

Play games online. Earn money for college.

Now that's a plan parents and kids can agree on!

**PTAs, for every 50
students who register
for the Game-a-thon
and earn just two
pledges, your PTA will
get a free iPad!**
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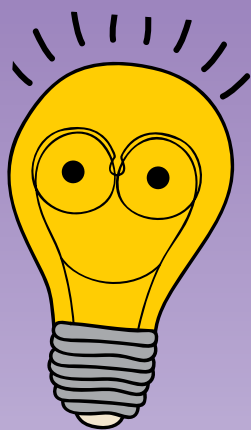


TIVITZ
COLLEGE SAVINGS
GAME-A-THON



Tampa Bay
Times
NIE
newspaper in education
tampabay.com/nie

**Think
about
it**



Parents, why should your child participate in the TiViTz College Savings Game-a-thon?

The cost of a college education has become out of reach for many families. Did you know:

According to College Data, the average cost to attend an in-state public university is about \$23,000 a year? A private college costs \$45,000 a year on average, and costs are still rising.

The national student loan debt is \$1.2 trillion and still growing.

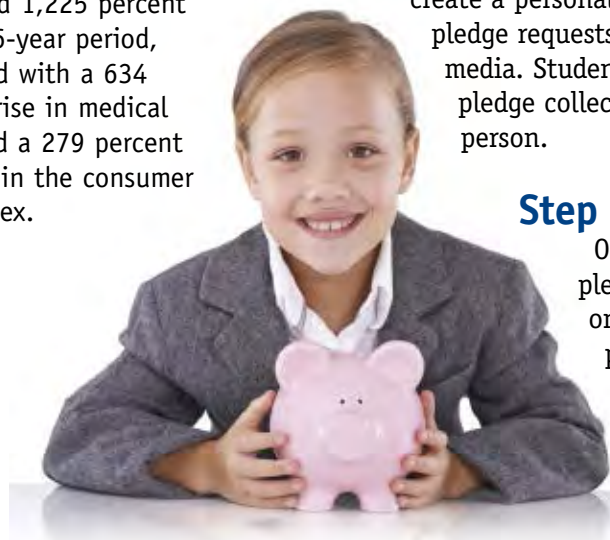
The average student loan debt per borrower is \$33,000, before interest.

Americans now owe more on their student loans than on their credit cards.

Each year, more than \$40 billion is spent on tuition by college freshmen.

The cost of higher education has jumped more than 13-fold in records dating to 1978. Tuition costs continue to rise even as enrollment slows and graduates struggle to land jobs.

Tuition expenses have ballooned 1,225 percent in the 36-year period, compared with a 634 percent rise in medical costs and a 279 percent increase in the consumer price index.



College Savings Game-a-thon

Kids, what if you could start earning your own money for college now?

With the new TiViTz College Savings Game-a-thon, kids as young as 6 years old can earn money for college by playing TiViTz math games online. It's easy! Just as with a walk-a-thon, kids will seek pledges from family, friends and neighbors. But instead of walking, they will be exercising their minds by playing TiViTz, the online math and strategy game that's as easy to learn as checkers but as challenging to master as chess.

Instead of buying gift wrap or cookie dough, family members and friends who make a pledge will be helping young people save for college and expand their critical thinking and math skills at the same time.

How does the TiViTz College Savings Game-a-thon work?

Step 1: Create a profile

Getting started is easy. If a child already has a TiViTz online games account, he or she can use the existing username and password to log in and create a Game-a-thon profile. Students who are new to TiViTz can create a brand-new user profile in just a few short steps.

Step 2: Designate a college savings account

Children's pledges may be deposited into any existing college savings account, such as a 529, UTMA, ESA or others. If a child does not have a college savings account, one can be set up on the TiViTz website in less than two minutes through our partner, TrustEgg.

Step 3. Seek pledges from friends and family

Using the simple online system, a child can quickly create a personalized pledge request page and send pledge requests via email, text message or social media. Students also can use the customizable pledge collection form and flyer to seek pledges in person.

Step 4. Play TiViTz math games

Once a child has received online pledges, he or she can start playing online TiViTz games to trigger those pledges. Once the required number of games has been played, pledge sponsors will receive an email request for payment, which can be paid online or via smartphone.



Step 5. Track college savings progress

Fundraising progress is easy to monitor using the personalized TiViTz College Savings dashboard. Track pledge requests sent and pledges received, see which invoices are paid or pending, and best of all, watch as the child's college savings account grows.

Step 6. Already more than \$10,000 in matching funds is available

Students who participate in the Game-a-thon not only can receive pledges from family and friends, but also can earn funds from generous companies and organizations that have agreed to match those pledge dollars.

Learn more at tivitzcollegesavings.com.



Want to learn more about TiViTz? Just ask one of the more than 50,000 Tampa Bay-area students who have played the award-winning math and strategy game at school or at home since 1999.

A countywide commitment

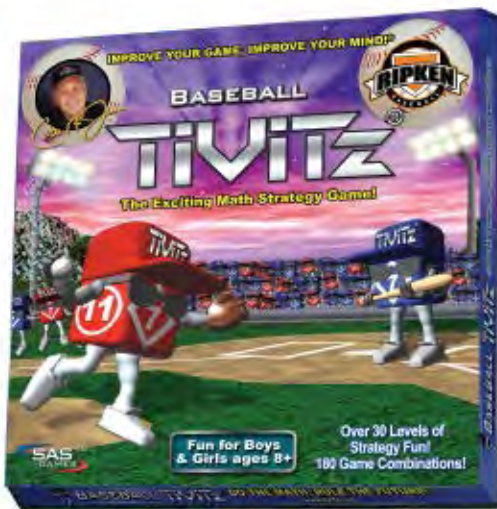
The TiViTz board game was first adopted for use in Tampa public schools by Hillsborough County Public Schools 15 years ago, and is now endorsed by MaryEllen Elia, superintendent of Hillsborough County Public Schools.

"I'm proud to say that so many of our students are engaged in playing TiViTz to improve their math and critical thinking skills," said Elia. "Math will be important to those students who pursue science-, technology- and engineering-based careers, but it will also be very important to all students, no matter what their career, in the information age of the 21st century."

Helping students build a strong foundation in math is a priority for Hillsborough County. Larry Plank, director of K-12



science, technology, engineering and mathematics education for Hillsborough County Public Schools, said, "TiViTz provides students in all grade levels with a hands-on STEM activity that's not only fun and engaging, but is also customized to their level of ability and promotes both critical thinking and math skills. A student can't win the game unless they can do the math correctly, and that's a huge motivator for kids. We're thankful for the tremendous support of TiViTz in Hillsborough County public schools. TiViTz gives us yet another leg up on making our students competitive in the age of technology."



A talent for teaching TiViTz

Where there are enthusiastic students playing TiViTz, there are inevitably dedicated teachers, passing along their love of the game. Last winter, more than 50 teachers gathered at the Tampa History Center for the annual TiViTz Teacher Tournament, where winning teams of teachers took home \$5,000 in prizes. While the final scores were extremely close, Claywell Elementary teachers Lisa Lawson and Cheryl King took home the First Place award of \$1,000.

A community partner

Since 2012, SAS Games, creator of TiViTz, has partnered with Caspers Company, owner/operator of 55 Tampa Bay-area McDonald's® restaurants. Together, the companies are proud to present TiViTz Tuesdays at McDonald's. Students gather at McDonald's restaurants on Tuesday afternoons, from February through April, to compete against students from other schools in order to share and improve their strategies.

Best of the best

Attendees at TiViTz Tuesdays were well prepared for TiViTz Tournament season. The school year came to a close with seven Tampa Bay qualifying tournaments in which more than 1,000 students competed. The 2013-2014 school year concluded with the Ripken Baseball TiViTz Championship on June 7 at Hillsborough Community College, Dale Mabry campus, where 200 students competed for bragging rights and a share of \$15,000 in scholarships. The winners also were celebrated at a pregame ceremony on the diamond at the Tampa Yankees' Steinbrenner Field. Tampa Bay



students will once again have the opportunity to compete for a seat at the championship, as well as college scholarships, in spring 2015.

Hope for parents

The TiViTz College Savings Game-a-thon provides parents and kids with a practical solution to the question, "How are we going to pay for college?" Consider this:

Young people who have a savings account are seven times more likely to attend college than youth who do not have an account.

Having a savings account containing even \$1 will increase the likelihood a child will attend college from 45 to 71 percent.

Even if you have a college savings plan, such as the Florida Prepaid College Plan, funds earned during the TiViTz College Savings Game-a-thon can be used to cover your student's books, meals, transportation and other expenses.

Students who participated in the TiViTz College Savings Game-a-thon beta test in Cocoa, Fla., earned an average of \$400 for their college savings in just six weeks. That's four times the national average for a school or organizational fundraiser.

Students keep 95 percent of the money they raise in their Game-a-thon, compared to the national average of 30 to 50 percent for other fundraisers.

Sign up at tivitzcollegesavings.com.



Math scavenger hunt

See if you can find each of these in the *Tampa Bay Times*. Be sure to write down the page number where you find each item: a fraction, a money amount, a date, a four-digit numeral, a three-digit numeral, a decimal, a percentage, a ratio, a temperature, an age, a number written as a word, a prime number, an odd number, an even number, a measurement in inches, a measurement in miles, a page number.



Can you guess which careers pay the most?

Kids, do you know what you want to study in college? Consider one of these college majors that were rated the top 10 in terms of starting salary by ThinkAdvisor.com. Guess what? All 10 are STEM careers dealing with science, technology, engineering and math!

Career	Starting Salary
10. Software Engineering	\$59,100
9. Industrial Engineering	\$59,900
7. (tie) Mechanical Engineering	\$60,100
7. (tie) Materials Science & Engineering	\$60,100
6. Aerospace Engineering	\$62,500
5. Computer Engineering	\$62,700
4. Electrical Engineering	\$63,400
3. Nuclear Engineering	\$66,800
2. Chemical Engineering	\$67,500
1. Petroleum Engineering	\$98,000

Do the math: Calculate the salary for each of these positions for 10 years and 15 years.



Kids' challenge

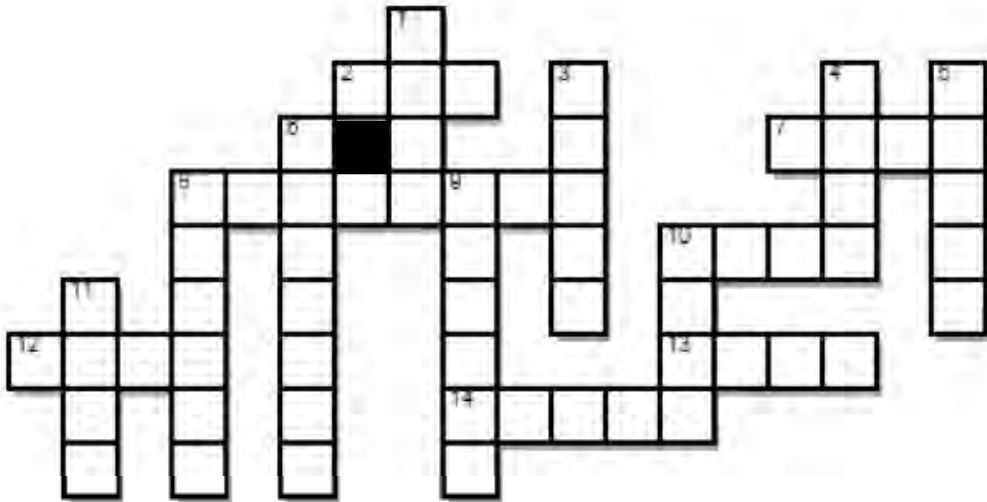
Kids, did you know that almost every professional career — from race car driver to fashion designer— requires math skills? Don't believe it? We challenge you and your class to come up with jobs that don't involve any math. Look in the *Tampa Bay Times* for jobs and career choices. Make a list of all of the jobs you find. If you can find one that does not involve any math, email info@tivitz.com. If you can convince us, we'll sponsor an ice cream party for you and your class!

Investing in your future

Kids, did you know that if you have your own savings account, you'll be seven times more likely to attend college? That's right! Even if the amount of money you save is not that great, setting aside as little as \$1 can help you picture yourself as a future college student! The TiViTz College Savings Game-a-thon can help you start earning and saving for your future. Ask your parent or guardian to help you register today at tivitzcollegesavings.com.

Math + financial literacy crossword puzzle

Numbers for the answers to the math questions should be spelled out. Example: Q. What is eight plus four? A. Twelve



ACROSS

- 2. How many pennies equal a dime?
- 7. What is the most important thing to do with your money?
- 8. What is $8 \times 2 - 3$?
- 10. What can you do to earn money?
- 12. You have purchased a package of seven pencils that you would like to share with your two friends. If each person (including you) takes one pencil, how many pencils would be left in the package?
- 13. Is food something you need or want?
- 14. There are sixteen kittens available for adoption. If 50 percent of the sixteen kittens are adopted on the first day, how many kittens are still looking for homes?

DOWN

- 1. What is something you don't want to be in?
- 3. What do you need to have in order to buy things?
- 4. Where is a good place to put your money?
- 5. There are ten sets of three brownies available on the table. If 23 people are present at the party and each person eats one brownie, how many brownies are left?
- 6. Mac likes to collect baseball cards. Each pack of baseball cards contains five cards. If Mac purchases three packs of cards, how many cards will he have?
- 8. What is $\frac{1}{4}$ of 120?
- 9. What is $10 + 5 - 4$?
- 10. Is a cellphone something you need or want?
- 11. There are twenty apples in a bag. If you divide the bag among five people, how many apples will each person have?



Answers
Across: 2. Ten; 7. Save; 8. Thirteen; 10. Work; 12. Four;
13. Need; 14. Eight
Down: 1. Debt; 3. Money; 4. Bank; 5. Seven; 6. Fifteen;
8. Thirty; 9. Eleven; 10. Want; 11. Four



TiViTz challenge

When you play TiViTz online or the TiViTz board game, the object of the game is to move your numbered tivits, or playing cubes, across the game board to land them at the score goal (an operation sign and a number) that will create the highest possible answer once the equation is solved. Just as in checkers or chess, you have to look out for tricky moves made by your opponent. Here, we've given you a shortcut by leaving out the game board so you can simply practice matching your tivits to the score goals.

To play

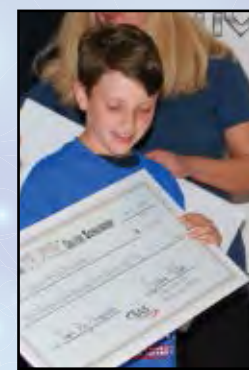
Match the tivits on the left to the score goals on the right that will create the highest possible solution. In each score goal, there is an operation sign — addition, subtraction, multiplication or division (game 2 only) — as well as a number. Draw a line to connect the tivit to the score goal you would like to pair it with. Use a pencil so you can erase.

Solve each equation, then add all your answers together to get a total score. Check the answers to see if you found the highest possible solution.

Hint: First, match your highest-numbered tivits with score goals that include the multiplication sign. Example: Pairing the 60 tivit with the (x 3) score goal will produce the highest possible solution of all of the tivit/score goal combinations (180).

Game 1

Tivit	Score Goal	Write Each Equation	Solution
12	+ 12		
18	- 1		
24	x 2		
30	- 9		
36	x 3	$60 \times 3 =$	180
42	- 2		
48	+ 1		
54	+ 4		
60	+ 18		



Total Score:

Game 2

Hint: Remember, when dividing by fractions, you are really multiplying by the denominator.

Tivit	Score Goal	Write Each Equation	Solution
10	x 13		
20	$\div \frac{1}{3}$		
30	$\div 5$		
40	- 8		
50	- 3		
60	- 10		
70	$\div 10$		
80	+ 171		
90	+ 14		



Total Score:

Answers to TiViTz Challenge: Game 1 = 521; 60 x 3 and 54 x 2 (All others can be in any order on remaining score goals to earn the highest possible total.)
Game 2 = 1829; 90 x 13, 80 $\div \frac{1}{3}$, 10 $\div 10$, 20 $\div 5$ (All others can be in any order on remaining score goals to earn the highest possible total.)



COMING
SOON!

TiViTz on tablets!

Starting Oct. 27, TiViTz can be downloaded for tablets via iTunes or Google Play. Enjoy free downloads featuring new graphics, a new soccer TiViTz theme and cool new badges you can earn! TiViTz is also available for free online play with Basic 2D and Advanced 3D versions at tivitz.com. Ripken Baseball TiViTz board games are available for sale online at tivitz.com.

How much does it cost?

Look in the *Tampa Bay Times* and on the Internet to determine the answers. Draw lines to match up the items on the left with the prices on the right.

- | | |
|--|--------------|
| a. A new car | \$61.53 |
| b. A video game for Wii | \$513.00 |
| c. Cellphone usage, per month | \$4.49 |
| d. A cheeseburger | \$339,000.00 |
| e. A house | \$31,252.00 |
| f. A PC laptop | \$23,000.00 |
| g. A college education, per year, for a public college | \$50.00 |
| h. Average student loan debt after college | \$33,000.00 |

(All answers are based on U.S. national averages. Sources: *USA Today*, Ask.com, Technomix, census.gov, SAS Games)

Answers
a) \$31,252; b) \$50; c) \$4.49; d) \$61.53; e) \$339,000; f) \$4.49; g) \$513; h) \$33,000.

TiViTz dates to remember

Oct. 27: Release of TiViTz games in iTunes and Google Play stores. Students can enjoy free downloads featuring new graphics, a new soccer TiViTz theme and cool new badges.

Nov. 1: TiViTz College Savings Game-a-thon Kickoff.

Nov. & Dec.: Invite SAS Games/TiViTz to your PTA meeting. TiViTz representatives will bring the pizza and answer your questions about the Game-a-thon. Email info@tivitz.com.

Nov. 1 — Jan. 15: Seek pledges for the Game-a-thon.

Nov. 1 — Jan. 31: Play TiViTz games to trigger your Game-a-thon pledges.

January (date TBA): Teacher Tournament

Feb. 3 — April 21: TiViTz Tuesdays at Caspers Company McDonald's® restaurants in Hillsborough County.

April/May: Regional Baseball TiViTz Tournaments.

May (date TBA): TiViTz Regional Championship.

TiViTz Teacher Tournament

The annual TiViTz Teacher Tournament returns in January 2015. Teams of two from across Tampa Bay will compete for \$5,000 in prizes, including a \$1,000 grand prize. Last year's event took place at the Tampa Bay History Center and was catered by Columbia Café. Check out the TiViTz website for more information: tivitz.com.

Get free iPads

PTAs, for every 50 students who register for the Game-a-thon and earn just two pledges, your PTA will get a free iPad to keep or raffle off!

And the best part? Your students are on their way to saving for college!

If your PTA would like us to present the Game-a-thon at a Nov./Dec. meeting, we'll bring the pizza and soft drinks! Fifteen minutes should be all we need. Please contact Matt Boatman at mboatman@tivitz.com to schedule a time and date.



To learn more,
go to
tivitz.com.

TiViTz: The exciting math and strategy game for kids

Looking for a way to sharpen kids' math skills, encourage critical thinking and have fun at the same time? Challenge them to a game of TiViTz! TiViTz engages kids' strategic thinking and basic computation skills as they maneuver their numbered tivits, or playing cubes, across the game surface to land at the numbered score goals that will produce equations with the highest possible answers. But a good strategy isn't enough to declare victory — players must correctly solve those equations to outscore their opponent and win the game.



TiViTz is as easy to learn as checkers but as challenging to master as chess, depending on the skill level selected and the strategies employed, including forced jumps, multiple jumps and blocks. To learn more, go to tivitz.com.

Start saving early for college

Most people know the importance of saving for a rainy day, but did you know that saving specifically for higher education can be a powerful motivator for your student to actually attend college? A study conducted by Washington University's George Warren Brown School of Social Work found that students who had some type of savings account were seven times more likely to attend college than similar youth who did not have a savings account. Research conducted by the Assets & Education Initiative at the University of Kansas found that "even a very small college fund is associated with a significant increase in the likelihood that a child will enroll in and complete college." Even amounts "that would do little to alleviate the challenge of paying for college," such as \$50 or even \$500, produced higher enrollment and completion rates. How can a small account make an impact on astronomical college costs? It's all about creating a "college-bound identity," said researcher William Elliott. "Obviously, these small amounts of money do not make a huge difference in students' actual college financing, but they may help students see themselves as people who go to college — what is often called a 'college-bound identity.'" He released his findings in a 2012-13 issue of "Bridges", a publication of the Federal Reserve Bank of St. Louis.



According to Elliott, "Just opening an account and designating some of that money for higher education may turn college into an important goal rather than just a dream, with a strategy for how to overcome cost barriers." For parents and for students, the TiViTz College Savings Game-a-thon provides the perfect solution — empowering kids to earn and save money for their own college education. Programs such as these that motivate kids to create their own college savings accounts, says the Washington University study, play an important role "in restoring the American dream of attending college."

The education crisis in America

The United States is experiencing a crippling education crisis, particularly in math and science, which is producing a drought of qualified workers in STEM (science, technology, engineering and math) careers.

Did you know?

Seventy percent of U.S. eighth-graders cannot do the math of their grade level.

American 15-year-olds are ranked 31st in the world in math.

A 2012 study comparing 16-to-65-year-olds in 20 countries found that Americans rank in the bottom five in the ability to reason and apply simple numerical concepts. Of nearly 4 million children who start pre-school in the United States each year, only about 25 percent go on to complete basic algebra in junior high, only 9 percent declare a STEM major at the undergraduate level, only 4.5 percent actually graduate with a STEM-related degree, and only 1.7 percent graduate with an engineering degree.

Visit tivitzcollegesavings.com to sign up today!

TiViTz is the answer

TiViTz not only helps students build critical thinking and computational math skills, its suite of board and online games also addresses how kids learn today, using the latest technology in fast-paced, mobile platforms such as laptops, tablets and smartphones.

Children love to compete, win and be rewarded. TiViTz addresses kids' motivational needs with fun-to-play online games and board games in multiple themes that appeal to students of all ages, kindergarten through 12th grade.



Using the news

Your teacher was just awarded \$1,000 to spend on materials for your classroom. She asked all 20 of her students in the class to help her decide how to spend the money. Look through the advertisements in the *Tampa Bay Times* to find supplies you need for your classroom and how much those supplies cost. Your class also wants to purchase a classroom set of Ripken Baseball TiViTz board games, which would cost \$425.

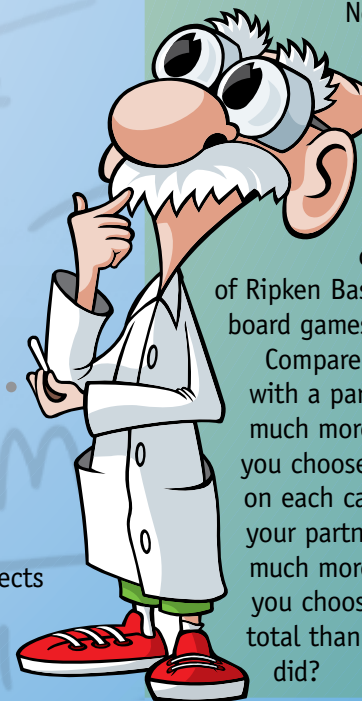
On a piece of paper, write down the items your class would purchase and how many of each item.

Create a bar graph to represent how you would spend the money. Scale the vertical axis by \$100. Write all of the labels.

What was the total cost of all your choices? Did you have any money left over? If so, how much?

Now calculate the cost and number of supplies, if your teacher wins a free classroom set of Ripken Baseball TiViTz board games.

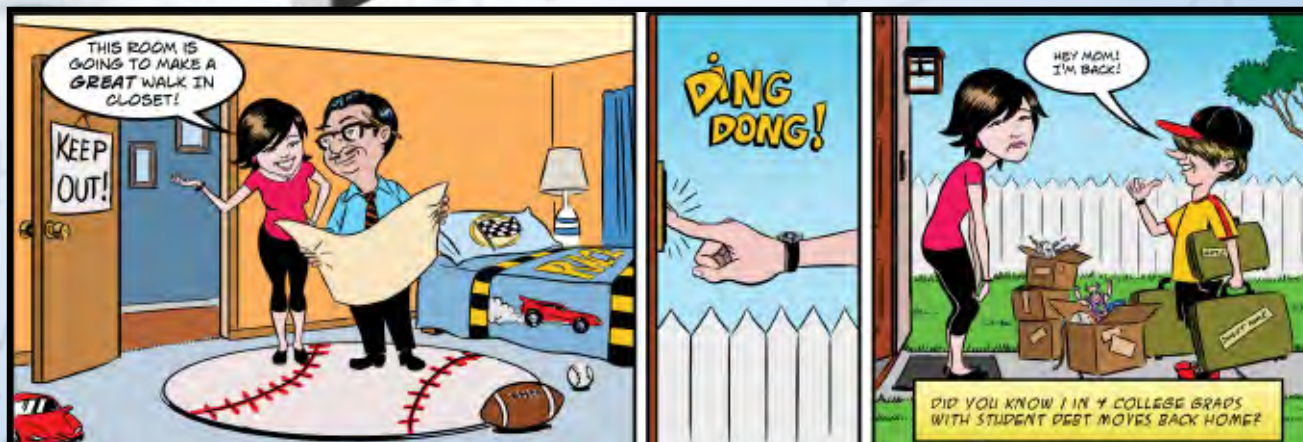
Compare your choices with a partner. How much more or less did you choose to spend on each category than your partner did? How much more or less did you choose to spend in total than your partner did?



Proficiency at higher math creates higher career earnings

Parents, if you'd like your child to earn a comfortable salary when they get older, help them to do well at math now. Studies show a direct link between higher math skills and higher salaries.

Building a strong math foundation in elementary school is key to helping students succeed in higher math subjects throughout middle school, high school and college. TiViTz math and strategy games can help build that foundation by reinforcing basic computation skills and presenting math in a fun and competitive format.



What if your child could start saving money for college ... now?

She can, thanks to the TiViTz College Savings Game-a-thon.

- Play games online and earn money for college!
- More than \$10,000 in pledge matches is available to Tampa Bay students!
- The Game-a-thon begins Nov. 1, 2014 and ends Jan. 31, 2015. Sign up today at tivitzcollegesavings.com.

College will be here before you know it...

Help your children build their dreams with the TiViTz College Savings Game-a-thon.



Analyzing word problems

Many problems can be solved in different ways. Decide if the following word problems can be solved using multiplication. Explain your thinking.

Liam is cooking potatoes. The recipe says you need 5 minutes for every pound of potatoes you are cooking. How many minutes will it take for Liam to cook 12 pounds of potatoes?

Mel is designing cards. She has four different colors of paper and seven different pictures she can glue on the paper. How many different card designs can she make using one color of paper and one picture?

Nina can practice a song six times in an hour. If she wants to practice the song 30 times before the recital, how many hours does she need to practice?

Owen is building a rectangular tile patio that is four tiles wide and six tiles long. How many tiles does he need?

Now it's your turn

Ask your teacher to split your class into pairs. Using the advertisements, cartoons and photos in the *Tampa Bay Times*, create your own word problems. Each pair of students needs to come up with six math word problems based on the items found in the newspaper. Swap word problems with another group and solve the problems. Share the results with the class.



Using the news Calculating areas and percentages

Compute the area of the advertisements on one page of the *Tampa Bay Times*. What percentage of the page is used for advertisements? Do this with several different pages and different sections of the newspaper, then figure the average amount of space used for ads. Explain your method for calculating the areas and determining the percentage. What conclusions can you come up with for the results of your calculations?

Newspaper in Education

The Tampa Bay Times Newspaper in Education (NIE) program is a cooperative effort between schools and the Times Publishing Co. to encourage the use of newspapers in print and electronic form as educational resources.

Our educational resources fall into the category of informational text. Informational text is a type of nonfiction text. The primary purpose of informational text is to convey information about the natural or social world. And since the mid-1970s, NIE has provided schools with class sets of informational text in the form of the daily newspaper and our award-winning original curriculum, at no cost to students, teachers or schools.

In the Tampa Bay area each year, more than 5 million newspapers and electronic licenses are provided to teachers and students free of charge thanks to our generous individual, corporate and foundation sponsors. In addition to providing free supplemental materials to educators, NIE hosts free educator workshops and webinars. Our teaching materials cover a variety of subjects and are consistent with the Florida Standards.

For more information about NIE, visit tampabay.com/nie or call 800-333-7505, ext. 8138. Follow us on Twitter at [Twitter.com/TBTimesNIE](https://twitter.com/TBTimesNIE). Educators, email ordernie@tampabay.com or call 800-333-7505, ext. 8138 to request free copies of this publication.

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Florida Standards

Reading and interpreting the material in this publication and the Times, as well as completing the activities, correlate to the following Florida Standards in mathematics for elementary school students: MAFS.MD.1.3; MAFS.MD.2.3; MAFS.NBT.1.1; MAFS.NBT.1.2; MAFS.NBT.1.3; MAFS.NF.1.1; MAFS.NF.1.3; MAFS.OA.1.1; MAFS.OA.1.2; MAFS.OA.1.3; MAFS.OA.1.4; MAFS.OA.3.5; MAFS.OA.4.8; and the following Florida Standards in Language Arts for elementary school students: LAFS.L.1.2; LAFS.L.2.3; LAFS.L.3.4; LAFS.RI.1.1; LAFS.RI.2.4; LAFS.RI.2.5; LAFS.RI.3.7; LAFS.SL.1.1; LAFS.SL.1.2; LAFS.SL.1.3; LAFS.SL.2.6; LAFS.W.1.1; LAFS.W.1.2; LAFS.W.1.3

