

SURVIVAL MATH

(Experiencing Math in Your Everyday Life)

Name _____

Date Due: The LAST SCHOOL DAY of Each Month

WHAT WILL YOU BE DOING?

Each month you will be responsible for choosing and completing one of these 20 mini-math projects to practice math skills through real-world experiences.

SPECIFIC DIRECTIONS

1. All projects should be neatly written or typed.
2. Each project should have a chart, a list of important data, an appropriate graph created representing your data, and/or a copy and/or original form attached to it.
3. Each project should have a written summary of what you have learned through completion of the activity.
4. Where you get your information should be plainly cited on your project such as listing a website you found information from.
5. The activity number and heading should introduce each project. I need to know which activity you did!
6. Some activities are more difficult to research and will take more time to do. **You should get started on the activity early in the month to allow yourself enough time.**
7. Using a 10-point scoring system, your projects will be scored in two ways: a student self-evaluation (how well you think you did) and a teacher evaluation. The teacher considers your evaluation when she scores your project, but her score is the score that counts in the grade book. Each activity is worth 0 to 10 points. These points will be converted into percentage points. For example, if you earn an 8.5, that equal an 85% as a math project grade for that quarter. You will receive a “0” if you do not turn in a project or if your project is over 5 school days late from the due date. Projects will be marked a letter grade off for each day they are late-one day late equals a B, two days=C and so on. Receiving a “10” on an activity means that you have put out extra effort and that you have extended the activity to its fullest. Of course, it also means your work is very neat and thorough. **While parental assistance is often needed and acceptable, work turned in should reflect the student’s effort.**

8. You will be keeping all of your projects in a portfolio throughout the year so that everyone will be able to see how well you have progressed and the effort that you have put into these math activities. We will have a Survival Math sharing event at the end of the school year. **Due to the project being kept in a portfolio, the projects must not be larger than a piece of paper in size.**

9. Attached to the last page of this Survival Math packet is the Scoring Rubric **IT MUST BE KEPT THROUGHOUT THE ENTIRE SCHOOL YEAR. IT WILL BE USED EACH MONTH FOR YOU TO SCORE YOUR PROJECT AND THEN FOR ME TO SCORE YOUR PROJECT. I WILL PASS IT BACK TO YOU WHEN I HAVE SCORED YOUR PROJECT THEN YOU MUST KEEP IT UNTIL THE NEXT MONTH WHEN IT SHOULD BE RETURNED TO ME AGAIN WITH YOUR NEXT PROJECT.**

10. **PLEASE KEEP THE SCORING RUBRIC EACH MONTH AND THIS SURVIVAL MATH PACKET IN THE MATH SECTION OF YOUR BINDER.**

THE SURVIVAL MATH ACTIVITIES

1. Select any ten grocery items you normally use in your family. Make a comparison chart showing the difference in prices at three different grocery stores.

2. While you are driving in your neighborhood, look at the prices of gasoline on the service station signs. Compare the price for unleaded, unleaded plus, and super unleaded at three different service stations over a three-week period. Compare the rise and fall of gas during this time. Make a chart similar to the one below or create a graph to show your comparisons.

3. Go to two car agencies and price the cost of a brand-new car that you and your family would like to have. Give a range of prices from the least expensive to the most expensive model. Include a brochure about each of the cars that you look at. List the special options that are on the car. Write a paragraph about your favorite car and what you like about it, or make a collage of cars that you would like to have.

4. Figure out the differences among the costs of admission to the major theme parks in your state or city. Make a list to show the amount you would pay to get into each of parks-no discounts-just admission price. List the parks and the costs of admissions. Try to think of at least five parks. After you have the correct prices, figure out how much admission to each of the parks would be for your entire family.

5. Compare the price of a regular hamburger, a regular order of French fries, and a medium soda from three fast-food restaurants. List the restaurants and the cost of each. Figure out the price these of items for you and your family at each place. Second, find a coupon for one of the restaurants, and compare the individual item price with the coupon price. How much do you actually save? Include the coupon and, if possible, a menu or advertisement for the restaurant.

6. Compare the price of a trip from your city to another major city in your state by car, plane, train, and bus. You will need some help from your parents. Show your information on a chart and tell how or where you got the information about the prices.

7. You are researching the best price for taking five of your friends to the movies for a party. Find the best price for three movie theaters close to your own house and the best time of day to go. Also include the price of one small box of popcorn and one small soda for each of your five friends, plus yourself.
8. For your birthday party, your mom has said that you may take seven friends and yourself to the skating rink (roller or ice). Find out how much money it will cost the eight of you to go skating. Also include the price of one hot dog or slice of pizza (label which you choose on your project) and one medium soda for each member of party. You may want to compare the price of two skating rinks in order to get the best deal. Show your mathematical figures on paper.
9. Find out how much it costs to rent a limo for four hours and for eight hours. Find out how many people you can take with you according to the limo rules. If you had the maximum number of people in the limo, how much would it cost per person? Write a paragraph telling what you would actually do if you took a limo ride for four hours.
10. Find the actual amount of sales tax you would pay in each of five states. You will need to research how much sales tax is in each state, including your own state. Figure out the difference in price for items amounting to \$10; \$100; \$1,000; \$5,000; and \$10,000 if you purchased the item in each of the five states.
11. Find out the difference in the cost of car insurance for a 16-year-old boy and a 16-year-old girl. You may want to check out more than one insurance company. List all the companies you check and how much the cost of insurance is for the teenage girl and boy.
12. Find out the cost for season tickets for the ballet, opera, and/or symphony for the most expensive, and least expensive seats. Also find out how many performances there are of each and the name of each. Actually attend one of the performances, and write a paragraph describing the experience. Don't forget to share the program guide with you teacher. (This same activity may be completed with season tickets to a sporting event)
13. Compare the values of money from 8 to 10 different countries. Tell what each currency is called, from what country it comes from, and how much it is worth in U.S. dollars.

14. Make a chart of the metric system of measurement compared with the U.S. and Britain system of measurement. How are they different? Write a paragraph explaining why the whole world should or should not be using the metric system of measurement.
15. You are looking for the best price on your favorite CDs. List the five CDs you want to purchase. Compare the price of these CDs at three different music stores. Show your comparison in chart form.
16. Find out how much it costs to camp overnight for your family at one of our county or state parks. Also, how much does it cost at a local, favorite tourist spot hotel in your city? Figure out the difference for a week of vacation at both places.
17. Spend part of the day with a person who works in a mathematics field. Write a summary of what you learned while you were observing the job. OR Interview a person who works in profession that includes mathematical skills. What is their job, what math skills do they use everyday, how does math play an important role in their everyday life?
18. How much is the fare for a taxi in your city per mile? Is there a difference between taxi companies? If so, tell the difference in prices of three taxi companies. What other charges is a person responsible for if he/she rides in a cab? Figure out how far it is from your house to the airport and how much it will cost for that ride.
19. Save cans or bottles for a determined period of time (recycle). Decide how you will spend the money you earn from recycling the cans and/or bottles (out for dinner, to an amusement park, a move, or a sports event). At the end of the time, add up the amount you earned and see if you have enough money to do what you wanted to do. Show you calculations on paper.
20. Make-up you own real-world mathematical activity. **You must check you idea with the teacher at least 2 weeks prior to the due date of the project!**