

<p>Essential Understandings</p>	<ul style="list-style-type: none"> ▪ Animals can be classified by their characteristics. ▪ Animals depend upon one another and their environment. ▪ Living things change over time.
<p>Essential Questions</p>	<ul style="list-style-type: none"> ▪ How are animals similar and different? ▪ How are animals classified? ▪ How do animals adapt to their environment? ▪ How do animals depend on their environment for survival? ▪ How do living things change over time?
<p>Essential Knowledge</p>	<ul style="list-style-type: none"> ▪ Understand the characteristics of each animal group: <ul style="list-style-type: none"> ○ <u>Amphibians</u>: cold blooded, moist skin, breathe with gills and then develop lungs, metamorphosis, hatch from eggs ○ <u>Arthropods</u>: exoskeleton, a segmented body, jointed legs, no backbone, cold blooded ○ <u>Birds</u>: backbone, warm blooded, wings, breathe with lungs, hatch from eggs, beak, two legs, feathers ○ <u>Fish</u>: backbones, breathe with gills, have fins, covered with scales, hatch from eggs, cold blooded ○ <u>Mammals</u>: warm blooded, covered with fur/hair, born live, breathe with lungs, have backbones, nurse their young ○ <u>Reptiles</u>: scales, cold blooded, breathe with lungs, back bone, hatch from eggs ▪ Understand the lifecycle of each animal group: <ul style="list-style-type: none"> ○ <u>Amphibians</u>: egg, tadpole, adult ○ <u>Arthropods</u>: varies <ul style="list-style-type: none"> ▪ egg, larvae, pupae, adult (butterfly, ant, moth) ▪ egg, egg sac, spiderling, adult ○ <u>Birds</u>: egg, baby, adult ○ <u>Fish</u>: egg, fry, adult ○ <u>Mammals</u>: baby, young, adult ○ <u>Reptiles</u>: egg, baby, adult ▪ Animals depend on their habitat for survival. ▪ Changes in habitat affect animals. ▪ Fossils can tell us about the animals that lived in the past, conditions of the habitat, climate, etc.
<p>Vocabulary</p>	<ul style="list-style-type: none"> ▪ <u>Terms</u>: <ul style="list-style-type: none"> ○ characteristics, classified, environment, similar, different, survival, amphibian, bird, fish, arthropod, mammal, reptile, metamorphosis, exoskeleton, fossil, larvae, pupae
<p>Essential Skills</p>	<ul style="list-style-type: none"> ▪ Describe the characteristics of an animal group. ▪ Compare and contrast animals and animal groups. ▪ Describe the stages in a life cycle ▪ Identify ways in which animals depend upon the environment.

<p>Related Maine Learning Results</p>	<p><u>Science</u></p> <p>A. Classifying Life Forms</p> <ol style="list-style-type: none"> 2. Describe characteristics of different living things. 3. Explain, draw, or otherwise demonstrate the life cycle of an organism. 4. Design and describe a classification system for objects. <p>B. Ecology</p> <ol style="list-style-type: none"> 1. Identify ways that organisms depend upon their environment. 2. Describe how almost all animals' food can be traced back to plants. 3. Give examples of how one change in a system affects other parts of the system. 4. Describe different ecological system on earth. <p>C. Cells</p> <ol style="list-style-type: none"> 1. Demonstrate that living things are made up of different parts. 2. Demonstrate an understanding that plants and animals need food, water, and gases to survive. <p>D. Continuity and Change</p> <ol style="list-style-type: none"> 1. Explain how fossils show the existence of past life. 2. Identify characteristics that help organisms live in their environment. 3. Draw or describe ways in which an organisms can change over its lifetime, sometimes in predictable ways (e.g., butterfly, frog). 4. Describe ways in which individuals of the same species are alike and different. <p>H. Energy</p> <ol style="list-style-type: none"> 2. Explain why living things need energy.
<p>Sample Lessons And Activities</p>	<ul style="list-style-type: none"> ▪ Design a variety of ways to sort and classify animals based on characteristics. ▪ Compare animals within the same species. ▪ Use a venn diagram to compare and contrast different animals and animal groups. ▪ Illustrate the life cycle of a specific animal. ▪ Use magazine pictures to sort and classify different animals into their groups.
<p>Sample Classroom Assessment Methods</p>	<ul style="list-style-type: none"> ▪ Sort animal pictures into the appropriate animal group.

<p style="text-align: center;">Sample Resources</p>	<ul style="list-style-type: none"> ▪ <u>Publications:</u> <ul style="list-style-type: none"> ○ <u>Amphibians:</u> <ul style="list-style-type: none"> ▪ <u>Can You Find Me? A Book About Camouflage</u> - Jennifer Dewey ▪ <u>Frogs</u> - Robin Dexter ▪ <u>Good Morning, Pond</u> - Alyssa Satin Capucilli ▪ <u>The Salamander Room</u> - Anne Mazer ▪ <u>Very First Things to Know About Frogs</u> - Patricia Grossman ○ <u>Arthropods:</u> <ul style="list-style-type: none"> ▪ <u>Becoming Butterflies</u> - Anne Rockwell ▪ <u>Bugs</u> - Anne Rockwell ▪ <u>From Caterpillar to Butterfly</u> – D. Heiligman ▪ <u>Insects Are My Life</u> - Megan McDonald ▪ <u>The Very Quiet Cricket</u> - Eric Carle ▪ <u>Waiting For Wings</u> - Lois Ehlert ○ <u>Birds:</u> <ul style="list-style-type: none"> ▪ <u>All About Owls</u> - Jim Arnosky ▪ <u>Baby Birds</u> - Joyce Dunbar ▪ <u>Birds</u> - Laurence Santrey ▪ <u>Feathers For Lunch</u> - Lois Ehlert ▪ <u>Good-Night Owl!</u> - Pat Hutchins ▪ <u>Owly</u> - Mike Thaler ○ <u>Mammals:</u> <ul style="list-style-type: none"> ▪ <u>About Mammals</u> - Cathryn Sill ▪ <u>Animal Tracks</u> - Arthur Dorros ▪ <u>The Big Bears</u> - Melvin Berger ▪ <u>Mammals</u> - National. Geographic ▪ <u>A True Book: Moose</u> - David Peterson ▪ <u>What is a Bear?</u> - Bobbie Kalman ▪ <u>Where Once There Was A Wood</u> - Denise Fleming ○ <u>Reptiles:</u> <ul style="list-style-type: none"> ▪ <u>All About Rattlesnakes</u> - Jim Arnosky ▪ <u>The Day Jimmy's Boa Ate The Wash</u> -Trinka Nobles ▪ <u>I Can Read About Reptiles</u> - David Cutts ○ <u>Snakes</u> - Patricia Demuth
<p style="text-align: center;">Technology Link</p>	<ul style="list-style-type: none"> ▪ http://www.brunswick.k12.me.us/curriculum