PRE/POST SITE TEACHER MATERIALS

ADAPTATIONS

Forest Preserve District
OF WILL COUNTY
Bringing People and Nature Together

Pre/Post Site Teacher Materials

Program: E.L.E.X., Early Learners Exercise Trail
Plum Creek Nature Center Field Trip

Integrate these resources into your classroom to maximize student learning from your educational program.

Activity: What Animal Am I?
Source: Sharing Nature with Children. Joseph Cornell. 1979.

Activity: What is Adaptation?
Source: Hands-on Life Science Activities for Grades K-8. Marvin N. Tolman

Activity: Pick-up Sticks Thumb Challenge
Source: PBS Parents Crafts for Kids and Forest Preserve District of Will County

Reference: ELEX Recommended Readings List
Source: Forest Preserve District of Will County

Correlated State Standards
Source: Forest Preserve District of Will County, the Council of Chief Sate School Officers (Common Core), and the National Research Council (NGSS)

Pre/Post Site Teacher Material List

Program: E.L.E.X. Early Learners Exercise
Plum Creek Nature Center Field Trip

Activity: **What Animal Am I?**
Source: **Sharing Nature with Children. Joseph Cornell. 1979.**

Summary:
Students familiarize themselves with native animals of Illinois' physical characteristics through the experience of playing a game.

Materials Needed:
- 15 different animal pictures
- Clothes pins

1. Pin a picture of an animal on the back of one of the children in the group.
    a. Don't show the child the picture.
    b. Have him turn around so that all the other children can see what animal he has become.
2. The child then asks questions to discover his own identity.
3. The other children can answer only "yes", "no", "maybe".

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Activity: **What is Adaptation?**
Source: **Hands-on Life Science Activities for Grades K-8. Marvin N. Tolman, James O. Morton.**

Summary:
Students use basic science concepts and facts to relate human adaptations to other animal adaptations.

WHAT IS ADAPTATION?

(Small-group discussion)

Materials Needed

- Pictures of people living, working, and playing in different climates
- Newsprint
- Pencils

Procedure

1. *Adaptation* in plants and animals refers to the way they can adjust or change to be able to live where and how they do. Many animals and plants can live only in certain places. People have made adaptations so they can live for periods of time almost anywhere. Discuss with your teacher some of the adaptations (adjustments) that have been made by you and others to enable you to be comfortable in your classroom today. List some important ones on the board.
2. Divide into groups of four or five and look at the pictures of ways people adapt to live, work, and play all over the world. Make a list of some ways humans are different from other animals in their ability to adapt.
3. From your pictures, choose the most interesting adaptations and share them with the class.

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Activity: Pick Up Sticks Thumb Challenge
Source: PBS Parents Crafts for Kids and Forest Preserve District of Will County

Summary:
Students will experience the importance of their own adaptation, their thumbs, by playing a game where they use all of their fingers with thumbs and without thumbs.

Instructions

1. **Using acrylic paint**, paint 3 Q-tips blue (8 points), 8 Q-tips green (3 points), and 14 Q-tips red (1 point).
2. **Let dry.**

How to Play Pick-Up Sticks:

1. Bundle the sticks in your hand and then drop them on the table.

2. Take turns picking up as many sticks as you can without moving any other stick except the one you are picking up.
3. If you move a stick, then your turn is over.
4. The player with the most points at the end of the game wins.

Thumb Challenge: Play the game a second time without the use of their thumbs.

Divide your classroom into groups of 4 or 5. Flip a coin to determine which player in each group goes first. Play until the last stick has been picked up or determine your number of sticks. The player that wins the coin toss should hold the sticks in a bundle in his hand with one side of his/her fist on the playing surface. You can play pick-up sticks on a table or on a smooth floor.

Release the bundle of sticks quickly and draw your hand away. The sticks will scatter and pile up.

Use the black stick as a helpful tool if you are the player who draws is successfully out of the pile. You may use the black stick to help you lift any other sticks out of the pile, to separate any sticks that are close together, or to flip a stick off another that is resting on.

Move around in a clockwise or counterclockwise direction to the next player. That player may choose to draw more sticks from the pile or begin again, gathering and scattering the remaining sticks. If any player succeeds in picking up all of the sticks, that player begins the next round, scattering the bundle again and drawing sticks until he loses a turn.

Pick up a red, then blue and then green stick in that order, if possible, and those sticks will count for double their value.

Win the game by reaching the pre-determined winning score first over a number of rounds, or by pickup up the most sticks in a single round.

Discussion:

Pre/Post Site Teacher Material List

Program: Early Learning Exercise Trail, E.L.E.X.
Plum Creek Nature Center Education Field Trip

Reference: E.L.E.X. Recommended Readings List
Source: Forest Preserve District of Will County

- Claws, Coats, and Camouflage – The Ways Animals Fit Into Their World. Susan Goodman. 2001
- Diary of a Worm and Friends Finger Puppets. Doreen Cronin.
- Diary of a Spider. Doreen Cronin. 2005

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Program: E.L.E.X., Early Learners Exercise Trail
Plum Creek Nature Center Field Trip

Correlated Common Core State Standards
Source: Forest Preserve District of Will County and the Council of Chief Sate School Officers (CCSSO)

Identified ELA and Math Standards are detailed below specific to this education program.

ELA Standards

Subject Code	K	Grade 1	Grade 2	Grade 3
Reading for Information (RI)	RI.K.1 - RI.K.4, RI.K.7	RI.1.1 – RI.1.4, RI.1.7	RI.2.1-RI.2.4, RI.2.7	RI.3.1 – RI.3.4, RI.3.7
Speaking and Listening (SL)	SL.K.2, , SL.K.4, SL.K.5	SL.1.2, SL.1.4, SL.1.5	SL.2.2, SL.2.4, SL.2.5	SL.3.2, SL.3.4, SL.3.5
Language (L)	L.K.4	L.1.4	L.2.4	L.3.4

Math Standards

Subject Code	K	Grade 1	Grade 2	Grade 3
Counting and Cardinality (CC)	K.CC.5, K.CC.6			
Measurement and Data(MD)	K.MD.2	1.MD.4		

Identified Science Standards are detailed below specific to this education program.

NGSS Standards

Disciplinary Idea	K	Grade 1	Grade 2	Grade 3
Earth and Space Sciences 3, Earth and Human Activity	K.ESS.3.2			
Life Science 2, Ecosystems		1.LS1.1, 1.LS1.2		3.LS2.1
Life Science 4, Biological Evolution				3.LS4.4