

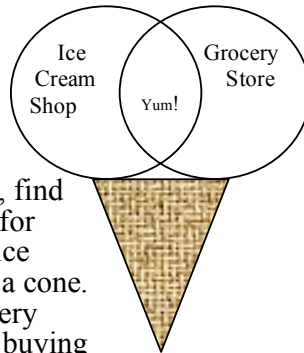
Computer Capers

Summer 2009

www.buddyproject.org/capers

Ice Cream Shop or Shop for Ice Cream?

Which is a more cost-effective way to enjoy the delicious summer treat? “Dip” into this problem by doing a little research. First, find out what the cost would be for your family to visit a local ice cream shop and each enjoy a cone. Next, take a trip to the grocery store and record the cost of buying the ingredients to make your own ice cream cones at home. How do the costs compare? Use a drawing program or the drawing tools in a word processor to display your results in an *ice cream cone-shaped* Venn diagram as illustrated above. Include the information that you found on each “scoop.” Type information found for each approach on the “scoops,” taking care to place the similarities you found in the area where the scoops overlap. Enjoy an ice cream treat while discussing your results with your family members. What are the positives and negatives to both strategies?



Why might you choose one way over the other on any given day?

Indiana Mathematics Standard 3.6.4: Express solutions clearly and logically by using the appropriate mathematical terms and notation. Support solutions with evidence in both verbal and symbolic work.

Summer Snapshots

Digitally document your summer by creating a slideshow that highlights a photo or two from each week. Create a simple slideshow using PowerPoint™ or other presentation software, setting up the number of slides (pages) that there are weeks of your summer break. Take photos and choose one or two to insert for each week’s page.

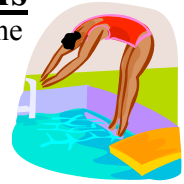
Add a descriptive caption describing what is occurring for each of the photographs. What fun it will be at the end of summer to look back at your photo journal to review all the wonderful things you did each week! You may even want to print it out and bind it like a book to keep a special memory of Summer 2009.



Indiana English Language Arts Standard 2.5.5: Use descriptive words when writing.

Clearwater Calculations

Splash! Summertime is here and the pools are open. Don’t let your math skills get rusty, though. Have a little fun figuring out a few math problems while you enjoy your time in the water. First, can you calculate the volume of your neighborhood or local pool? Use a spreadsheet to help you with your calculation. Column A would be length; column B, width; column C, depth (if the depth varies, use the average depth). Next, can you calculate the number of gallons of water the pool contains? Use the following formula for a rectangular pool: length x width x average depth x 7.48 gallons (the amount of water per cubic foot). Remember a * signifies “multiply” in a spreadsheet. Finally, what is the weight of all of the water in the pool? Find the weight of one gallon (either by weighing one yourself or doing a little online research) and multiply that using your answer to the previous problem in your spreadsheet.



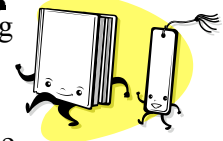
Challenge Question: If you were to fill the pool with your home garden hose, how long would it take? What would you need to do to be able to calculate this answer?

Were your calculations a splashing success?

Indiana Mathematics Standard 5.5: Students understand and compute the areas and volumes of simple objects, as well as measuring weight, temperature, time, and money.

Record Your Reading

Are you planning on participating in the summer reading program at your local library? If so, why not use your family computer to help you keep a record of your progress?



Create a database that has the following fields: “Date,” “Book Title,” “Author,” “# of Pages Read,” and “# of Minutes Read.” Now, each time you sit down to enjoy a book, follow up by recording your reading progress. When you are ready to go to the library, simply pull up your database to create and print a report. Use the data to communicate with the librarians about your progress. What kinds of prizes are you working toward? Happy summer reading!

Indiana Science Standard 6.2: Students use computers and other tools to collect information, calculate, and analyze data. They prepare tables and graphs, using these to summarize data and identify relationships.