

Square of Life

Grade Cluster - K-2

NETS-S – 2 - Communication & Collaboration

Quick Look:

Students will examine squares in their schoolyard to observe what living and non-living items they find. They share this information in a collaborative database online. Additionally, they share their observations with another school located in another state or country.

Scenario:

The teacher explains to the class that they are going to be starting a new, collaborative project called [Square of Life](#). She explains that, using the Square of Life website, the class will share information about their location, their school, and the living and non-living things found in their schoolyard. This is going to be shared with other schools in other states. The students are very excited about this new project and the impending opportunity to learn more about what is in their own backyards, as well as other schools. Before students collect the information about the living and non-living things in their Square Meter, they make some predictions about what they might find and record this in a [Google Doc](#). Students then plot a square meter in their school yard and record the living and non-living things that they find. Students, working in groups of three or four, record what they find in their square meter. They compare this to their original predictions and discover they had overlooked a lot! One student in the group videotapes the area, while the other students in the group describe what they are seeing. Since each group will be presenting to a wider audience, students know that they will need to edit these digital images prior to the inclusion in the subsequent presentation to their peers, community members, parents and other collaborating schools in the project. (2a, 2b, 6a, 6b)

Students will use the [Biokids Critter Catalog](#) to help identify insects in their square. Students will use sites found in the Square of Life Reference Center and selected by teachers, to help identify the soil and plants they may find in their square. Knowing that students may still need help identifying everything in their square, the teacher arranges for guest speakers from the local Natural Resources office or local college department to visit the class and talk to the students about the things they found in their square. These folks will help identify items the students couldn't identify.

Students will use [Google presentation](#) to present a short slide show of their findings and send out the link to several different schools that are part of the project. (6b) The information collected in their square is shared in a database on the [project database](#) website for all the schools participating to view. (2a) Information collected will also be shared on the class [blog](#).

Each group presents information about their location, shares a map of their area using [Google Maps](#), and provides specific information about the living and non-living things in their squares. Then, using the database of information, each group will choose one other school that has video conferencing capabilities or [Skype](#), with whom to compare and contrast their information. The teacher shows students on a Google Map where their collaborating schools are located.(2a, 2b, 6b, 6d) Once they learn this, students show a cluster map (widget on their blog) describing where all the collaborating schools are located. (2d) Students will include this comparison in their presentation, which will be posted to the project web site. They will also present their findings to the collaborating schools.

The students are very excited about their projects, and also want to present their work to other classrooms in the building. Students in the other classrooms marvel at the wondrous living and non-living things found in their own backyard!

Student Standards – The following NETS-S are noted in the Scenario:

2. Communication and Collaboration –A,B, D
6. Technology Operations and Concepts – B,D

Teacher Standards – Teachers who teach this unit address the following NETS-T:

1. Facilitate and Inspire Student Learning and Creativity- B, D
2. Design and Develop Digital-Age Learning Experiences and Assessments- B, C,
3. Model Digital-Age Work and Learning – B, C, D
4. Promote and Model Digital Citizenship and Responsibility – A, B, D
5. Engage in Professional Growth and Leadership

Content Grade Expectations

The scenario writer has identified the following content grade expectations that s/he felt might be assessed in this scenario. In most of these scenarios, there may well be opportunities to assess other or additional content grade expectations across a variety of disciplines. If you are interested in developing a unit or lessons based on the following scenario, and you don't see any grade expectations in your content area, we encourage you to capture the ideas presented in the scenario and make it your own by adding components that address the grade expectations you are most interested in assessing.

Science

S 1-2: 2 - Students demonstrate their understanding of PREDICTING AND HYPOTHESIZING by...

- Predicting a logical outcome to a situation, using prior knowledge, experience and/or evidence.
- Explaining reasons for that prediction.

S1-2:46 - Students demonstrate their understanding of Processes and Change over Time within Systems of the Universe by...

- Observing, describing and comparing color and texture of different types of rocks and soils.
- Conducting tests on how different types of soils retain

S1-2:4 - Students demonstrate their ability to CONDUCT EXPERIMENTS by...

- Referring to and following a simple plan for an investigation.
- describing observations using senses rather than feelings (e.g., The snail has a hard shell with wavy, brown lines, rather than the snail is awesome).
- Recording observations of similarities and differences.
- Drawing scientifically:
 - a. Recording relative proportion (e.g., Eyes are approximately the right size when compared to the head) including focus on finer details, and differentiating all parts observed.
 - b. Labeling significant aspects of a scientific drawing or diagram with words provided.
 - c. Creating a title for a scientific drawing or diagram.
- Recording data (in a table provided by the teacher) generated from the use of simple science equipment, as well as nonstandard and standard measurement tools.