GPS on a field trip

Summary

Learners use GPS's to locate waypoints, use mapping skills to illustrate the location, and make an animal out of modeling clay.

Time Frame

3 class periods of 60 minutes each

Group Size

Small Groups

Life Skills

Thinking & Reasoning, Communication

Materials

GPS instrument, modeling clay, sketch pad, pencils, markers and crayons, drinks, and snack

Background for Teachers

Need to know how to make an animal out of modeling clay, be familiar with animal food chains, mapping skills

Student Prior Knowledge

This lesson is for small children to experience and begin learning, no prior knowledge is necessary.

Intended Learning Outcomes

Learners will meet core standards for kindergarten: a. Recognize that maps and globes are symbols for actual places. b. Identify items on a map of the area. c. Explore basic map and globe directions and characteristics (e.g. top, bottom, right, left, land). d. Make representations of things observed in the environment (e.g. drawing, painting, making models with clay).

Instructional Procedures

First, provide learners with an outline of a map of the area they will be doing the GPS activity at. As they discover the cites with their GPS have them take time within the same period or day to mark their path on the map. Do age appropriate mapping skills e.g. for 5-6 year old children have them locate and graph the top, bottom, right and left areas, mark land and the water on it. Second, have learners observe the animals located at the first cite. Provide modeling clay for them to replicate an animal. For example, we explored a farm with a creek running through it, and they found a treasure with neccessary art supplies in it. Learners were able to choose an animal, snake, insect or bird to replicate by molding clay. On their maps they could draw the creek and where their chosen living thing to make a model of, was found. Third, learners go to another marked waypoint using their GPS as their guide. At this cite, they get a drink and a snack. Learners also mark on their maps where they are at and make sure that another person could follow their map to get to this cite.

Strategies for Diverse Learners

Advanced learners can help others find the waypoint using a GPS. The art activities using modeling clay, mapping skills, drawing and coloring are individual and can be done at the level of the learner to

the best of their ability.

Extensions

While learners are out exploring a wonderful opportunity is presented to discuss food chains and how they work. Make sure the animals that are made out of the modeling clay are included in the food chain.

Assessment Plan

Learners will show their completed maps, and animals made out of clay to the teacher. Other learners must be able to read their map. They have to be able to locate the top, bottom, right and left directions and the land and water. Learners need to demonstrate an understanding of what a GPS is used for and how to read one with assisted help.

Authors

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