

Super-Journal Week 2:6

Every night, you should be reading at least 30 minutes of whatever book you have checked out from your assigned reading list. Tape or glue (but do not staple) this sheet into your Super-Journal on the left-side page. Fill in the table below *every day* by recording the required data.

Day	Title	Start Pg.	End Pg.	Parent Sign.
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				
Saturday				
Sunday				

On the right-side page of your Super-Journal, answer one of the questions below throughout the week. Be sure that the questions you choose to answer go with the appropriate type of book (Fiction or Nonfiction). The Super-Journal is due on the first day after the weekend (usually Monday).

FICTION

1. You will be making 5 whole page illustrations based off of 5 separate quotes from your reading. Each illustration should take an entire page. Make sure that you write the quote, and the page number you got your quote from at the bottom of each illustration.

Don't forget to color them!

NONFICTION

1. What is this text about?
2. Summarize the main ideas in 5 sentences.

RL.3.7/RI.1.2

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Estimating in Word Problems with Fractions

14

Name: _____

Solve the problems. Estimate to tell if your solution is reasonable. Show your work.

- 1 Jim mails one package that weighs $\frac{3}{8}$ pound and another that weighs $\frac{2}{3}$ pound. What is the total weight of both packages?

- 2 Rosa needs $5\frac{1}{4}$ yards of ribbon for a craft project. She already has $2\frac{7}{8}$ yards of ribbon. How many more yards of ribbon does she need to buy?

- 3 To make fruit punch, Tyrone needs $3\frac{3}{8}$ quarts of orange juice and $3\frac{3}{4}$ quarts of cranberry juice. How many quarts of juice does he need in all?

Estimating in Word Problems with Fractions continued

14

Name: _____

- 4 Lin spent $\frac{5}{6}$ hour on math homework and $1\frac{5}{8}$ hours on science homework. How many hours in all did she spend on homework for both subjects?

- 5 Sandra rode her bike $9\frac{1}{3}$ miles on Monday and $6\frac{4}{5}$ miles on Tuesday. How many more miles did she ride on Monday than on Tuesday?

- 6 How can you make a high estimate for the sum of two fractions in a word problem?

Charge It!

Cross-Curricular Focus: Physical Science



Many people do not really understand how **electricity** works. They just know that when they need power to run an appliance, they have to plug it into the wall.

Energy comes from charged particles that are moving around. Have you ever rubbed a balloon against your clothes to make it stick? Have you held a balloon or a comb over someone's head to watch his hair stand up straight? That's static electricity and electrically charged particles. But these particles don't do much unless we control their energy.

Static electricity builds up on certain materials. Other materials, though, let electrical charges flow through them. This creates an electric current. Electric current travels very easily through metals like copper, gold, silver, and aluminum. We call materials that electric current flows through easily **conductors**. Water is also a good conductor of electricity. That's why electrical charges can travel through people, too. There is water in every cell of a person's body. Electric current can travel through these cells.

Since metal is a good conductor of electricity, electrical wires are often made out of metal. Wiring can also be made out of non-metal materials, such as graphite.

Conductors have to be enclosed in a material that is an **insulator**. Insulators do not allow electric current to pass through them. The rubber coating that you see on electrical cords covers the metal. The electric current stays inside the cord so we can direct the current to the appliance that needs power. Other good insulators are glass and some plastics.

Name: _____

Answer the following questions based on the reading passage. Don't forget to go back to the passage whenever necessary to find or confirm your answers.

1) What are two materials that are good conductors of electricity?

2) How is static electricity different from electric current?

3) What could happen if the rubber coating on a power cord is damaged?

4) Is water a conductor or an insulator?

5) In your own words, explain the difference between a conductor and an insulator.

Solve the problems.

- 1** Lori needs at least 12 liters of water to fill a water cooler. She has a container with 4.55 liters of water, a container with 3.25 liters of water, and a container with 4.85 liters of water. Does she have enough water? Use estimation only to decide. Explain why you are confident in your estimate.

- 2** Nia wants the total weight of her luggage to be no more than 100 pounds. She has three suitcases that weigh 30.8 pounds, 35.42 pounds, and 33.28 pounds. Is the total weight within the limit? Use only estimation to decide. Explain how you know your estimate gives you the correct answer.

- 3** Omar measures one machine part with length 4.392 inches and another part with length 6.82 inches. What is the difference in length? Use estimation to check your answer for reasonableness.

- 4** Kyle wants to buy a hat for \$5.75, a T-shirt for \$7.65, and a keychain for \$3.15. He has \$16. Does he have enough money? Use estimation only to decide. Explain why you are confident in your estimate.

- 5** For his hiking club, Ricardo is making a container of trail mix with 3.5 kilograms of nuts. He has 1.78 kilograms of peanuts and 0.625 kilogram of almonds. The rest of the nuts will be cashews. How many kilograms of cashews does he need? Use estimation to check your answer for reasonableness.

- 6** Suppose you want to be sure that the total cost of three items does not go over a certain amount. How can you only use estimation to solve the problem?

3. Paying for a Meal

Eating Out

When you go out to dinner, first plan ahead. **Estimate** how much money you think you'll need. Then, when you order, add up the **prices** of the items you wish to order to make sure you have enough **money**. When your bill comes, be sure to check your waitperson's math! Don't forget **tax and tip** (usually 15% of the cost of your meal).

Menu

Entrée

Hamburger	\$5.00
Cheeseburger	5.85
Chopped Steak	7.25
Fried Shrimp	7.50
Broiled Filet of Sole	7.75
Seafood Platter	8.25

Side Orders

Soup of the Day	3.75
Side Salad	1.60
Vegetable of the Day	2.55
Cole Slaw	1.35
Onion Rings	1.10
French Fries	1.00
Baked Potato	1.90

Sandwiches

Egg Salad	3.50
Tuna	3.95
Turkey	4.25
Chicken Salad	3.75
Ham and Cheese	3.95
Roast Beef	4.50

Desserts

Chocolate Cake	3.65
Apple Pie	3.79
Cheesecake	3.85
Ice Cream Scoop	1.75
Donut	.55

Beverages

Fruit Juice	1.55	Hot Chocolate	1.65
Milk	1.00	Coffee or Tea	.75

Quick Reference

When adding money, remember these steps:

- Line up the decimal points for each amount you are adding.
- Add each column of numbers from right to left.
- The **sum**, or **total**, is the answer to an addition problem.
- To check your answer, add the amounts again, starting with a different number first.

Use what you've learned.

Look at the menu on page 27 to find the price of each item. Write the prices and then add to find the total cost of each meal. The first problem is done for you.

1. Hamburger \$5
 Hot Chocolate \$1.65
 Total \$6.65

2. Tuna Sandwich _____
 Soup _____
 Apple Pie _____
 Total _____

3. Ham and Cheese Sandwich _____
 Milk _____
 Total _____

4. Cheeseburger _____
 Fruit Juice _____
 Total _____

5. Roast Beef Sandwich _____
 French Fries _____
 Hot Chocolate _____
 Total _____

6. Fried Shrimp _____
 Onion Rings _____
 Total _____

7. Chicken Salad Sandwich _____
 Soup _____
 Apple Pie _____
 Total _____

8. Turkey Sandwich _____
 Cole Slaw _____
 Fruit Juice _____
 Total _____

9. Seafood Platter _____
 Vegetable _____
 Cheesecake _____
 Coffee _____
 Total _____

10. Chopped Steak _____
 Baked Potato _____
 Chocolate Cake _____
 Total _____

11. Filet of Sole _____
 French Fries _____
 Side Salad _____
 Fruit Juice _____
 Total _____

On Your Own

List the items that you would like to order. Then compute the total cost of your meal.

 Total _____

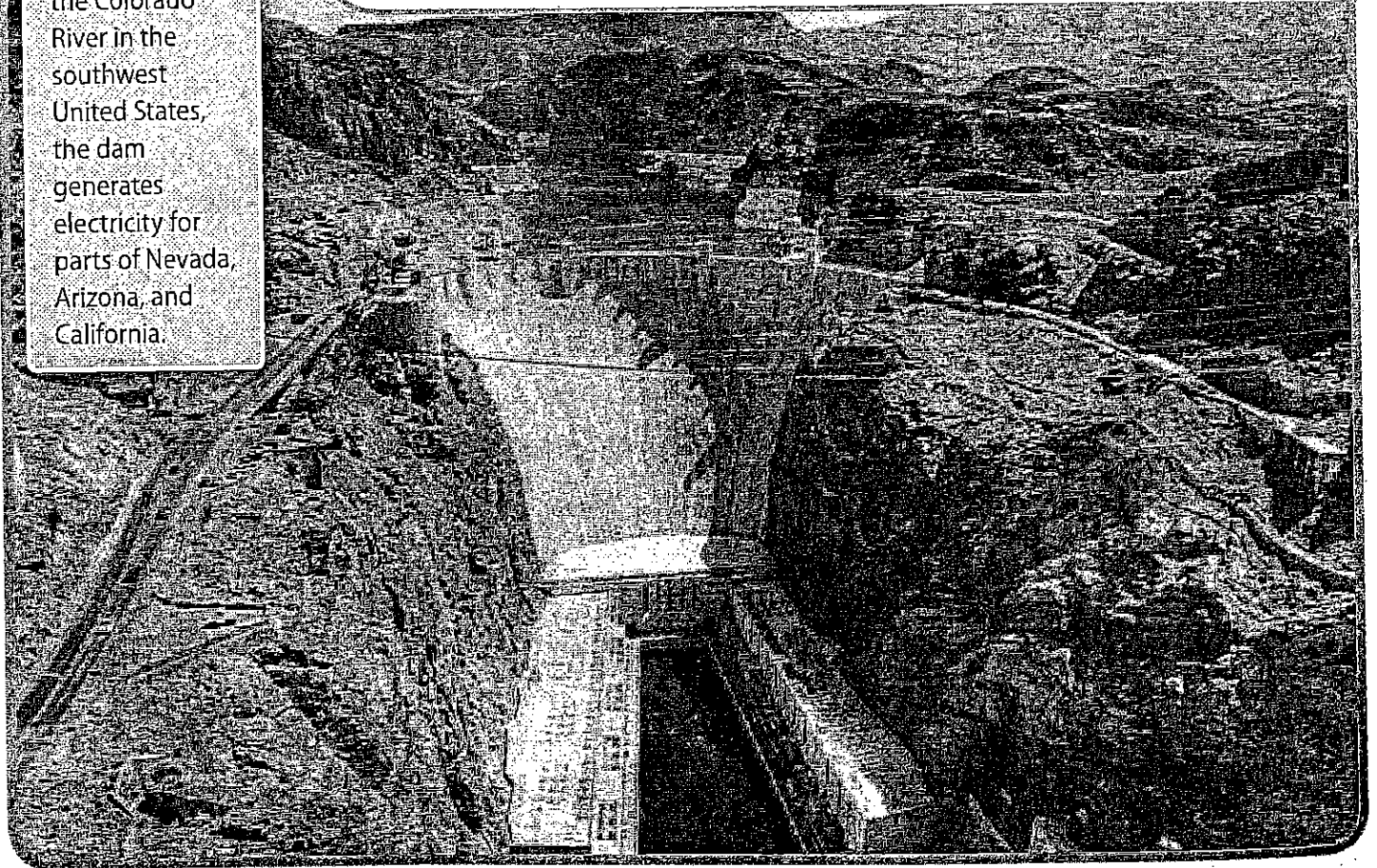
HYDROELECTRIC POWER

BY THE UNITED STATES GEOLOGICAL SURVEY

Hydroelectric Power: How It Works

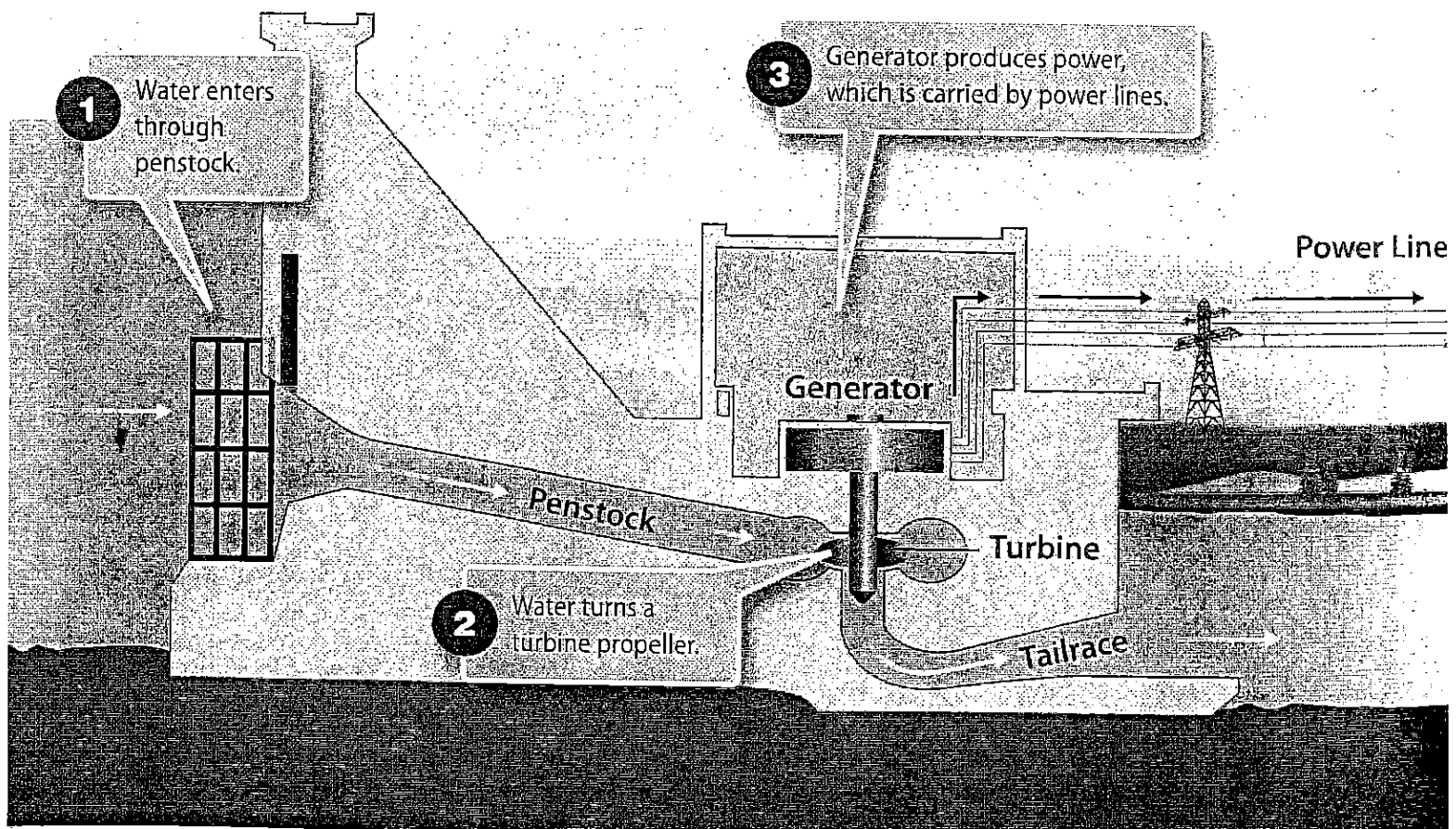
- 1 So just how do we get electricity from water? Actually, hydroelectric and coal-fired power plants produce electricity in a similar way. In both cases, a power source is used to turn a propeller-like piece called a turbine. The turbine then turns a metal shaft in an electric generator. The generator is the motor that produces electricity. A coal-fired power plant uses steam to turn the turbine blades. A hydroelectric plant uses falling water to turn the turbine. The results are the same.

This photograph shows Hoover Dam. Built on the Colorado River in the southwest United States, the dam generates electricity for parts of Nevada, Arizona, and California.



- 2 A typical hydroelectric dam is built on a large river with a large drop in elevation. The dam stores lots of water behind it in the reservoir. Near the bottom of the dam wall there is the water intake called a penstock. Gravity causes the water to fall through the penstock inside the dam. At the end of the penstock, there is a turbine propeller, which is turned by the moving water. The shaft from the turbine goes up into the generator, which produces the power.¹ Power lines connected to the generator carry electricity to your home and mine. The water continues past the propeller through the tailrace. The water then flows into the river, past the dam. By the way, it is not a good idea to be playing in the water right below a dam when water is released!

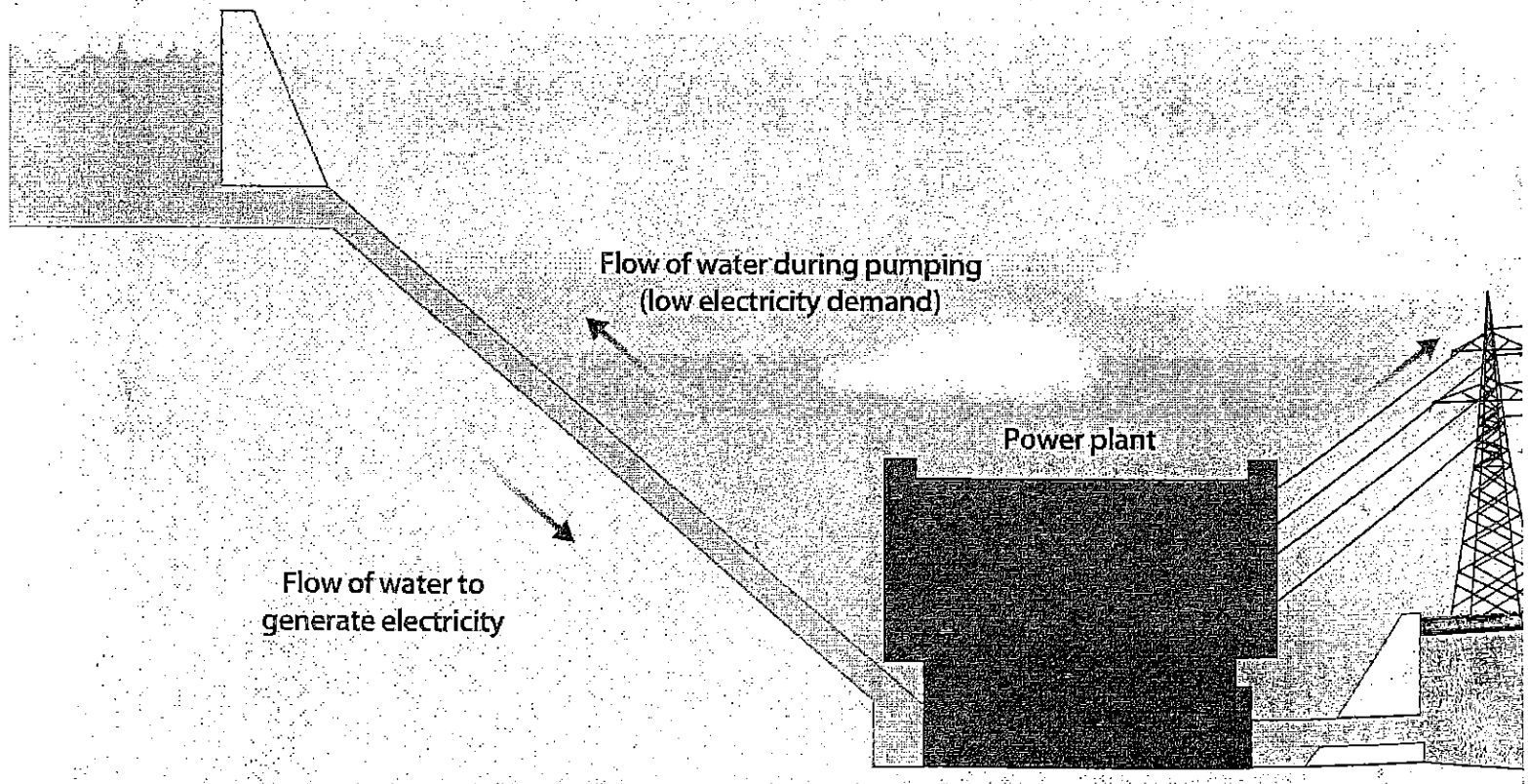
¹ For the generator to produce electricity, loops of wire must spin rapidly through force fields made by magnets.



Pumped Storage: Reusing Water for Peak Electricity Demand

- 3 Demand for electricity is not “flat” and constant. Demand goes up and down during the day. Overnight there is less need for electricity in homes, businesses, and other facilities. For example, at 5:00 PM on a hot August weekend day, there may be a huge demand for electricity to run millions of air conditioners! But, 12 hours later at 5:00 AM . . . not so much. Hydroelectric plants are more efficient at providing for peak power demands during short periods than are fossil fuel and nuclear power plants. One way of doing that is by using “pumped storage,” which uses the same water more than once.
- 4 Pumped storage is a method of keeping water in reserve for peak periods of power demand. Pumps move water that had already flowed through the turbines back up to a storage pool above the power plant. That happens when customer demand for energy is low, such as during the middle of the night. The water is then allowed to flow back through the turbine-generators at times when electricity demand is high.

Storage pool



Name _____

Literacy Connection: Informational Text

"Hydroelectric Power": Add and Subtract Decimals
Use the table for Problems 1-4. Show your work.

Wisconsin River Basin Hydroplant Dams	
Hydroplant	Height of Dam (feet)
Otter Rapids	12.5
Rhineland	31.8
Kings Dam	23.4
Grandfather	92.0
Wisconsin Dells	26.6
Stevens Point	16.6

Source: <http://www.wic.com/Content/Hydroplants.cfm>

- 1 What is the combined height of the Kings Dam Plant and Stevens Point Plant?

_____ feet

Name _____

Literacy Connection: Informational Text

- 2 How many feet taller is the Rhineland Plant than the Otter Rapids Plant?

_____ feet

- 3 What is the combined height of the Wisconsin Dells Plant, Grandfather Plant, and Kings Dam Plant?

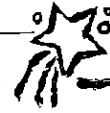
_____ feet

- 4 What is the difference in height between the tallest and the shortest hydroplant dam in the Wisconsin River Basin?

_____ feet

Name _____

Subtracting decimals



Map It Out



Always write a long subtraction problem vertically before solving it. When subtracting decimals, write each place value column so the decimal points are aligned.

$$\begin{array}{r} 82.17 - 74.16 = \\ \underline{82.71} \\ 74.16 \end{array}$$

Write each subtraction problem vertically. Subtract.

$$107.5 - 71.4 =$$

Region A

$$99.85 - 56.37 =$$

Region B

$$78.94 - 59.54 =$$

Region C

$$91.6 - 12.7 =$$

Region D

$$84.57 - 32.98 =$$

Region E

$$548.3 - 282.6 =$$

Region F



Mary traveled to two regions. Their difference is 24.08. What two regions did she visit?

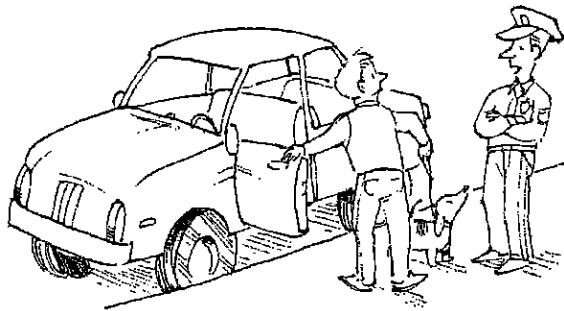
Name: _____

Date: _____

Riddle 41**"Does your dog have a license?"**

Add.

Solve the riddle using your answers below.



$\begin{array}{r} \$1.34 \\ + \$3.27 \\ \hline \$ \\ \hline \end{array}$ <p>E</p>	$\begin{array}{r} \$2.34 \\ + \$1.65 \\ \hline \$ \\ \hline \end{array}$ <p>S</p>	$\begin{array}{r} \$1.62 \\ + \$3.56 \\ \hline \$ \\ \hline \end{array}$ <p>O</p>
$\begin{array}{r} \$2.10 \\ + \$1.40 \\ \hline \$ \\ \hline \end{array}$ <p>V</p>	$\begin{array}{r} \$1.46 \\ + \$.23 \\ \hline \$ \\ \hline \end{array}$ <p>R</p>	$\begin{array}{r} \$3.73 \\ + \$3.59 \\ \hline \$ \\ \hline \end{array}$ <p>H</p>
$\begin{array}{r} \$1.73 \\ + \$5.24 \\ \hline \$ \\ \hline \end{array}$ <p>N</p>	$\begin{array}{r} \$3.68 \\ + \$.29 \\ \hline \$ \\ \hline \end{array}$ <p>M</p>	$\begin{array}{r} \$1.58 \\ + \$2.48 \\ \hline \$ \\ \hline \end{array}$ <p>L</p>
$\begin{array}{r} \$4.57 \\ + \$1.22 \\ \hline \$ \\ \hline \end{array}$ <p>D</p>	$\begin{array}{r} \$4.93 \\ + \$1.77 \\ \hline \$ \\ \hline \end{array}$ <p>I</p>	$\begin{array}{r} \$1.25 \\ + \$.63 \\ \hline \$ \\ \hline \end{array}$ <p>T</p>

Solve the Riddle!

Write the letter that goes with each answer.

 $\overline{\$6.97}$ $\overline{\$5.18}$ $\overline{\$7.32}$ $\overline{\$4.61}$ $\overline{\$5.79}$ $\overline{\$5.18}$ $\overline{\$4.61}$ $\overline{\$3.99}$ $\overline{\$6.97}$ $\overline{\$1.88}$
 $\overline{\$5.79}$ $\overline{\$1.69}$ $\overline{\$6.70}$ $\overline{\$3.50}$ $\overline{\$4.61}$