Cell Day

Summary
Students will collect samples and bring them to school to look at underneath the microscope. They will keep a journal of their observations and drawings and summarize their findings.

Main Core Tie
SEEd - Grade 7
Strand 7.3: STRUCTURE AND FUNCTION OF LIFE Standard 7.3.1

Time Frame
10 class periods of 30 minutes each

Group Size
Individual

Materials
- microscopes
- slides
- cover slips
- biological stains
- razor blades or scalpels
- worksheet
  (example below, or students can bring their own notebooks)

Background for Teachers
Students should be cautioned about cells scraped off of rotting meat or other sources of harmful bacteria. They should not collect blood or body secretions for reasons of health and sanitation.

Student Prior Knowledge
Students should have used the microscope and seen cells and cell parts previous to doing this activity. (A cheek and onion cell lab would be a good background activity.)

Instructional Procedures
Explain to students that they will be collecting cells from objects in their world that could contain cells. They will be using the microscope to determine if cells are present and what parts they can see, size, shape etc.
Students should not work in groups larger than two if at all possible. Expect that the first day they will forget to bring cells and will end up looking at hair or lint. You may wish to require they bring substances that can only be found somewhere outside of school for a few of their observations.
Remind students how a preparation must be made for cells to be visible under the microscope. Tell students how many samples you would like them to bring each day and how many days you would like them to work on this activity.
Ask students to summarize their findings by making a poster of their most interesting cell (or non-cell) They should draw it and describe it to the class. They should describe whether the substance is living or not, based on the cell (or not)