

Software for the Soul

By Denise Buttenaar BGCDSB eLC

This newsletter is about OSAPAC resources that are available to help supplement your math and science lessons.

GIZMOS

<http://www.explorelearning.com/>

GIZMOS, a piece of OSAPAC software for teaching Math and Science in Grades 3-12, has released 2 new GIZMOS for Science, including one that will be very beneficial in the Mathematics classroom as well.

Resources for ALL Gizmos include:

- a Student Exploration Guide & Key (in Word and .pdf format)
- a Teacher Guide (in Word and .pdf format)
- a Vocabulary Sheet (in Word and .pdf format)
- Assessment Questions

UNIT CONVERSION GIZMO: Use unit conversion tiles to convert from one unit to another. This GIZMO allows students to answer questions such as "What is the height of Mount Everest in kilometers?" With 55 preset problems to choose from, students will get plenty of practice converting distance, time, speed, mass, volume, and density units

The largest animal on Earth is the blue whale, which has a mass of 150 metric tons. What is the mass of a blue whale in grams?

Conversion: Mass [Next]

Problems Solved: 2
Correct

150 ~~metric tons~~ = $\frac{1000 \text{ kilograms}}{1 \text{ metric ton}} \cdot 150 \text{ metric tons} = 1.500 \cdot 10^5 \text{ kg}$

Results: Cheeseburger digestion
Digestion is complete. The system absorbed 0% of available Calories. The system absorbed 7% of the water in the food. The resulting stool was liquid. 44.16 Calories did not enter the bloodstream because of missing capillaries or lymphatic vessels.

Large Organs: Esophagus, Mouth/ pharynx, Large intestine
Small Organs: Rectum/ anus, Small intestine: duodenum, Small intestine: jejunum/ileum
Food: Stomach
Analysis

The DIGESTIVE SYSTEM GIZMO allows students to arrange the organs and structures of the human digestive system in any way they like. By measuring how well different nutrients are digested and absorbed, students can discover for themselves the important role that each organ plays in the digestive process.

* If you do not have an account, contact Theresa Harrietha for your access information.

NETMATHS

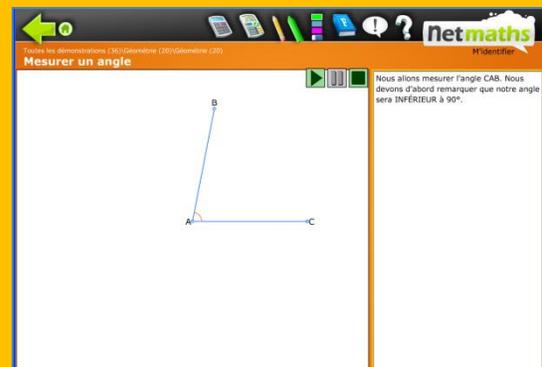
<http://on.netmaths.net/default.aspx>

A French online math site for grades 4-8! Log on today to create your own account!

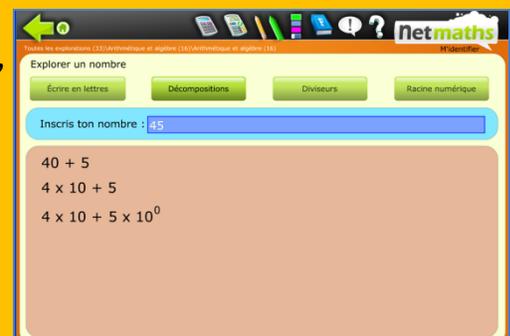
Suivez les instructions afin de créer votre compte et vos classes. Ensuite, vos élèves créeront leur compte au www.netmaths.net/EtudiantOntario avec les codes d'activations classes que vous leur donnerez.



Netmaths has **demonstrations**,



explorations,



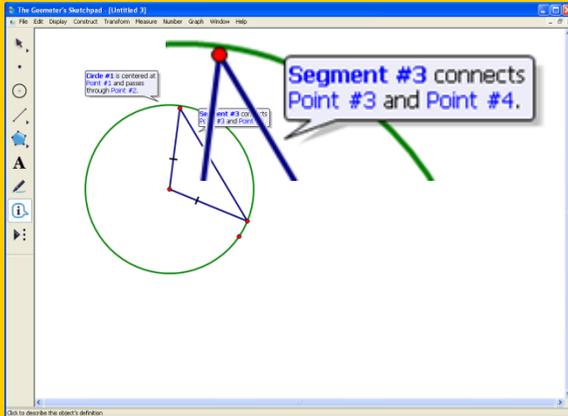
as well as **exercises** for students to practice. Ideal for differentiated learning, students are able to progress, learn and self-evaluate at their own pace.

Utilisez votre tableau blanc interactif pour améliorer la collaboration dans la salle de classe!

GEOMETER'S SKETCHPAD 5

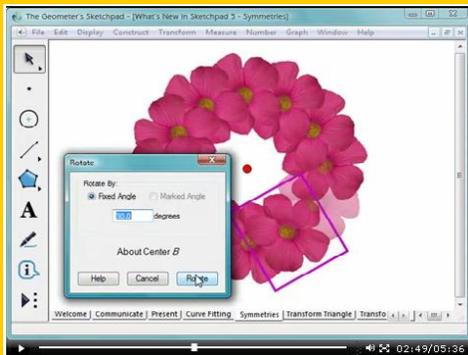
Geometer's Sketchpad is a dynamic construction, demonstration and exploration tool that you can use across all grade levels. Geometer's Sketchpad takes mathematical illustrations and turns them into interactive objects that respond to the mathematic definitions you have put into them.

The **Information** Tool is used to explore how a sketch is constructed and how the objects relate to each other.



What's New in Version 5???

Create interactive classroom presentations for your whiteboard. Integrate pictures into your mathematical explorations. Explore symmetries and transformations using your own uploaded images.



New function capabilities in Version 5 make Sketchpad even better for creating algebra, pre-calculus and calculus demonstrations.

Resources

Support materials such as walk through tutorials and tip sheets are found in the program help menu. Find more information and upload sketches by joining

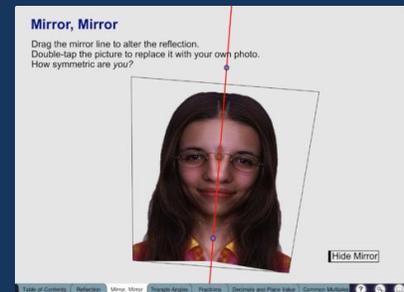
<http://sketchexchange.keypress.com> - the online community for sharing Sketchpad activities, tips, questions, and ideas.



IPAD INTEGRATION

Sketchpad Explorer is an excellent free app that allows you to interact with, and investigate, *any* mathematical document created in Sketchpad. It is good for using an existing document, not for creating a document (can't measure angles, etc). Copy your existing .gsp files to the Sketchpad Explorer Library.

1. In iTunes open up the **apps** tab.
2. Under file sharing choose **SketchExplorer**.
3. Drag and drop your .gsp files from your computer into the SketchExplorer Documents.



MULTIPLE SOLUTIONS, ONE ANSWER!

How many different ways will your students solve this question?

“Every day when Kathryn returns from school she puts her change from buying lunch into a jar on her dresser. This weekend she decided to count her savings. She found that she had 72 coins—all nickels and dimes. The total amount was \$4.95. How many coins of each kind did she have?”

From <https://homeworkhelp.ilc.org/>.

If you have any questions about any of the OSAPAC resources listed here, or would like me to introduce you or your class to them, please email me and let me know. Till next month...

Denise Buttenaar