

Gravel and Rocks

Illinois State Standard: SCIENCE #11

This exercise can be adapted for grades one-three.

Collect Data

Know & apply the concepts, principles and processes of scientific inquiry for investigations using measuring instruments.

MATERIALS NEEDED:

*NOTEBOOK OR GRAPH PAPER FOR EACH CHILD

*MAGNIFYING GLASS FOR EACH CHILD

*RULER FOR EACH CHILD

*PENCIL

*ROCKS

METHOD: DIVIDE THE CLASS INTO GROUPS OF FOUR STUDENTS. Using the following items the students are to record their observations.

Students need to use one sheet of notebook paper to record:

 Their name, the date of the experiment, and the title of the experiment-
 GRAVEL AND ROCKS

Using their magnifying glass they are to determine the color of the rock sample for each group.

Draw on the paper how the sample appears

Using the ruler, record how long the sample rocks are - record this number. (NOTE- CHILDREN TOO YOUNG TO USE A RULER CAN USE GRAPH PAPER AND OUTLINE THEIR ROCK AND THEN COUNT THE SQUARES FOR THE LENGTH AND RECORD THAT OBSERVATION).

After students have made their observations then one student can represent the group and explain what they observed as they examined the sample with the magnifying glass. Then the students should tell what the length of their sample was.

The groups should then discuss which group had the largest sample. Did any of the groups have samples that were the same length? Were the samples the same color?

Students can conclude that rocks can vary in size, shape and color.

POSSIBLE VOCABULARY

SOIL

DIRT

ROCK

STONE

PEBBLE

GRAVEL

EARTH

SAND

With this discussion the classroom should have access to samples of earth, sand and rocks.

Students may research the above terms.

RESOURCES

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

ONE NATURAL RESOURCES WAY

SPRINGFIELD, ILLINOIS 62702-1271

217-524-4126

Website: [HTTP://dnr.state.il.us](http://dnr.state.il.us)

Email: teachkids@dnrmail.state.il.us

NYSTROM MAPS- ILLINOIS MAP

MAP # 2HGSS12

ILLINOIS STATE GEOLOGICAL SURVEY

615 EAST PEABODY DRIVE

CHAMPAIGN, ILLINOIS 61820-6970

217-333-4747

Website: <http://www.isgs.uiuc.edu>

OFFICE OF MINES AND MINERALS

ONE NATURAL RESOURCE WAY

SPRINGFIELD, ILLINOIS, 62702-1271

Website: <http://dnr.state.il.us/mines/education/kids.htm>

GEOLOGY UNDERFOOT IN ILLINOIS BY RAYMOND WIGGERS

ISBN 0-87842-346-x