

## BIOLOGY LABORATORY MATERIALS LIST

- ❖ The following items will provide your students with the ability to perform most of the experiments and observations for Biology. Purchase supplies locally whenever possible. Many materials can be used in successive years.
- ❖ Laboratory equipment is a must. If your school is small, you may want to pick and choose if you are not able to acquire all of the materials listed below. Feel free to contact us for suggestions on which supplies are most important, if you cannot purchase them all. The preserved slides and dissection kits are very reasonably priced.
- ❖ Items that will be needed first semester need to be ordered as soon as possible.
- ❖ Your biggest expense will be a microscope. We suggest you buy a quality microscope rather than “toy” versions or cheap models. Often you can find used microscopes at hospitals and public schools. You can also find reasonably priced microscopes at any scientific supply company. The BJU Press offers a quality microscope at a reasonable price. If you would like to shop around, the high school microscope you purchase should meet the following specifications:
  - 10x ocular (eyepiece)
  - 4x, 10x, and 40x objectives
  - separate coarse and fine focus adjustment knobsYou can choose a microscope with either a concave mirror or a built-in illuminator. The illuminator is much more convenient and is easier to use, but a microscope with a mirror and external light source will be sufficient for this course.
- ❖ The order numbers from Carolina Biological Supply Company and Home Science Tools are included in the chart. Carolina can be reached at 800-334-5551 or at [www.carolina.com](http://www.carolina.com). Home Science Tools can be reached at 1-800-860-6272 or at [www.hometrainingtools.com](http://www.hometrainingtools.com). Carolina is recommended for traditional schools because our experience shows that they supply quality products at reasonable prices. We have included ordering information for Home Science Tools as well for the benefit of our homeschool families. You may, however, be able to obtain the supplies from other companies and are welcome to shop around for the best price.
- ❖ When ordering the microscope, dissection kit, or replacement dissection specimens from the BJU Press, you can use the Customer Service number (800-845-5731), or you can order online ([www.bjupress.com](http://www.bjupress.com)). To find the materials online, type in the order number under “Search,” or go to the Grade 10 Biology materials page.

### Abbreviation Key for the Supply List

c.s. = cross section

l.s. = longitudinal section

sec. = section

w.m. = whole mount (entire organism)

**Biology**  
**(2008-2009 ACADEMIC YEAR)**  
**Scope and Sequence**

Description	Carolina order no.	Home Science Tools order no.	BJU Press order no.	Qty. per group of 2-4 students
Compound microscope			181081	1
Prepared microscope slides:				
<sup>1</sup> onion ( <i>Allium</i> ) root tip mitosis, l.s.	FR-30-2396	MS-ALLROOT		1
<sup>1</sup> <i>Amoeba proteus</i> , w.m.	FR-29-5384	MS-AMOEBA		1
<sup>1</sup> <i>Paramecium caudatum</i> , w.m.	FR-29-6962	MS-PARACAD		1
<sup>1</sup> <i>Euglena</i> , w.m.	FR-29-5666	MS-EUGLENA		1
<sup>1</sup> <i>Spirogyra</i> , w.m.	FR-29-6548	MS-SPIROC		1
<sup>1</sup> mixed diatoms, w.m.	FR-29-5936	MS-DIATOM		1
<sup>1</sup> <i>Rhizopus</i> sporangia, w.m. (bread mold)	FR-29-7770	MS-RNIGR		1
<sup>1</sup> <i>Penicillium</i> , w.m.	FR-29-7968	MS-PENIC		1
<sup>1</sup> <i>Coprinus</i> , c.s. (mushroom)	FR-29-8176	MS-MUSHROM		1
<sup>1</sup> lichen thallus, sec.	FR-29-8476	MS-LICHEN		1
<sup>2</sup> leaf, c.s. (typical dicot leaf)	FR-30-3838	MS-FICLEAF		1
<sup>2</sup> buttercup stem, c.s. (typical dicot stem)	FR-30-2870	MS-RANSTEM		1
<sup>2</sup> typical dicot root, c.s.	FR-30-1880	MS-RANROOT		1
<sup>2</sup> <i>Grantia</i> , c.s. & l.s. Note to homeschoolers: Home Science Tools does not offer the combined <i>Grantia</i> slide, only the <i>Grantia</i> , l.s. If you wish, the combined slide can be purchased from another scientific supply company.	FR-30-5848	MS-GRANTIA		1
<sup>2</sup> <i>Hydra</i> , c.s.	FR-30-6046	MS-HYDRACS		1
<sup>2</sup> <i>Hydra</i> budding adult, w.m.	FR-30-6064	MS-HYDRBUD		1
<sup>2</sup> ground bone, c.s.	FR-31-2964	MS-HUBONE		1
<sup>2</sup> skin, sec.	FR-31-4504	MS-HUSKSWG		1
<sup>2</sup> striated (skeletal) muscle, sec.	FR-31-3256	MS-MUSC3		1

## Biology

(2008-2009 ACADEMIC YEAR)

Scope and Sequence (continued)

Description	Carolina order no.	Home Science Tools order no.	BJU Press order no.	Qty. per group of 2-4 students
<sup>2</sup> smooth muscle Note to homeschoolers: The slide MS-MUSC3 from Home Science Tools contains both the striated and smooth muscle sections.	FR-31-3340			1
<sup>1</sup> Beakers Note: The beakers are used in Biology only for holding water. If you have beakers for another science class, you do not need to purchase additional beakers.	FR-72-1209			2
Each class also needs one of the following:				
<sup>1</sup> Box microscope slides	FR-63-2950	MS-SLIDP72		
<sup>1</sup> Box coverslips	FR-63-2962	MS-SLIDCV		
<sup>1</sup> Lens paper	FR-63-4005	MI-PAPER		
<sup>1</sup> Methylene blue stain Note: Carolina Biological does not offer methylene blue stain to homeschoolers. However, the stain can be purchased from Home Science Tools.	FR-87-5913	CH-METHBLU		
<sup>2</sup> Dissection kit Note: The dissection kit can be ordered from the BJU Press. We suggest ordering from BJU Press, as the kit includes all of the specimens and tools necessary for BJ LINC Biology. The dissection kit from the Press includes dissection tools, magnifying glass, dissection pan, activity book, storage bags, dissection pins, and one each of earthworm, crayfish, perch, and frog. You may order specimen replacements separately if you already have the pan and other tools. The BJU Press item number for the specimen replacements is 033076.			033027	1

<sup>1</sup>These items are needed for first semester.

<sup>2</sup>These items are needed for second semester.

The following supplies can be obtained locally: cotton swabs, onion, razor blades, banana, spinach leaves, flowers, fruit, seeds, sugar, glass rods, vanilla.

**Note:** We have not included living items because of the difficulty of maintaining them. If your school has the facilities to work with living cultures, call us for a more thorough list of supplies.