

LESSON: Field Trip to Your Square

GRADE: 2

OBJECTIVES:

Science

Science as Inquiry

S.K-2.SI.1 Ask questions about objects, organisms, and events in the environment.

- Students should answer their questions by seeking information from their own observations, investigations and from reliable sources of scientific information.

Physical Education

- **P.E. Standard 1-** Demonstrates competency in a variety of motor skills and movement patterns

MATERIALS & RESOURCES:

- Access to *Square of Life* website-
http://ciese.org/curriculum/squareproj/field_trip/
- Drawing tools (pencils, markers, etc.)
- Clipboards or cardboard
- Plant and animal reference books and materials (see *Square of Life* Reference Materials Section-
<http://ciese.org/curriculum/squareproj/reference/>)
- Several meter or yard sticks (at least 2)
- String or Yarn (for 8 squares you will need a minimum of 100 feet)
- Wooden stakes or wire clothes hangers
- Document books and websites

PRESENTATION:

Students will visit their square and spend about a half hour observing the animals, plants and non-living objects that are in their square. They will draw a sketch of their square based on their observations.

DIRECTIONS:

Before beginning this lesson you should complete the following:

1. Ideally you will want to have three students per square, so for a class of 24 students you will need to measure off eight squares around the schoolyard.
2. You should tour the schoolyard and select the sites for your squares carefully. It is best to select sites, which will contain "unique" subject for the students to study. This object might be a tree, large rock, ant colony, etc.
3. It can be very useful to have several basic reference books on hand to help in the identification of the objects students find. In the Reference Materials section of the project web site you will find web sites as well as books which you can use.
4. Once you have selected the locations for your squares use the meter (or yard) sticks to measure off a one meter by one meter square. Stick your stakes or piece of cut up clothes hangers in the corners of the square.
5. Lastly, run the string or yarn around each corner stake to create the outline for the square. **SAFETY NOTE:** Make sure to follow the guidelines for your school regarding outdoor activities. In particular, make sure to exclude areas that might be dangerous to work in. It might be helpful to locate the squares in one area so that you can observe all of the groups at the same time. If you do use wire clothes hangers make sure to tape over any sharp ends. Before conducting the activity make sure to pre-select the students and assign them to a square. Select students that will work well together and will not distract one another from completing the activity. Don't wait until the class starts to assign students to squares.

Procedure Activity #1: Preparing for the study

For this activity, do the following:

1. Explain to the students that they are going to get to work on a special project that will involve their schoolyard environment. Tell them that once they are able to describe every detail of their own square and what they found in it, they will get to tell the other students around the world what they discovered.
2. Lead a discussion in which students make predictions about some of the things (living and non-living) that they think they will find in their squares.

Activity #2: Sketching your square

For this activity, do the following:

1. Break students up into their groups (one group per square).
2. Explain that they are going to investigate what is actually in their one meter square. Tell them that they are going to work in teams of three (again, larger or smaller groups will work).
3. Handout drawing paper and explain that they are going to spend about a half hour observing their square and drawing a sketch of it. Wait until they are at their squares before you distribute the drawing tools.
4. Bring the students outside and have each team sit next to their square. You may want to locate each student at a corner of the square so that they do not disturb each other.
5. Once all of the groups are settled distributed the drawing tools and handout.
6. Let the students simply sketch whatever they see in their square. Remind them to look under rocks and other movable objects.
7. About 5 minutes before the end of the activity announce that they should finish up their sketches. For older students, you can ask them to record some written comments on what they saw.
*Note: In addition to making sketches and taking notes, you might also allow the students to collect a few samples to bring back into the classroom. Bring brown paper bags and sampling jars and demonstrate how to collect a sample and place it in the bag.
8. Have the students gather up their materials and head back into the classroom.

Activity #3: What did you find?

For this activity, do the following:

1. Reassemble into a circle and ask the students to share what they found. Were the items they expected to find present? Were they surprised at any of the things they found?
2. Students should keep their sketches and notes for use in preparing a class list for submission to the Project Database.

TIME:

2 hours

PROCESSING THROUGH THE SIX PILLARS:

WHAT?

- How did you work together on this project? (assign a portion of the square, all look at entire square, etc.)
- What did you find? Did you find plants? Animals? Non-living objects?

SO WHAT?

- Do you think some of the items may have been overlooked if we did not use everyone's eyes and do our best on the project? What would have been missed?
- In this project, did all things we found in our square have equal worth/significance?

NOW WHAT?

- Is that what our outside world is like – with all things (living and non-living) having some worth/significance?