



From the Math and Science Departments:

Summer Suggestions to Build Up Junior Math and Science Skills

Students interested in refining math skills over the summer have several options:

- TriC Publications have prepared inexpensive summer study workbooks for various levels of math. They are designed for use by the student at home three or four times a week for ten weeks. Workbooks are available to order at http://www.summerskills.com/summerskillsbooks/math_books
- A TI-84 Plus CE or TI-84 Plus C Silver Edition calculator is required for both math and science courses. If you see a good deal on one early in the summer, you may want to purchase it right away. Although you will learn how to use it in class, you may want to familiarize yourself with it over the summer. For information on this calculator, go to <http://education.ti.com/en/us/products/calculators/graphing-calculators>. Calculator tutorials can be accessed at www.atomiclearning.com/k12/en/ti_84c.
- A brief review of fundamental Algebra concepts is included in the document located at <http://www.unioncatholic.org/downloads/pdf/2014-2015/algebraprep.pdf>.
- Below are websites that you may find helpful when researching mathematical topics throughout the summer or during the school year:
<https://www.khanacademy.org/> (under the LEARN tab, click mathematics)
<http://www.purplemath.com/>
http://www.sadlier-oxford.com/math/student_2006.cfm?tp=lessonplanners&grade=8
<http://www.algebrahelp.com/>
<http://www.math.com/homeworkhelp/Algebra.html>
<http://www.coolmath.com/algebra/index.html>

Overall preparation for Biology is very simple. As you go through the summer, be aware of how you use your senses to gain knowledge. Think about how things, living or nonliving, change. Here are some questions to consider:

- ✓ How do I use my senses to study living things around me? Are my senses reliable?
- ✓ In what ways do living things differ from nonliving things?
- ✓ In what ways does a particular living thing differ from other living things?
- ✓ How do living things and nonliving things interact?
- ✓ How would you describe something like a tree or particular animal to distinguish it from all other things?

Gaining practice in thinking about these kinds of questions is the key to really thinking deeply in biology, in science and in general. They will prepare you for studying biology concepts successfully. You may also want to read the Science Department Philosophy and Mission as listed in the *Curriculum Guide* to see how these questions are relevant for all science courses.

- Are you interested in seeing what biology is all about? Try these sites:
<https://phet.colorado.edu>
<https://www.youtube.com/user/bozemanbiology>
<http://www.cellsalive.com/>
<http://learn.genetics.utah.edu/>
http://evolution.berkeley.edu/evolibrary/article/evo_01
<http://science.nationalgeographic.com/science/health-and-human-body/human-body/>
<http://www.animalearn.org/links.php>