

Theme: Creature Feature

Suggested Reading: *Brown Bear, Brown Bear* by Bill Martin, Jr. & Eric Carle

The STEM approach starts with a concept that usually comes easily for pre-K children: animals. But don't let the familiarity with animals allow the children to miss the STEM concepts that can be taught, even with such a familiar concept.



TECHNICAL

Activity 1: Our Zoo

Instructions: The children build their own (real or make-believe) animals out of classroom items, such as blocks or modeling clay. It is important that the children choose the mediums and the animals. When the animals are finished, the children compare their animals to see which is the longest, the smallest, etc. Note: the children will be working with their pretend animals during the entire theme and may choose a different animal for each activity.

Teacher Guide: In this activity, it is important for the students to choose their own materials for building the models of their animals. This will better allow you to help the students see the consequences of their choice: that there are some materials that last longer or that enable the children to make a bigger model than some other materials would allow. These "technical" or Technology concepts help form the basis for later STEM educational readiness.

Materials: Blocks, modeling clay, and other construction items including paper and crayons



LITERACY

Activity 2: Create a Class Book

Instructions: The children draw pictures of their animals, and each dictates one sentence to the teacher that tells something about his or her animal. The teacher writes the sentence on each picture and all of the pictures go into a book that is read aloud to the class.

Teacher Guide: While the approach features STEM concepts, literacy is also emphasized as is demonstrated in the second activity, "Create a Class Book." When the children are preparing their drawings, give them a preview of how their drawings and their sentences will be used. The very idea of dictating one sentence concisely enough to be written by the teacher may be a challenge for some children, but working at this is a healthy exercise.

Materials: Paper, crayons



MOVEMENT & MUSIC

Activity 3: Animal Actions

Instructions: The children act out how animals move and the sounds animals make. The teacher plays slow music and the children move their animals to the music. There are no materials for this activity.

Teacher Guide: Allowing children at this age to physically move as a part of an activity is very beneficial. "Animal Actions" affords this opportunity. This activity will require some planning for the teacher to assemble 2-3 excerpts of music of widely different tempos. Music is often associated with mathematics and this activity is no exception. The correspondence between tempos and how the children react may form the basis for later understanding of algebraic correspondence.



HEALTH & NUTRITION

Activity 4: Healthy Animal Snack

Instructions: The children create animals from carrots, celery sticks (or pretzel sticks) and cheese cubes. They should be sure to gobble them all up!

Teacher Guide: Even nutrition can be presented as a STEM (in this case, science) concept as in “Healthy Animal Snack.” While the children are creating their animals, teachers may want to discuss the choice of materials as all being healthy foods, and what we mean (and here’s the science) when we say something is healthy. We mean, of course, that something is good for our body. But what does that mean? A discussion about how certain foods inside our bodies help our bodies to work better and others to work not so well can begin to form the foundation of a scientific understanding of nutrition.

Materials: Vegetable sticks, pretzel sticks, and block cheese cubes



SPATIAL CONCEPT

Activity 5: Up and Down

Instructions: Each child chooses an animal. The teacher uses the spatial concepts of “up” and “down” as an exercise. The teacher tells the children to stand up and sit down like their animals would. No materials are needed for this activity.

Teacher Guide: The spatial concepts discussed in this activity form the basis of much of modern engineering. Urging your children to be creative with how they express these concepts will begin to form foundations for this type of study later in their education.



ADULT & CHILD TIME

Come See Our Zoo

Instructions: The children share with the adults their zoo, the animals they built, and the class book they made. There are no materials for this activity.

Teacher Guide: Children love to show off their accomplishments, especially to caring adults. The Adult/Child Time activities in each Theme provide regular opportunities for the children to get one-on-one attention from an adult. The children are able to engage in a conversation that builds their confidence and self-esteem. “Come See Our Zoo” gives the children an opportunity to share what they worked on in this Theme: the animals they built, the class zoo, and the class book. When the adults arrive in your classroom, take a few minutes to explain what they will be doing with the children. Give the adults a suggestion of what to talk about with the children relative to the activity of “Come See Our Zoo.”



TAKE HOME

Animal Walk

Instructions: The adult at home takes the child on a walk through the neighborhood or local park, noting the different animals that live there (squirrels, cats, dogs, birds). The adult and child talk about what is different and what is the same with all the animals they see. There are no materials for this activity.

Teacher Guide: Copy the note from the Resource section and send it home with each child.

Transitions: Creature Feature

Comprised of a series of simple activities, transitions are meant to continue the learning of the week in every situation. Transitions are great pick-me-ups and can be facilitated while walking, cleaning, moving, etc. Try your own!



Movement

Instructions: The children pretend to be an animal that is sneaking silently down the hallway.

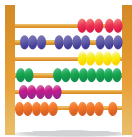
Teacher Guide: Let each child choose which animal they wish to be to “sneak down the hallway.”



Problem Solving

Instructions: The children pretend they are animals. They each sit in their spot the way their chosen animal would. They can make sounds like their animal.

Teacher Guide: As an aid to getting children to sit and be quiet for the next Activity, ask the children to think (but don't tell others!) about an animal and pretend they are that animal sitting “in your spot.”



Math (similarities and differences)

Instructions: The children pretend to be an animal; each child finds another animal that is like (similar to) them. The teacher instructs the class to tell their new animal friend what kind of animal they are.

Teacher Guide: Encourage the children to walk around, engaging other children as to what kind of animal they are and thinking about how each animal is different or the same. You may want to follow this up with the Problem Solving Transition (just above).



Communication

Instructions: The children each find a partner and tell them where their animal lives. The teacher dismisses the children back to their seats as their chosen animal by where they live: trees, caves, ground, woods, etc.

Teacher Guide: If you have time after this Transition and each child is in his/her seat, you may want to ask for volunteers to explain the kind of home in which they are now sitting (tree, cave, ground, woods, etc).



Teamwork

Instructions: The children pair up. The teacher gives a pliable object, like a rolled up sheet of newspaper, to each pair of children. The children pretend to be animals and each pair works together to carry their object the way their chosen animal would.

Teacher Guide: You may have to provide some examples for the children: a kangaroo carrying the object in its pouch (a pocket on their clothing or inside a buttoned shirt/blouse); a monkey carrying the object on its back like a baby monkey; penguins moving their eggs between their feet. Many animals carry things in their mouths, but you may want to suggest that if the team chooses this mode of transportation, they should place the object under their neck to avoid getting newsprint in their mouths.

Transitions: Creature Feature



Decision Making

Instructions: The children pretend to be animals. The teacher dismisses a few children at a time to move like their animal to the whole group area. Those who are not moving can guess what kind of animals are moving.

Teacher Guide: You may want to encourage the small group of children to choose the animal that they want to mimic or assign them one of the following; tiger, elephant, bear, fish, bird. Tell the children that they may use noises like the animal or motions or type of walk or they may mimic body parts (like the elephant's trunk) as clues for their classmates to guess.



Movement and Sound

Instructions: The children pretend to be animals. The teacher explains that animals make both loud and quiet sounds. The children make quiet sounds or loud sounds based on prompts from the teacher as they move to different areas.

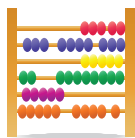
Teacher Guide: As an aid for quieting children after a noisier Activity, ask the children to make the quiet sound of their choice: of a bird, a cat, a dolphin, a puppy dog or a pig.



Decision Making

Instructions: The children pretend they are the parent of an animal. As they move from one area to another, the teacher tells them to think of what they might feed their baby animal.

Teacher Guide: This Transition can be used when you are taking your class to a different location in your school. It gives the children a specific focus to think about the animal they built in Activity 1 as they are Transitioning. Upon arrival, ask a few children to share what they decided their animal would like to eat.



Math (similarities and differences)

Instructions: The children pretend to be animals and find another animal that is different from them. The teacher instructs the children to show their friend how they sleep, how they eat and how they talk or communicate.

Teacher Guide: You may want to provide the children with some choices of animals to ensure that they find other children who are pretending to be animals that are very different; for example: giraffes, pigs, elephants, birds, fish, or monkeys.



Teamwork

Instructions: The children pretend to be animals and gather around the "waterhole" for a drink. Some animals may go for a swim while others may fly over the water.

Teacher Guide: Use this Transition to encourage the children to move to a different location and form a circle holding hands. You can also leave the "arrival at the waterhole" open ended; some children may pretend their animal is swimming, others may fly over the waterhole.

Feedback Loop Questions

Here are some examples of open-ended questions that will help the children internalize each week's concepts. Remember that it is your job as the facilitator to allow the children to connect the learning dots themselves. Please supplement the provided questions with your own.

What animal would you like to be? Why?

How could you show us how your animal moves?

**What is another animal that is like (similar to) yours?
Different from yours?**

How does your animal get along with other animals? Why?

How do you think your animal eats and drinks?

Do all animals get along?

What color is your animal?

Does your animal have a pattern on its fur or skin?

What would your animal look like if you could make it a different color and pattern?

How do you think your animal would connect to all the other animals?

Reflections: Creature Feature

This is a free space where you can make notes or observations about the activities of the module.

Activity 1: Our Zoo

Activity 2: Create a Class Book

Activity 3: Animal Actions

Activity 4: Healthy Animal Snack

Activity 5: Up and Down

Adult & Child Time: Come See Our Zoo

Take-Home Component: Animal Walk

Transitions:

Other: