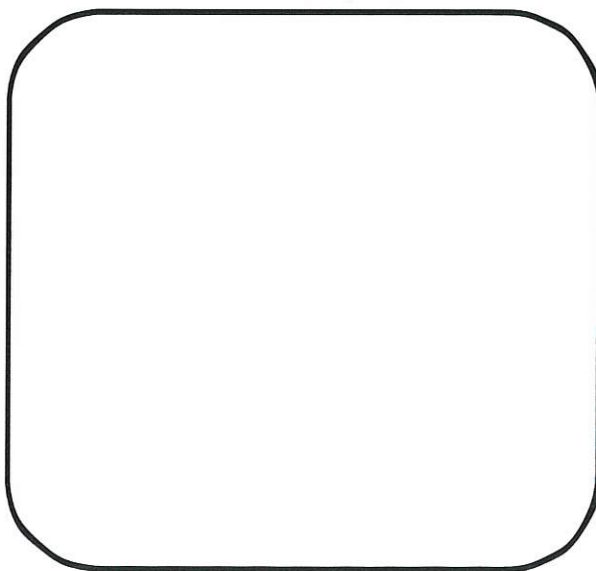
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Title



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Blank Template if Student is Having Difficulty Creating One:

Budget: \$1000

Item Purchased	Price	Decimal of the Budget