

# CLASSIFICATION OF ANIMALS Grade Band: 4-5 Content Focus: Theatre & Science



## LEARNING DESCRIPTION

In this lesson, students will classify animals based on their attributes and use their voices and bodies to personify their assigned animals. They will then participate as "Classification Experts" on the game show "Connect Your Animal," helping reunite lost animals with their families. Through scientific inquiry, students will classify their own organisms and assist game contestants in classifying theirs. By engaging in this process, students will become adept at classification, much like real scientists.

## **LEARNING TARGETS**

Essential Questions	"I Can" Statements
	I can accurately classify assigned animals and identify characteristics used in identification.
How can we classify animals based on their attributes?	I can accurately use my voice and body like my assigned animal when performing.



# **GEORGIA STANDARDS**

Curriculum Standards	Arts Standards
Grade 5: S5L1. Obtain, evaluate, and communicate information to group organisms using scientific classification procedures. a. Develop a model that illustrates how animals are sorted into groups (vertebrate and invertebrate) and how vertebrates are sorted into groups (fish, amphibian, reptile, bird, and mammal) using data from multiple sources.	Grade 5 TA5.CR.1 Organize, design, and refine theatrical work. TA5.PR.1 Act by communicating and sustaining roles in formal and informal environments.

# **SOUTH CAROLINA STANDARDS**

Curriculum Standards	Arts Standards
Grade 4: 4-LS1-1. Construct an argument that plants and animals have internal and external structures that function together in a system to support survival, growth, behavior, and reproduction.	Anchor Standard 1: I can create scenes and write scripts using story elements and structure.
	Anchor Standard 3: I can act in improvised scenes and written scripts.
	<b>Anchor Standard 8:</b> I can relate theatre to other content areas, arts disciplines, and careers.

# **KEY VOCABULARY**

Content Vocabulary	Arts Vocabulary
Animals - Many-celled organisms that do not make their own food, have no cell walls, and have no chloroplasts	<ul> <li><u>Theater</u> - Dramatic literature or its performance; drama</li> </ul>
<u>Characteristic</u> - A feature passed from a parent to an offspring (scaly skin, fins, rough skin etc)	<ul> <li><u>Character</u> - A person, an animal or other figure assuming human qualities, in a story</li> </ul>
Classification - The systematic grouping of organisms by observed similarities	<ul> <li>Voice – An actor's tool, which we shape and change to portray the way a character speaks or sounds</li> </ul>
Warm-blooded - Animals whose body temperature is internally regulated	<ul> <li>Body – An actor's tool, which we shape and change to portray the way a character looks, walks, or moves</li> </ul>
Cold-blooded - Animals whose body temperature is not internally regulated	<u>Dialogue</u> – Conversation between characters



- <u>Vertebrate</u> Organisms that have a series of bones joined together with a flexible material called cartilage
- <u>Invertebrate</u> Animals that do not have a backbone
- <u>Scene</u> The dialogue and action between characters in one place for one continuous period of time
- <u>Improvisation</u> A creation that is spoken or written without prior preparation
- Monologue A speech by a single character in a play, film, or other dramatic work; often used to give the audience deeper insight into the character's motivations and feelings
- Ensemble All the parts of a thing taken together, so that each part is considered
- <u>Tableau</u> A "living picture" in which actors pose and freeze in the manner of a picture or photograph

#### **MATERIALS**

- Photos of animals representing a variety of animals (one per student)
- Game cards with host questions

#### **INSTRUCTIONAL DESIGN**

### **Opening/Activating Strategy**

- Start with a general physical warm-up to get the students' bodies ready. Use exercises such as:
  - **Stretching:** Stretch all major muscle groups.
  - Shaking Out Limbs: Shake out arms, legs, and the whole body to release tension.
  - **Energy Passes:** Stand in a circle and pass a clap or a simple motion around to build group focus and energy.
- Explain that students will explore different characters by changing their walk and physicality. Encourage them to think about how their character's age, status, mood, and personality influence their movement.
  - Begin with simple prompts to get students thinking about different ways to walk.
     Call out various types of characters and ask students to walk around the space embodying those characters. Examples include:
    - An elderly person with a cane
    - A proud soldier
    - A sneaky thief
    - A graceful dancer



Have students return to their seats.

#### **Work Session**

- Review classification with students:
  - What is classification and why do we classify things? Ask students for examples of things that we classify, such as types of foods or sports.
  - Review the Animal Classification Order Kingdom, Phylum, Class, Order, Family, Genus, Species.
    - Kingdoms are large groups, encompassing millions of kinds of organisms each. All animals are in one kingdom (called Kingdom Animalia); all plants are in another (Kingdom Plantae).
    - Species are the smallest groups. A species consists of animals of the same type who are able to breed and produce young of the same kind.
  - Some of the ways we classify living things include:
    - Is it single celled?
    - Is the nucleus in the cell?
    - Does it make its own food?
    - Does it eat food?
    - Does it reproduce sexually?
  - Old blooded vs. warm blooded:
    - Cold blooded animals include fish, amphibians, reptiles, and all invertebrates.
    - Warm blooded animals include birds and animals not in the above list.
  - Vertebrate vs. Invertebrates:
    - Vertebrates are animals with backbones, including humans, dolphins, flamingos, alligators, fish, and frogs. Our vertebrate movement will be:
      - "ver" clap elbows to hands flat together
      - "te" thumbs swing out to the side
      - "brate" both palms touch shoulders/back
- There are six Vertebrate Groups: Birds, Mammals, Fish, Reptiles, Amphibians, Arthropods (Insects and Arachnids).
  - BIRDS: Animals that have two wings, two feet and are the only animals that have feathers. Some birds fly, some run and some swim. This group includes blue birds, flamingos, macaws, ostriches, chickens, etc.
    - Movement:
      - "bird" flap arms like bird wings and stop feet one at a time
  - MAMMALS: An animal that feeds milk to its young and has hair or fur on its body. Some examples are whitetail deer, squirrel, pig, dog, cat, bears, chimpanzees, dolphin, and whale.
    - Movement:
      - "mam" hug your body for warmth and rub arm like fur
      - "mal" pretend to suck thumb
  - o FISH: Animals that live in water, breathe with gills, and are covered with scales.
    - Movement:
      - "fish" hands on cheeks, top of hand to cheek with fingers splayed out for gills; purse lips together and open like fish lips
  - REPTILES: Animals with rough, dry skin that may have scales or hard plates. Some examples are alligators, turtles, and giant tortoises.



- Movement:
  - "rep" cross arms and scratch skin on upper arms
  - "tiles" knock on top shoulders
- AMPHIBIANS: Animals with smooth, wet skin that typically begin life in the water, breathing with gills. They metamorphosize into an adult that lives on land, and give birth by laying eggs. Some examples are frogs, toads and salamanders.
  - Movement:
    - "am" stroke cheeks with both hands
    - "phi" hands in front and squat like a frog
    - "bian" come up and stick tongue out to catch a fly then say "ribbit"
- INVERTEBRATES: Cold blooded animals without backbones. Some examples are butterflies, clams, octopus, worms, starfish, and ants.
  - Movement:
    - "inver" forearms cross and sway in front of body
    - "te" arms out like butterfly wings
    - "brate" fingers at hips like octopus arms
- Some invertebrate groups:
  - MOLLUSKS: Cold-blooded animals with soft bodies; most have a hard shell.
     Some examples include octopus, slugs, snails, squids and clams.
    - Movement:
      - "mol" arms crossed in front of body like cold
      - "lus" soft pat on upper arms
      - "ks" fist knock on back of shoulders
  - ECHINODERM: Cold-blooded animals with bodies with rough skin and sharp spines. Some examples are sea stars, sea urchins and sand dollars.
    - Movement:
      - "echi" arms crossed in front of body like cold
      - "no" scratch upper arms
      - "derm" put fingers out like claws
  - ANNELIDS: Cold-blooded animals with soft bodies with sections. Some examples are worms, leeches and clamworms.
    - Movement:
      - "an" arms crossed in front of body like cold
      - "ne" soft pat on upper arms
      - "lid" palms out front a foot apart and move from right to left (2 times)
  - CNIDARIANS: Cold-blooded animals with symmetrical, sac-like bodies and true mouths; they are able to eat/digest food. Some examples are hydras, polyps, jellyfishes, sea anemones, and corals.
    - Movement:
      - "cni" forearms together in front of body and hands swing out (symmetry)
      - "dar" arms bowed out around stomach
      - "ians" mouth moving like eating
  - ARTHROPODS (means "jointed leg"): Cold blooded animals with exoskeletons and jointed legs. Some examples include spiders, crabs, lobsters, ladybugs, centipedes, and millipedes.
    - Movement:
      - "arth" knock on stomach



- "ro" pointer fingers half up
- "pod" pointer finger all the way up and shiver
- ARACHNIDS: Arthropods with exoskeletons, two different body regions (head and abdomen), and eight legs; includes spiders, scorpions, ticks, mites, harvestmen, and crabs.
  - Movement:
    - "ar" two fist on top of each other
    - "rach" eight fingers open
    - "nid" all fingers wiggling
- INSECTS: Arthropods with three different body regions (head, thorax, abdomen), six legs attached to thorax (middle), and sometimes wings; includes grasshoppers, bees, butterflies, flies, beetles, and ladybugs.
  - Movement:
    - "in" three fingers open
    - "sect" six fingers coming off both sides of chest, then hands become wings
- Animal Classification: Who am I?
  - Hand out pictures of different types of animals (one per student).
  - Discuss how a scientist or zoologist examines animals.
  - Ask students to observe their animals as if they are zoologists.
  - Students should look at all of the animal's features so that they can properly classify this animal in the group that it belongs to.
  - Using movement: Now, tell students to sit like their animal sits or stands. Move like their animal moves. Pretend to eat like their animal eats.
  - Tell students to give their animal a name.
  - Using voice: On the count of three, at the same time and aloud, tell students to say
    what their animal ate for breakfast using their animal's voice, which should be
    different from their own voice (high or low or fast or slow; fast or slow, etc.).
  - Now tell students to sit as their animal would sit and classify their animal.
- Ask students to write down the answers to these questions on the paper with their animal picture:
  - What animal are you?
  - Is it a vertebrate or invertebrate? Backbone or no backbone?
  - If a vertebrate, go through the types of vertebrates and decide:
    - Are you cold blooded or warm blooded?
    - Describe your skin (hairy, scaly, furry, rough, wet, dry, feathers, etc.).
    - Do you have scales or a hard plate?
    - Do you have wings and two feet?
    - What do you eat?
    - Do you live on land or in the water?
  - o If an invertebrate, go through questions that correspond to invertebrates.
  - Now ask students to write down two or three elements that make their animal a part of their classifying group.
  - Sitting like their animal would sit to show the pattern and shape, students should introduce themselves to their neighbor using the name they selected and the voice they created for their animal.
- "The Animal Kingdom Classification Connection Game"
  - Set up four chairs in the front of the classroom in a line facing the audience/students.



- Tell students that they are going to participate in a live television game show called "The Animal Kingdom Classification Connection Game" where lost animals are connected back with their loved ones.
- Ask four students to be the starring animals and walk up and sit in the four seats as their animal would move.
- The teacher will act as the game show host and will have two assistants Zoologists/students come up to help classify the animals.
- Ask two students to be the assistant Zoologists.
- Have them make up names and introduce themselves to the audience using a different voice.
- Have each animal and each expert say hello to the audience using their animal voice
- Say, "Today we are going to classify each animal on our show and get them back home! We will start by talking to one animal at a time. We will ask each animal some questions one at a time to help us identify its group of origin."
- Hand the assistant zoologists two sets of questions (one for vertebrates, one for invertebrates):
  - Questions: Are you a vertebrate or an invertebrate?
  - VERTEBRATE LIST:
    - Are you cold blooded or warm blooded?
    - Describe your skin? (hairy, scaly, furry, rough, wet, dry, feathers, etc.)
    - Do you have scales or a hard plate?
    - Do you have wings and two feet?
    - What do you eat?
    - Do you live on land or in the water?
  - INVERTEBRATE LIST:
    - Do you have an exoskeleton?
    - Do you have sharp spines?
    - Do you have joined legs?
    - Do you have a segmented body? If so, how many segments?
    - Do you have wings?
    - Do you have legs? If so, how many legs?
  - After the questions are asked, the experts can state their answer and the audience will make a ding sound if they are correct and make a buzz sound if they are incorrect.
  - If correct, the animal gets to do a dance moving as their animal would move back to his/her seat.

#### Closing/Reflection

- Close the lesson with Animal Families Unite.
- Have students find the other animals in their classification and go to different areas in the room
- Once all groups are together go around the room and have each group chant their classification and then become their animals with sounds.
- Have the students tell the features that apply to their classification.

# **ASSESSMENTS**



#### **Formative**

Teachers will assess students' understanding of the content throughout the lesson by observing students' participation in the activator, discussion of animal classification, ability to classify animals, and use of body and voice to personify their animal.

#### **Summative**

### **CHECKLIST**

- Students can accurately classify assigned animals and identify characteristics used in identification.
- Students can accurately use their voices and bodies like their assigned animal when performing.

### **DIFFERENTIATION**

**Acceleration:** Students can write a dialogue between their animals introducing themselves and the characteristics that make them part of their classification group.

#### Remediation:

- Provide a graphic organizer to help students structure their responses and classify their animals.
- Allow students to work with a partner to classify their animal.

#### ADDITIONAL RESOURCES

\*This integrated lesson provides differentiated ideas and activities for educators that are aligned to a sampling of standards. Standards referenced at the time of publishing may differ based on each state's adoption of new standards.

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