



Lab Guide for Elementary Slide Set

12 Slides

1. Cotton Fibers
2. Wool Fibers
3. Pollen
4. Nylon Fibers
5. Silk Fibers
6. Bird Feather
7. Corn Starch
8. Cross section of a pumpkin stem
9. Hydra Whole Mount
10. Salt Crystal
11. Honeybee Leg
12. Frog Blood Smear

Guide contains a slide-by-slide guide with questions and educational material, with area for student notes. Final page is blank notepaper, which can be re-printed and inserted where more writing space is needed.

The slide set is available from www.GreatScopes.com

This guide was written by Bridget Ardoin, author of the homeschool manual:

“What?? Me Teach High School Biology?”

It is available at www.high-school-biology.com.

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Page 1 of 14



7) Stem of Pumpkin

- a) What do you see? What color(s) is it? What does it look like?
- b) What kind of living thing is a pumpkin?
- c) Do you see the different colored bubbles? Those are plant cells. Plant cells are different from animal cells. Plant cells have a strong, sturdy cell wall. Animal cells do not. Why do you think God made plant cells with a cell wall? They help make the plant stand up straight (plants don't have a skeleton like we do!)
- d) Do you see how some colored bubbles, cells, are clumped together? They have different jobs. The purple clumps of cells close to the outside are called the phloem (pronounced "fleem"). There are phloem cells clumped in groups around the middle also. Phloem cells are like pipes, letting the food that was made in the leaves travel to the rest of the plant.
- e) The clumps of green, larger cells close to the purple clumps of cells around the middle are called xylem. The larger empty space in the middle is also called the xylem. The xylem is also like pipes that let the water travel from the roots to the rest of the plant.
- f) All the rest of the cells around the middle, around the phloem and xylem, are called the pith.



8) Legs of a Honey Bee

- a) What do you see? What color(s) is it? What does it look like?
- b) Do you notice there are different sections in the leg?
- c) What do you notice about the very end of the leg? Why do you think God made the bee have these little "hooks"?
- d) Do you notice the tiny lines on the section near the "hooks"? What do you think these lines are?
- e) Why do you think God made the bee have these tiny hairs on this part of the leg? The bee collects pollen from the flowers it visits, and packs it around its legs. The hairs help hold the pollen to its legs. What do you think the bee does with the pollen it collects?
