

Instructional Recipe

How are animals alike and different?

Kindergarten, Science & Language Arts



Online research and information resources available through a partnership between the Texas State Library and Archives Commission, the Texas Education Agency and Education Service Center, Region 20 <http://web.esc20.net/k12databases>

Step 1 – Ask

Objectives: Students will identify and describe parts of animals including wings, feet, heads and tails. Students will sort animals according to their physical characteristics.

Introduction: Identify parts of students' bodies including their heads, feet, hands, arms, and legs. You may want to introduce this concept by dancing the "Hokey Pokey." Discuss how body parts function.

Display pictures of a variety of animals. Have student volunteers describe what they see in each picture. Note the characteristics/features/parts of each animal. Begin to build vocabulary related to animal parts (wings, feet, heads, tails).



"American robin." Online Photograph. Encyclopædia Britannica Online School Edition. 2 Aug. 2008 <<http://school.eb.com/elementary/art-87180>>.

Ask:

- ★ What different parts does a _____ have? (insert names of various animals)
- ★ What other animals have similar parts?
- ★ How does a _____ use its _____? (e.g., How does a bird use its wings?)
- ★ How are a _____ (name of animal) and a _____ (name of animal) alike/different?

Vocabulary:

- ★ parts
- ★ wings
- ★ feet
- ★ heads
- ★ tails

Kindergarten Science TEKS:
(10) **Organisms and environments.** The student knows that organisms resemble their parents and have structures and processes that help them survive within their environments. The student is expected to:
(A) sort plants and animals into groups based on physical characteristics such as color, size, body covering, or leaf shape; (B) identify parts of plants such as roots, stem, and leaves and parts of animals such as head, eyes, and limbs;

English/Language Arts TEKS:
(K.3) **Listening/speaking/audiences/oral grammar.**
(A) choose and adapt spoken language appropriate to the audience, purpose, and occasion, including appropriate volume and rate.

Technology Application TEKS:
(7) **Solving problems.**
(A) use software programs with audio, video, and graphics to enhance learning experiences.

Step 2 – Investigate

Read and discuss selected articles with students. If possible, use a projector or interactive whiteboard to project the images. Discuss characteristics/parts of these animals. Use Searchasaurus to locate articles on additional animals.

K-12 Databases Resources:

- ★ [Frogs of the World!](#) *Scholastic News -- Edition 1*, Apr2005, Vol. 61 Issue 7, p2-3, 1p, 6c; Reading Level (Lexile): 350; (AN 16406887)
- ★ [A Parrotfish Is a Fish.](#) *Scholastic News -- Edition 1*, May/Jun2004, Vol. 60 Issue 8, p4-4, 1p; Reading Level (Lexile): 500; (AN 12866895)
- ★ [Snow Monkeys.](#) (cover story) *Scholastic News -- Edition 1*, Jan2006, Vol. 62 Issue 4, p1-3, 3p; Reading Level (Lexile): 410; (AN 19263262)
- ★ [A Pack and Its Pups.](#) *Scholastic News -- Edition 1*, May/Jun2006, Vol. 62 Issue 8, p2-4, 3p; Reading Level (Lexile): 530; (AN 20553136)
- ★ [Many Kinds of bears.](#) *Scholastic News -- Edition 1*, Oct2006, Vol. 63 Issue 2, p4-4, 1p; Reading Level (Lexile): 490; (AN 22648444)
- ★ [Pocket Babies.](#) *Scholastic News -- Edition 1*, Mar2007, Vol. 63 Issue 6, p1-3, 3p; Reading Level (Lexile): 430; (AN 24187153)
- ★ [America's Bird.](#) *Scholastic News -- Edition 1*, Feb2007, Vol. 63 Issue 5, p1-4, 4p; Reading Level (Lexile): 600; (AN 23723342)

- ★ Visit Encyclopaedia Britannica, click on [Britannica Learning Zone](#), click on Explore.

Books: animal books featuring a variety of photographs

Step 3 – Create


Create a large classroom chart on butcher paper. Affix pictures of various animals in the left column, and work together to check off the body parts each animal has. Compare various animals' characteristics.

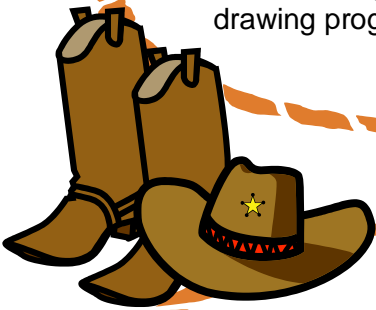
Animal (name and picture)	Wings	Head	Tail	Feet

🔗 Technology Link – Use clip art pictures of animals inserted into a chart, such as the one above, created in Microsoft Word and displayed on a Smart Board.

Step 4 – Discuss


- ★ Students will draw several different animals and label specified parts (e.g., wings).
- ★ Students will share one of their drawings with the class, correctly naming and describing specified parts of animals. As students share their drawings, encourage them to compare various animals' parts/characteristics.
- ★ Next, draw a Venn Diagram or T-Chart on a large sheet of butcher paper. Have students sort their animal drawings into different groups according to their physical characteristics (i.e. body covering, number of legs, size, etc.) Tape or tack the drawings onto the butcher paper. Watch to see that each student can place his/her drawing into the appropriate group. Repeat this activity several times using different characteristics for sorting. Ask students, "How else could we sort the animals?"

 Technology Link - Students may create their animal drawings using a drawing program such as Kid Pix.






Step 5 – Reflect

Allow students to present their projects to the rest of the class. Use the following suggested rubric to assess the students' work. Make sure that the students are familiar with the rubric *before* they begin creating their project. They should refer to the rubric repeatedly to monitor their progress in creating their project.

 Technology Link: You can also create your own rubric with your students at <http://rubistar.4teachers.org/index.php>.

Rubric

Animal Parts—Drawing & Sharing with the Class

			
Drawings— Content	Drew and labeled all animal parts correctly.	Drew animals but labeled some parts incorrectly.	Drew animals but labeled most parts incorrectly or did not label parts at all.
One Drawing— Sharing with the Class	Named animal and described all animal parts correctly.	Named animal and described some parts correctly.	Did not name animal and/or did not describe most parts correctly.
Sorting - Sorting animals by characteristics	Sorted his/her animal correctly several times	Sorted his/her animal correctly at least one time.	Could not sort animal correctly into a group.
Sharing— Voice	Student spoke clearly and was easy to hear and understand.	Student spoke clearly some of the time but was sometimes difficult to hear or understand.	Student did not speak in a way that was clear or easy to understand.