Cathy Eddy
Teacher/volunteer role

Inquiry based Outdoor Exploration (June 21 & 22, 2010)

Lesson Plan One: Environmental Experiences

Activity: The Shape of Things, p.19

Opportunities to integrate: (when, where, extensions)

To introduce the lesson, materials will be available as a discovery center activity during center time with myself at the table to provide guidance and discussion questions.

Following centers, a large group activity will be provided before going outside.

Children will look for shapes in nature and collect them, if possible, during outside time. Bags with a shape on it will be available for children to put their objects in. If it's not possible to bring the object inside, the child will draw a picture of it and a teacher will take dictation of the child's description.

Upon return to the classroom during snack, discussion about the objects found and which shape it looked like would take place.

After snack children will have the opportunity to show and describe the object[s] they found and tell which shape it looks most like. I will chart them on chart paper or a whiteboard. We will find out which shape had the most nature items, which one the least, etc. bringing in discussion of quantities.

After children have left for the day, their objects will be photographed for a class nature shape book to be put into the library corner. Additional pages can be added as children find more nature objects on other days. The items they found during outside will be added to the discovery center.

Extensions would be to: add new library books about shapes as mentioned on page 24 and 25, add magnifying glasses or microscopes for closer observations, continue to collect items. Take additional walks during different seasons and compare to the first nature shapes found. Create a nature shape book for each season. Compare and contrast number of items found in different seasons. Include nature magazines in the art area that children could use cut out shapes of nature objects. Post collages of the nature shapes around the room. Another day add twigs to the building area or in the art area. Make a shape guide of the playground area (p. 22). Send home the Family and Friends letter on p. 25.

Some children may be ready to experiment with combining shapes to form new shapes which would lead to new shape walks and discovering how shapes combine to form new shapes with sometimes different names.

Activity component: (when & how it will be used)

I'd use the activity "Introducing The Theme" activity during center time at the discovery center. The Shape Walk, p. 20, would be somewhat modified as described above and take place during outside time with a continuation of it during snack and a large group activity.

Local natural areas, parks, or guest speakers to include:

Since I'm not currently teaching or volunteering. I would check the DNR website to locate the appropriate person to check on their availability. If a park was available locally, it would be ideal to repeat the activity there and compare what was found. I would ask the families if any of them had any type of nature collection that they might be willing to come and share with the children.

Description of the outdoor exploration:

Location: The playground and yard area – would like to keep it somewhere easily accessible so could re-visit during other seasons.

Additional preparation needed: I'd pre-visit the playground/yard to scout out what I might be able to guide children towards if they had difficulty finding nature items. The nature items for the discovery center would be collected in advance. I would want to make sure to have some different things than what might be found on the playground, and some the same.

What the exploration will look like?
Two open-ended questions to encourage further student investigation**:**
1. Can you put together the things that belong together?
2. How can you tell what things are the same shape?

Standards/benchmarks/concepts that were met using components taught:
Head Start Science – 3.B.1, 3.B.2, 3.B.3, 3.B.4, 4.A.4, 4.A.5, 4.1, 5.B.1, 7.C.3, 8.B.2

Modifications to the activity or components:
These are described above under "Opportunities to integrate"

Indicate modifications/considerations for children with special needs and dual language learners:

Special needs – child may need assistance with mobility and having items within reach, child may need additional time to move or to process questions asked, child may need lower level questions (i.e., yes/no, choice of two answers, what or who questions) child may need adult assistance in identifying nature items, child may need assistance in matching a nature item to a shape. The assistance may come from a peer helper or adult.

Dual language learner – focus and use new vocabulary words repeatedly, connect the English word to the child's first language, use visuals to show the schedule, use facial expressions, gestures, and objects to help explain, check frequently for child's understanding, if possible have an interpreter available to assist during the discovery center, outside time and sharing

Age appropriate literature:
Books: See the books listed on p. 24 and 25

Title	Author	Type of Literature	Learning Opportunity
Shapes, Shapes, Shapes	Tana Hoban	Picture book	Compares shapes
My Shapes, Mi Forma	Rebecca Emberley	Picture book	Bilingual, explores shapes
When a Line Ends, a Shape Begins		Picture book	Teaches differences between shapes
It Looked Like Spilt Milk	Charles G Shaw	Picture book	Imagination observing cloud shapes
Brown Rabbit's Shape Book	Alan Baker	Picture book	Discover how balloons come in different shapes

Periodicals:
Your Big Backyard
Turtle
National Geographic Little Kids

Zootles
Wild Animal Baby
LADYBUG

Websites:
http://kids.nationalgeographic.com/kids/ **National Geographic**
http://www.amnh.org/education/ **American Museum of Natural History**
http://www.education.com/activity/preschool/science/ **Preschool Science Activities**
http://www.reachoutmichigan.org/funexperiments/quick/preschool.html **Michigan Preschool Science**
http://science.preschoolrock.com/ **Preschool Rock Science and Nature**
http://www.naturerocks.org/ **Nature Rocks**
http://www.brighthub.com/education/early-childhood/articles/38968.aspx **Outdoor Nature Games**

Pre-learning activities:
Discussion of shapes and practice matching and sorting shapes
Discussion about outside safety
Discussion of which nature things should be left outside and what things can be brought indoors
Learning the difference between nature and what is made by man

Post learning activities:
Document children's learning through observation, contributions to class book, language samples and new vocabulary learned