



From Wolf to Dog

Lesson Overview

GRADE LEVEL: 5-8

TOPIC/SUBJECT MATTER: Life Science

TIME ALLOTMENT: Two 45-minute class periods

OVERVIEW:

During this video-enhanced lesson, students will learn that all dogs came from one ancestor- the wolf. Students will watch and discuss video segments from the NATURE film "Dogs that Changed the World," and explore different theories about how this transformation happened. Students will learn about different breeds of dogs and create a book with pictures and information about a variety of dog breeds. In the culminating activity, students will interview a dog owner and create a poster and/or a presentation about his/her dog.

MEDIA RESOURCES

Video

Clip 1: From Wolf to Dog

Reflections about the transformation from wolf to dog

Clip 2: The Speed of Change

Exploring the speed of evolution

Clip 3: Today's Dog

A quick look at the dogs of today



Websites

American Kennel Club (http://www.akc.org/breeds/index.cfm?nav_area=breeds)

This Web site includes information about the internationally-recognized breeds.

National Geographic Web sites' Animal Section
(<http://animals.nationalgeographic.com/>)

This Web site features many photos of animals including photos of dogs and wolves, which can be used in this lesson.

Standards:

National Science Education Standards, Grades 5-8
(http://www.nap.edu/openbook.php?record_id=4962)

LIFE SCIENCE: Content Standard C

As a result of their activities in grades 5-8, all students should develop understanding of

- **Regulation and behavior**

- o An organism's behavior evolves through adaptation to its environment. How a species moves, obtains food, reproduces, and responds to danger are based in the species' evolutionary history.

- **Diversity and adaptations of organisms**

- o Millions of species of animals, plants, and microorganisms are alive today. Although different species might look dissimilar, the unity among organisms becomes apparent from an analysis of internal structures, the similarity of their chemical processes, and the evidence of common ancestry.

- o Biological evolution accounts for the diversity of species developed through gradual processes over many generations. Species acquire many of their unique characteristics through biological adaptation, which involves the selection of naturally occurring variations in populations. Biological adaptations include changes in structures, behaviors, or physiology that enhance survival and reproductive success in a particular environment.



MATERIALS

For each student:

- "Dog Breed" Student Organizer
- "Dog Interview" Student Organizer

For the class:

- Photographs of a few very different looking dogs, such as a Chihuahua, a Saint Bernard and a Greyhound. (A good source for these photos is the [American Kennel Club Web site](http://www.akc.org/): <http://www.akc.org/>.)
- Two photographs of a wolf (full-body and close-up of head)

OBJECTIVES

Students will be able to:

- Explain that all dogs evolved from wolves;
- Discuss theories about how the wolf evolved into the dog;
- Explain how quickly the transformation from wolf to dog might have happened;
- Understand how breeding animals for specific traits can result in the altered look and behavior of the descendants of those animals;
- Describe different breeds of dogs;
- Discuss the behaviors, skills, appearance and personality of one particular dog and explain whether the dog "fits in" with the general description of the breed.

Prep for Teachers

Prior to teaching this lesson, you will need to:

Preview all of the video segments and Web sites used in the lesson.

Download the video clips used in the lesson to your classroom computer, or prepare to watch them using your classroom's Internet connection.

Bookmark the Web sites used in the lesson on each computer in your classroom. Using a social bookmarking tool such as <http://delicious.com/> or www.diigo.com (or an online bookmarking utility such as www.portaportal.com) will allow you to organize all the links in a central location.



Print out a copy of the "Dog Breed" and "Dog Interview" Student Organizers for each student.

Print out photographs of a few (3-4) very different looking dogs, such as a Chihuahua, a Saint Bernard and a Greyhound. (A good source for these photos is the [American Kennel Club Web site](http://www.akc.org/): <http://www.akc.org/>.)

Print out two photos of a wolf - a full body shot and a close-up of its head. (One good place to look for wolf photos is the [Animal Section of the National Geographic Web site](http://animals.nationalgeographic.com/): <http://animals.nationalgeographic.com/>.)



NATURE[®]

Dog Breed Student Organizer

Name of group: _____

Brief description of group: _____

Name of breed: _____

Brief description of the breed (physical traits, skills, personality, how it helps people, etc.): _____

Adaptations that help this breed (specialized senses, body type, fur thickness, etc.):

Other interesting facts about the breed:

Drawing or photo of the breed:



My Name: _____ Date of Interview: _____

Dog Interview Student Organizer

Use this sheet to help you interview the dog's owner. Feel free to make up more questions.

Dog's Name: _____ **Breed:** _____

[Note: If the dog is a mixed breed, try to identify which breeds are the most dominant.]

How long have you had the dog? _____

Why did you chose this particular dog (breed)? _____

Describe the dog's personality: _____

What are some examples of your dog's special skills or talents? (Listen for stories about the dog's superior sense of hearing, superior sense of smell, etc.)

Is this the first dog you have ever had? _____

What gives the dog the most pleasure?

What frightens the dog? _____



Additional Questions:

Question:

Answer:

Question:

Answer:

Write additional information on the back of this sheet.