2012

Stone Oak Park Exploration: 1st Grade

Canyon Ridge Elementary School (San Antonio, Tex.)

Stone Oak Park – 1st Grade

Title: Stone Oak Park Exploration		**Subject/Course: Science**
Topic: Living/Nonliving, Plant Parts, and Food Chain	**Grade: 1st**	**Designer(s): Canyon Ridge Teachers**

Stage 1- Desired Results

Established Goals:

Understandings:	Essential Questions:
*Objects are classified as living or nonliving. *All living things have basic needs that can be satisfied through interactions with living and nonliving things. *Plants have basic needs that need to be met and understand how their needs are met. *Plants are a system that is composed of parts that work together. *Life is dependent on plants. *Plants and animals are interdependent for survival purposes.	*How do living and nonliving things differ? *What is the primary source of energy for all food chains? *How do living things depend upon one another to survive? *How does energy flow through a food chain? *What are the basic needs of plants? *How do plants grow and survive in our environment?
Knowledge and Skills: *(NEISD scope & sequence; TEKS; Core; etc.)* TEKS: **(9) Organisms and environments. The student knows that the living environment is composed of relationships between organisms and the life cycles that occur. The student is expected to:** (A) sort and classify *living and nonliving things* based upon whether or not they have basic needs and produce offspring; 1.2 A ask questions about organisms, objects, and events observed in the natural world 1.2 C collect data and make observations using simple equipment such as hand lenses, primary balances, and non-standard measurement tools 1.2 D record and organize data using pictures, numbers, and words 1.2 E communicate observations and provide reasons for explanations using student-generated data from simple descriptive investigations **10** (B) identify and compare the ***parts of plants***; **9** (B) analyze and record ***examples of interdependence*** found in various situations such as terrariums and aquariums 9 (C) gather ***evidence of interdependence*** among living	Materials Needed: Camera, binoculars, magnifying glasses, scissors, glue, clipboards, pencils, Living/Nonliving t-chart, Interdependence-Food Chain Flowchart, Scavenger Hunt; book Who Eats What? Or Food Chains: yarn+

organisms such as energy transfer through food chains and ***animals using plants for shelter*** 1.9 C gather evidence of interdependence among living organisms such as ***energy transfer through food chains***	

Stage 2- Assessment Evidence/Vocabulary	
Performance Tasks: • Students will print their pictures of the plants from the park and in small groups make a poster and label each kind of plant and its characteristics. • Students will draw and label in their science journals the parts of a tree and a plant/bush from the park and complete a Venn Diagram to show similarities and differences.	Vocabulary: Living; nonliving; food chain; interdependence; energy; transfer; source; roots; flower; stem; leaves; plants; properties; environment

Stage 3- Learning Plan

Pre-Field Trip Activity:

- Review vocabulary and concepts.
- Establish rules of conduct on the field trip. Show Stone Oak Park Powerpoint.
- Explain the use and care of the items in the backpack.
- Review field trip expectations.
- Collect field trip permission slip from each student.

Activity #1:

- While walking through the park students will draw and label examples of living and nonliving objects in the correct column of their t-chart.
- Meet back in the amphitheater to share and discuss the examples that the students have discovered. Discuss what characteristics make the objects living or nonliving.
- Have the students sort, cut, and glue picture cards by living/nonliving on Manila paper.

Activity #2:

- Sit quietly outside. Feel the warmth of the sun on your skin. Can you feel the sun's energy? See the sun shining on the plants around you. The plants are busy making food to help them grow. Look carefully. Can you see any animals eating from the plants (drinking nectar, chewing leaves, eating seeds, etc.)? Are there any animals that eat other animals?
- Read the book Who Eats What? Or Food Chains
- YARN ACTIVITY – Have students tape one picture each to their chests. Tell the students they will make a food web. Have them stand in a circle and introduce themselves as the plant or animal they represent. The student with the sun picture should stand in the center. They should look around and ask themselves:
  1. Who in the circle could I give my energy to? (Who might eat me?)
  2. Who in the circle could give me energy? (Whom might I eat?)

  Explain that the ball of yarn represents sunbeams or energy from the sun. Ask the student representing the sun to hold the end of the yarn tightly and toss the ball to someone who can use that energy (a green plant). When a student representing the green plant catches the ball of yarn, he or she should hold a piece of the yarn and throw the ball to someone else that could use the energy. For example, the sun might throw the yarn to the grass, the grass to the grasshopper, and the grasshopper to the meadowlark. After the yarn reaches a carnivore, break it off to represent one food chain. Return the yarn to the sun

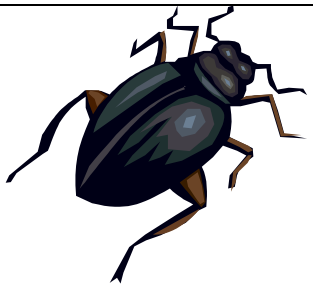
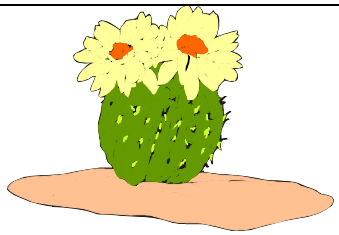
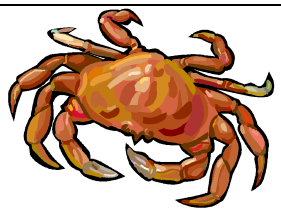
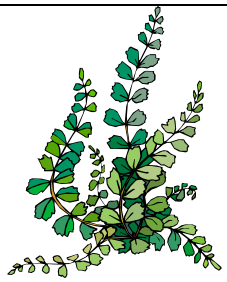
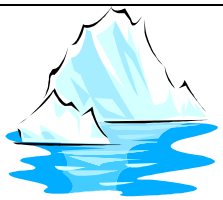
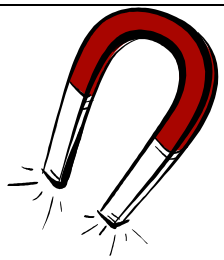
to start another chain. This time the sun might throw its energy to the grass, the grass to the field mouse, and the field mouse to the great horned owl. Again, break the yarn, throw it back to the sun, and have the sun start another chain. Continue making chains until every student holds as least one strand of yarn.

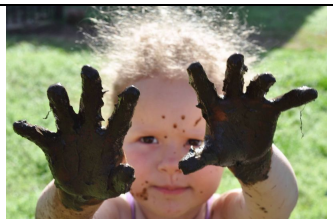
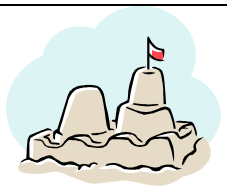
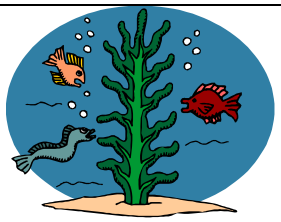
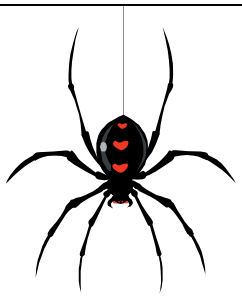
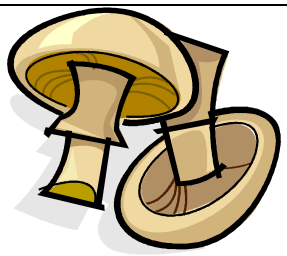
- Each group of students will observe, record and complete "Interdependence – Food Chain Flowchart"
- Students draw pictures and label parts of a food chain that is observed. (Ex. Sun, grass, grasshopper, bird)

Activity #3:

- Each group will observe, record, and take pictures of:
  1. Trees – height and kinds
  2. Bushes – leaves and size
  3. Plants – size, kind, textures
  4. Flowers and its parts
  5. Insects that depend on plants
- Students will complete Scavenger Hunt and discuss questions with teacher.

Living/Nonliving Cards

 beetle	 bird	 breath flame
 bubbles	 cactus	 crab
 fern	 ice	 juice
 magnet	 milk	 mouse

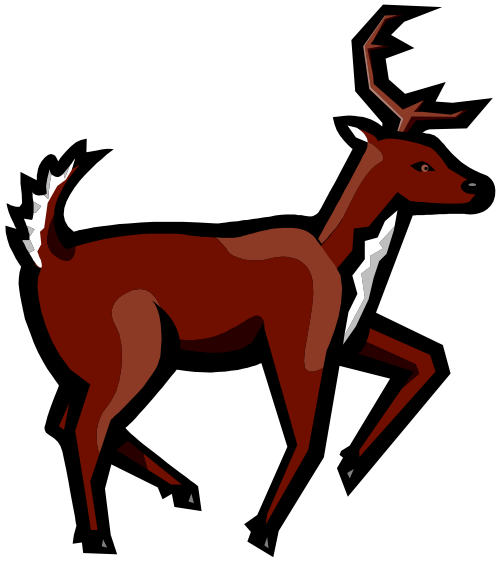
 mud	 Pine Tree	 sand
 seaweed	 spider	 steam
 tears	 toadstools	 water

Food Web Pictures

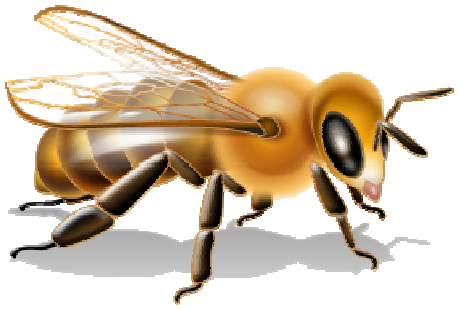
Human

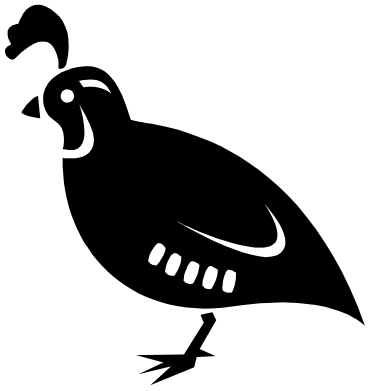
Duck

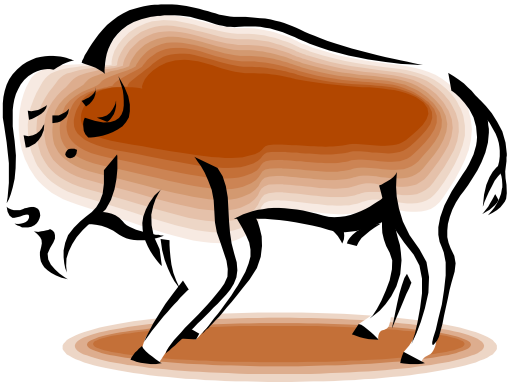
Grass



Deer

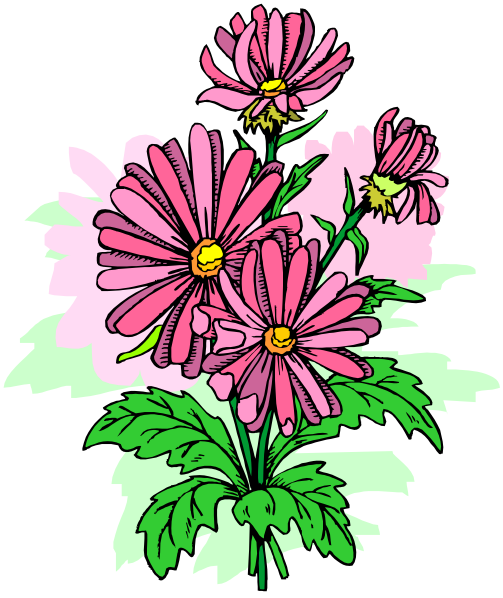
 Owl	 Bee
 Mole	 Beetle

 Prairie Dogs	 Sunflower
 Meadow Lark	 Quail

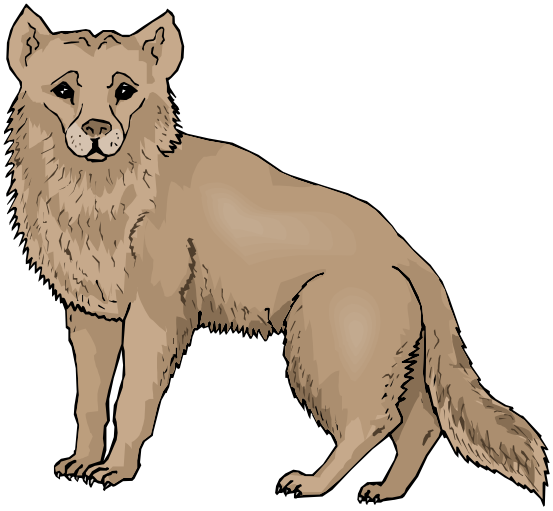


Bison

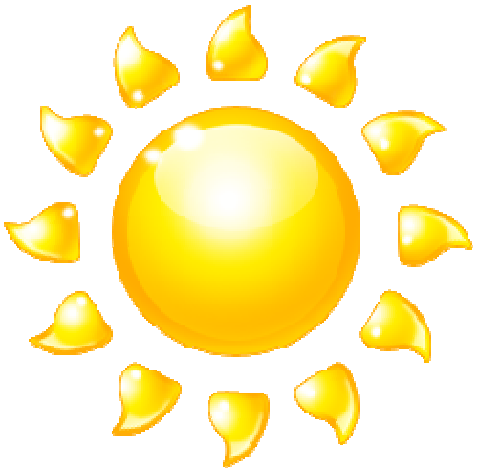
Butterfly

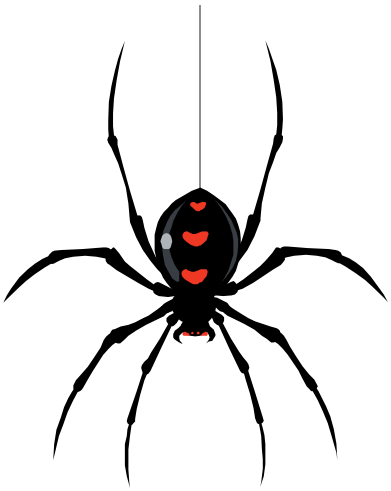
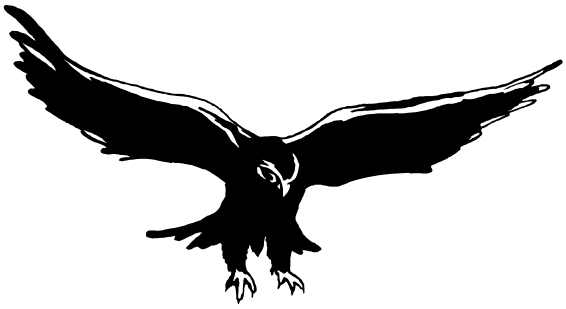
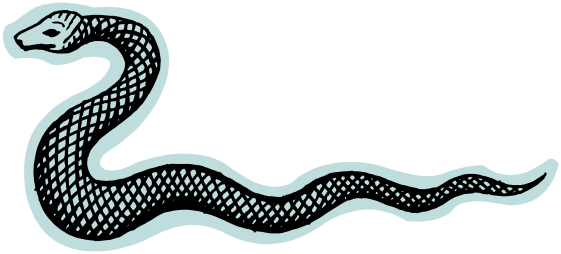


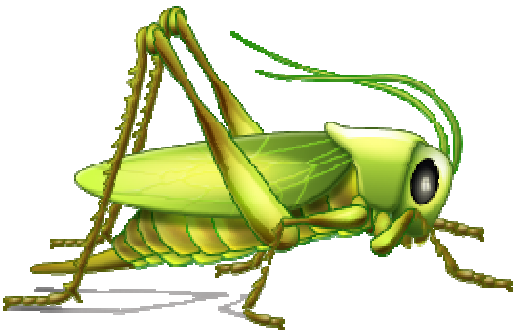
Aster

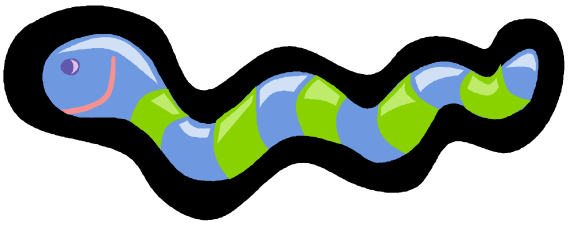
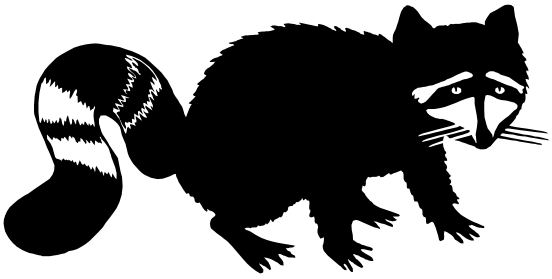


Coyote

 Sun	 Orchard Grass
 Clover	 Rabbit

 Spider	 Hawk
 Snake	 Frog

 Caterpillar	 Fox
 Grasshopper	 Mouse

 Coneflower	 Worm
 Raccoon	 Black-eyed Susan