

Science Activities for Developing Visual Literacy

*****Pics4Learning Lessons** – All of these lessons use digital camera and/or digital images in unique and engaging ways. You will find lessons for math, science, language arts, and social studies.

<http://www.tech4learning.com/services/teachingwithdigitalcameras.htm>

*****Catch a Constellation – Sample Project from Ruth Grillo’s Teaching with Digital Cameras book**

<http://www.tech4learning.com/pdfs/constellation.pdf>

Elements of Machines <http://www.mos.org/sln/Leonardo/InventorsToolbox.html>

- **Simple Machines** Go on a camera scavenger hunt with student teams to find objects in school or home that are made of compound or simple machines.
- **Simple Machines 2** Present pictures of simple and compound machines and have students identify the parts.

Experiment Set Up Take pictures of how to correctly set up an experiment and incorrectly set up experiments so that students have a visual cue of the procedure.

Field Trips Take pictures of animals during a field trip to a local zoo or animal farm. As students research the animals they can include the picture in their reports.

First Signs of Spring/Fall/Winter Have students be on alert for the first bloom, first leaf that changes color, temperature changes, etc. The [Journey North](http://www.journeynorth.org) website may be useful. (<http://www.learner.org/jnorth/>)

Five Senses. Have students take pictures of the body parts used for each sense. Then take pictures of everyday objects. Have students match the objects to what senses can be used to identify each. For example, the eyes, nose, and hands can be used to identify a flower. This can be done with a class book or bulleting board.

Horticulture guides Create a guidebook about trees, flowers, or plants. Students can take pictures at a school garden or greenhouse, or at a local nursery, then research to identify each plant. Instruct student groups to gather information such as amount of sunlight needed, best soil to grow in, genus species name, or amount of rainfall needed. Use publishing or presentation software to create guidebooks from the research and pictures.

- Desert Rose: Propagation from Seeds (<http://www.k12.hi.us/~rkubota/digiphoto/drose/drose.html>)
- The Butterfly and Hummingbird Garden at Longfellow School (<http://www.brunswick.k12.me.us/lon/flowers/Flowers.html>)

Monarch Migration <http://www.smm.org/sln/monarchs/we/highlandpark.html>

Mystery Volcano and Other Projects from Kapunahala Elementary School

http://www.k12.hi.us/~kapunaha/student_projects/student_projects.htm

Parts of a plant or flower Instead of having students draw or locate parts of a plant or flower, have them take pictures of the various parts on a live flower. Pictures can be inserted into presentation software, with names and descriptions added as "captions" in text boxes.

Photo Journals <http://www.psd267.wednet.edu/~kfranz/Science/WaterHabitat/pondphotojournals.htm>

Plant Growth – Have students create a clay animation which demonstrates the stages of a plant's growth from seed to maturity. By taking pictures at each stage they can animate the pictures into a QuickTime movie. (For information on Clay Animation projects, see Tech4Learning:

<http://www.tech4learning.com/services/teachingwithdigitalcameras.htm>)

Stages of Development. Many elementary classrooms study life cycles and raise tadpoles, mealworms, or butterflies. Document the stages of the life cycle by taking pictures at each stage. The pictures can be used on a bulletin board display or poster. Mount the pictures on tagboard, laminate, and you have a sequencing puzzle for students. Chick here to see the life cycle of a butterfly. (<http://www.butterfly-guide.co.uk/life/>)

Steps in an experiment Students can document their lab experiments by taking pictures as they do each stage. This can be used after the experiment by the teacher to assess the students' work or by the students to identify things they did right or where they went wrong. Obviously this teacher had a sense of humor when she wrote a guide for parents with instructions on how to capture live cockroaches for science experiments. (<http://www.k12.hi.us/~rkubota/digphoto/cockroach/roach.html>)

Types of Clouds For several days, have the class walk outside and take a picture of the clouds. Pictures can be used to identify the different types of clouds.