Expert Pack: Animal Adaptations
Lexile Range: 180-790

Topic/Subject: Animal Adaptations

Essential Question:
• How do adaptations help animals to survive?

Texts/Resources

Books
1. Animal Adaptations by Julie K. Lundgren
2. How Do They Move? by Kira Freed
3. Animal Eyes by Pam Bull

Articles
1. “Adaptation”

Videos
1. “Animal Adaptations for Kids”
2. “Animal Body Coverings”

Rationale and Suggested Sequence for Reading
The text set begins with Animal Adaptations, a non-fiction book that will be explored as a read-aloud (620L). Students will then view “Animal Body Coverings,” an informational video about body coverings and why animals have them. The next two texts are leveled readers, titled “How Do They Move?” and “Animal Eyes”, that will be read by students. Discussions and illustrations on how animals have different adaptations to help with movement are in the book “How Do They Move?“. “Animal Eyes”, a very engaging text with pictures, furthers students’ study of animal adaptations. The next source is a video, titled “Animal Adaptations for Kids”; students will deepen their understanding of why animals have body coverings and how this relates to the way humans use clothing to adapt to their environment. Finally, a World Book article “Adaptation” is read aloud to students. This reading reinforces learning from the set and adds to the set by including examples of plant and insect adaptations.
The Common Core Shifts for ELA/Literacy
1. Regular practice with complex text and its academic language
2. Reading, writing and speaking grounded in evidence from text, both literary and informational
3. Building knowledge through content-rich nonfiction

College and Career Readiness Anchor Standards for Reading Literary and/or Informational Texts
1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
10. Read and comprehend complex literary and informational texts independently and proficiently.
Annotated Bibliography

620L  Animal Adaptations
Author: Julie K. Lundgren
Genre: Informational text
Length: 136 words, 24 pages
Synopsis: This text shows and explains different animal adaptations used for survival. The text has a table of contents, photographs, section headings, bolded words, labels, glossary and captions. Looks at animal adaptations and how these changes to the way the different species look and act, help them to survive in their environment.
Recommended Student Activities: Wonderings

N/A  “Animal Body Coverings”
Author: Suzan Yassin
Genre: Informational video
Length: 3:22
Synopsis: The video begins by answering questions about what is a body covering and why animals have it. Definitions and examples of each of the major coverings are given. Graphics and labels as well as headings with a focus on vocabulary are included.
Recommended Student Activities: A Picture of Knowledge

180L  How Do They Move?
Author: Kira Freed
Genre: Informational text
Length: 179 words
Synopsis: The book illustrates that animals have specific adaptations that help them move, including flying, jumping, running, etc. The book has drawings and simple repetitive sentences as well as a question/answer format.
Citation: Freed, K. (2002). How Do They Move? Tuscon, AZ: The Learning Page
Recommended Student Activities: Quiz Maker

370L  Animal Eyes
Author: Pam Bull
Animal Eyes gives the reader an up-close look at the eyes of some familiar animals. Readers are encouraged to guess what kind of animal has the type of eyes presented before turning the page to find out. Photographs provide clues that help readers decode unfamiliar words.

Citation: Bull, P. Animal Eyes. https://www.raz-plus.com/books/leveled-books/book/?id=86&lang=English

Recommended Student Activities: Quiz Maker

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**“Animal Adaptations for Kids”**

Author: Unknown
Genre: Informational video
Length: 7:15

Synopsis: The video begins with children discussing how humans wear clothes to adapt to their environment and then explores how animal adaptations help with survival. The video is accompanied by narration, includes graphics, as well as labels and headings with a focus on vocabulary.

Citation: “Animal Adaptations for Kids” [video file] www.Makemegenius.com, October 2013
Retrieved from http://www.youtube.com/watch?v=yY4NNxka_to
Recommended Student Activities: A Picture of Knowledge

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**“Adaptation”**

Author: World Book Kids
Genre: Informational text
Length: 293 words

Synopsis: This brief article from World Book Kids extends “adaptation” to examples including plants and insects. This information builds on the topic and may inspire student curiosity about adaptations.

Recommended Student Activities: Wonderings
Supports for Struggling Students

By design, the *gradation of complexity* within each Expert Pack is a technique that provides struggling readers the opportunity to read more complex texts. Listed below are other measures of support that can be used when necessary.

- Provide a brief **student-friendly glossary** of some of the academic vocabulary (tier 2) and domain vocabulary (tier 3) essential to understanding the text.
- Download the Wordsmyth widget to classroom computers/tablets for students to access student-friendly definitions for unknown words. [http://www.wordsmyth.net/?mode=widget](http://www.wordsmyth.net/?mode=widget)
- Provide brief **student friendly explanations** of necessary background knowledge.
- Include **pictures or videos** related to the topic within and in addition to the set of resources in the pack.
- Select a small number of texts to **read aloud** with some discussion about vocabulary work and background knowledge.
- Provide **audio recordings** of the texts being read by a strong reader (teacher, parent, etc.).
- **Chunk the text** and provide brief questions for each chunk of text to be answered *before* students go on to the next chunk of text.
- Pre-reading activities that focus on the **structure and graphic elements** of the text.
- Provide **volunteer helpers** from the school community during independent reading time.
- Use Expert Packs as the **resources for Guided Reading** with a small group of students.

Why Text Sets Support English Language Learners

Those acquiring English as a second language have to learn many words in English to catch up with their English-only peers. Vocabulary builds at a much quicker pace when reading a set of connected texts. Text sets are an adaptable resource perfect for building knowledge and vocabulary. Student use of text sets can vary in terms of independence or teacher supports based on the individual needs of the students in the room. Activities found within the text set resources reflect several best practices for English Language Learner instruction including:

- Providing brief, engaging texts that provide a high volume of reading on a topic.
- Providing web-based resources and/or videos that are tied to the content of the texts students are reading.
- Providing opportunities for students to learn new vocabulary through the use of student-friendly definitions in resource-specific glossaries.
- Allowing for options to reinforce newly learned vocabulary and/or content through graphic organizers.
- Providing opportunities for students to reinforce new vocabulary through multi-modal activities including written work, group discussion, viewing visual content, and reading texts that feature the vocabulary.

Teachers of ELLs may use the protocols on the following pages to provide additional support to students who are struggling to access the content within text sets because they are new to English.
ELL Text Set Protocol Grades K-2

The protocol below assumes that students will be engaged in reading text sets with the support of the teacher and/or another adult staff member. This can be done full class, or in small groups, but will likely require adult support in this grade band.

Please note that this protocol includes options for teachers. This includes the order in which various activities (steps) take place. Individual decisions should be made considering the needs of the students and the demands of the content, keeping in mind that the goal of each scaffold is to allow students to meaningfully access each text and move toward independent, knowledge-building reading.

**Step one: Build knowledge and vocabulary as you build student interest and engagement in the topic.**

Introduce students to the overall topic/content of the text set, including knowledge demands needed to engage in the content, and domain-specific vocabulary necessary for comprehension. This should be done prior to engaging with the texts themselves – time allotted to this activity should reflect student needs (anywhere from 5 minutes prior to reading, to a full day's lesson is appropriate).

*Options for this step include:*
- Engage students in reading and discussing auxiliary texts and resources (illustrations, photographs, video clips) on the topic of the text set.
- Pre-teach a few key content-specific terms prior to students engaging with a text set. (Ideas for text-focused vocabulary instruction can be found [here](#).)
- Provide a student-friendly glossary prior to reading each text, with picture support where possible.

If pairing the text set with a Read Aloud lesson, giving students access to the resources in the text set can help build their knowledge and vocabulary prior to engaging with the anchor or primary text, as can access to the resources alongside subsequent reads of the anchor text. The “juicy sentence” discussion is a strategy developed by Dr. Lily Wong Fillmore to help students learn to deconstruct and reconstruct sentences, and to understand how different language features contribute to meaning. Teachers should use the [juicy sentence guidance](#) to dig deeply into a sentence or phrase within the read aloud book, to build vocabulary, deepen content knowledge, and support understanding of syntax and grammar. Juicy sentence work should not be done for the other texts in the text set, since the purpose is for students to work rapidly through a high volume of reading to build knowledge.

**Step two: Read text orally.**

Focusing on one resources at a time, allow students to listen to a fluent read of the resource.

*Options for this step include:*
- Have the teacher model the first read of a text or resource.
- Use recordings of the text to provide additional opportunities to hear expert reading.

**Step three: Engage in group discussion about the content.**

Allow students time in partnerships or small groups to discuss the content of the resource.

*Options for this step include:*
- Allow for discussion/conversation (in the students’ home language if possible) with a small group of students reading the same text set prior to writing or provide heterogeneous language groupings to talk about content and discuss what students are learning.
- Provide opportunities to practice using newly acquired vocabulary in the context of discussion.
- Have students refer to the student-friendly glossary included with each passage to identify meanings for new vocabulary necessary for comprehension.

**Step four: Write about what was read.**

*Options for this step include:*
- Use the “Rolling Knowledge Journal” and/or “Rolling Vocabulary Journal” as a shared writing routine.
• Have students complete the “Rolling Knowledge Journal” and/or “Rolling Vocabulary Journal” as independent graphic organizers that help to scaffold the writing process and capture student knowledge over time. Encourage students to use a combination of writing and drawing.
• Provide students with several supports to help students engage in writing/drawing about what they read:
  o Use mentor texts about which students can pattern their writing.
  o Allow them to write collaboratively.
  o Show students visual resources as prompts, etc.
  o Provide language supports such as strategically chosen sentence starters.

Repeat steps one through four with each resource in the text set as appropriate.

ELL Text Set Protocol Grades 3-12

The goal of text sets is to help students build knowledge through a volume of independent reading, and it is important that educators provide scaffolds to allow English Language Learners to be successful in engaging meaningfully with the texts, even as students are still developing English language skills. The protocol below can be used for teaching with text set resources as a full class. Students can also be trained on the protocol so that they can utilize text sets in small groups or partnerships as a resource for independent or reciprocal reading and study.

Please note that this protocol includes options for teachers. Individual decisions should be made considering the needs of the students and the demands of the content, keeping in mind that the goal of each scaffold is to allow students to meaningfully access the text and move toward independent, knowledge-building reading.

Step one: Build knowledge and vocabulary.

Introduce students to the overall topic/content of the text set, including knowledge demands needed to engage in the content, and domain-specific vocabulary necessary for comprehension. This should be done prior to engaging with the texts themselves; time allotted to this activity should reflect student needs (anywhere from 5 minutes prior to reading, to a full day’s lesson is appropriate).

Options for this step include:
• Engage students in reading and discussing auxiliary texts (of lesser complexity) and resources (illustrations, photographs, video clips) on the topic of the text set.
• Pre-teach a few key content-specific terms prior to students engaging with a text set. (Ideas for text-focused vocabulary instruction can be found here.)
• Provide the student-friendly glossary included in the text set prior to reading each text.
• When possible, allow students to read texts in their home language about the topic under study.

Step two: Read text orally.

Focusing on one resource at a time, allow students to listen to a fluent read of the resource, while following along with their own copy of the text.

Options for this step include:
• Have a fluent reader model the first read of a text or resource.
• Have students engage in a buddy/partner read.
• Use recordings of the text to provide additional opportunities to hear expert reading.

Step three: Engage in group discussion about the content.

Allow students time in partnerships or small groups to discuss the content of the resource.
Options for this step include:

- Allow for discussion/conversation (in the students’ home language if possible) with a small group of students reading the same text set prior to writing or provide heterogeneous language groupings to talk about content and discuss what students are learning.
- Have students refer to the student-friendly glossary included with each text set to identify meanings for new vocabulary necessary for comprehension.

Step four: Write about what was read.

Options for this step include:

- Use the “Rolling Knowledge Journal” and/or “Rolling Vocabulary Journal” as a shared writing routine/graphic organizer to help to scaffold the writing process and capture student knowledge over time.
- Provide students with several supports to help students engage in writing/drawing about what they read:
  - Use mentor texts about which students can pattern their writing.
  - Allow them to write collaboratively.
  - Show students visual resources as prompts, etc.
  - Provide language supports such as strategically chosen sentence starters.

Repeat steps one through four with each resource in the text set as appropriate.
Expert Pack: Animal Adaptations

Learning Worth Remembering

**Cumulative Activities** – The following activities should be completed and updated after reading each resource in the set. The purpose of these activities is to capture knowledge building from one resource to the next, and to provide a holistic snapshot of central ideas of the content covered in the expert pack. *It is recommended that students are required to complete one of the Cumulative Activities (Rolling Knowledge Journal or Rolling Vocabulary) for this Expert Pack.*

1. **Rolling Knowledge Journal**
   - Read each selection, one at a time.
   - After you read *each* resource, stop and think what the big learning was. What did you learn that was new *and important* about the topic from *this* resource? Write, draw, or list what you learned from the text about (topic).
   - Then write, draw, or list how this new resource added to what you learned from the last resource(s).

**Sample Student Response:**

<table>
<thead>
<tr>
<th>Title</th>
<th>Write, Draw, or List</th>
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<tbody>
<tr>
<td><strong>New and important learning about the topic</strong></td>
<td><strong>How does this resource add to what I learned already?</strong></td>
</tr>
<tr>
<td>1. <em>Animal Adaptations</em></td>
<td>Adaptations affect animals’ appearance and behavior.</td>
</tr>
<tr>
<td>2. “Animal Body Coverings”</td>
<td>Animals can be grouped by their different body coverings. It helps us to understand what animals go with each covering and why.</td>
</tr>
<tr>
<td>3. <em>How Do They Move?</em></td>
<td>Animals’ body parts are adaptations to help them move.</td>
</tr>
<tr>
<td>4. <em>Animal Eyes</em></td>
<td>Animal eyes are adapted in different ways.</td>
</tr>
<tr>
<td>5. “Animal Adaptations for Kids”</td>
<td>Adapting is changing selves to a new condition. Animals adapt to their habitats.</td>
</tr>
</tbody>
</table>
6. “Adaptation”  

| An adaptation is a feature that helps a living thing survive, like their environment and how to get their food; but not just animals have adaptations. | Plants and insects also have adaptations. All living things, not just animals, have adaptations. |

2. Rolling Vocabulary: “Sensational Six”

- Read each resource then determine the 6 words from each text that most exemplify the central idea of the text.
- Next use your 6 words to write about the most important idea of the text. You should have as many sentences as you do words.
- Continue this activity with EACH selection in the Expert Pack.
- After reading all the selections in the Expert Pack, go back and review your words.
- Now select the “Sensational Six” words from ALL the word lists.
- Use the “Sensational Six” words to summarize the most important learning from this Expert Pack.

<table>
<thead>
<tr>
<th>Title</th>
<th>Six Vocabulary Words &amp; Sentences</th>
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</table>
| Animal Adaptations | Words: enemies, actions, balance, gather, warn, shoo  
1. Animals need adaptations to protect themselves from enemies.  
2. In addition to body features, adaptations can be actions.  
3. Some animals use their tails to help with balance.  
4. Many animals must gather food to survive.  
5. Animals can use adaptations to warn enemies before they attack.  
6. Animals use features like tails and eyelashes to shoo away pesky insects. |
| “Animal Body Coverings” | Words: outer, classified, hair, smooth skin, smooth, plates  
1. Coverings are on the outer part of an animal’s body.  
2. Animals can be classified by the type of body coverings they have.  
3. Some animals, like elephants, have hair.  
4. Some animals, like frogs, have smooth skin.  
5. When skin is smooth it protects certain animals like armor.  
6. Some animals, like lizards, have scales or plates grouped together. |
### How Do They Move?

**Words:** land, wings, flippers, fins, hop, swinging

1. Animals have different body parts to help them move in the air, the water, and on land, or the ground.
2. Wings help birds fly.
3. Flippers help water animals, like seals, swim fast.
4. Fins help fish swim and move in the water.
5. Frogs hop on land with their legs.
6. Some animals, like monkeys, move by swinging between trees using their arms and tails.

### Animal Eyes

**Words:** strange, dots, clearly, well, kind, tiny

1. Some animal eyes can look very strange.
2. It has eight eyes that look like little dots.
3. Most spiders can’t see clearly.
4. The owl’s eyes help it to see well at night.
5. This kind of lizard does.
6. The dragonfly has eyes that are made up of many tiny eyes.

### “Animal Adaptations for Kids”

**Words:** adaptation, habitats, aquatic, desert, terrestrial, arboreal

1. Adaptations are necessary for animals to survive in their habitats.
2. Animals have different adaptations that are suited to their specific habitats.
3. Aquatic animals live in the water.
4. Animals can live in the desert with little water.
5. Terrestrial animals live only on land.
6. Arboreal animals live mostly in trees.

### “Adaptation”

**Words:** variety, features, particular, enable, trait, reproduction

1. Living things have a variety of adaptations.
2. Adaptations can include size, color, shape, behavior, and other features.
3. Many adaptations help living things survive in a particular type of place.
4. This adaptation enables them to make more food.
5. Different animals have a similar trait, but use it differently.
6. Both flowers and fruits have adaptations that help in reproduction.

### Sensational Six

**Words:** coverings, survive, habitats, adaptations, protect, environment

All animals have body **coverings** that help them **survive** in their natural **habitats**. Animals have **adaptations** that help **protect** them, care for their young, and find food in their **environments**.
1. Rolling Knowledge Journal

- Read each selection in the set, one at a time.
- After you read each resource, stop and think what the big learning was. What did you learn that was new and important about the topic from this resource? Write, draw, or list what you learned from the text.
- Then write, draw, or list how this new resource added to what you learned from the last resource(s).

**Sample Response**

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2. **Rolling Vocabulary: “Sensational Six”**
   - Read each resource then determine the 6 words from each text that most exemplify the central idea of the text.
   - Next use your 6 words to write about the most important idea of the text. You should have as many sentences as you do words.
   - Continue this activity with EACH selection in the Expert Pack.
   - After reading all the selections in the Expert Pack, go back and review your words.
   - Now select the “Sensational Six” words from ALL the word lists.
   - Use the “Sensational Six” words to summarize the most important learning from this Expert Pack.

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<td>Words:</td>
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1. **A Picture of Knowledge** *(Recommended for videos “Animal Body Coverings” and “Animal Adaptations for Kids”)*

- Take a piece of paper and fold it two times: once across and once top to bottom so that it is divided into 4 quadrants.

- Draw these shapes in the corner of each quadrant.

  ![Shapes](image)

  1. Square
  2. Triangle
  3. Circle
  4. Question Mark

- Write!

  - Square: What one thing did you read that was interesting to you?
  - Triangle: What one thing did you read that taught you something new?
  - Circle: What did you read that made you want to learn more?
  - Question Mark: What is still confusing to you? What do you still wonder about?

- Find at least one classmate who has watched the video and talk to each other about what you put in each quadrant.

2. **Quiz Maker** *(Recommended for How Animals Move and Animal Eyes)*

- Make a list of three or more questions that would make sure another student understood the information.
• Your classmates should be able to find the answer to the question from the resource.
• Include answers for each question.
• Include the where you can find the answer in the resource.

<table>
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<tr>
<th>Question</th>
<th>Answer</th>
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3. **Wonderings** (Recommended for *Animal Adaptations* and the Word Book article “Adaptation”)

<table>
<thead>
<tr>
<th>I’m a little confused about:</th>
<th>This made me wonder:</th>
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</table>

On the left, track things you don’t understand from the video and the article.

**I am confused about or do not understand....**

On the right side, list some things you still wonder (or wonder now) about this topic.

**I wonder or would like to learn more about....**
Animal Adaptations

<table>
<thead>
<tr>
<th>Word</th>
<th>Student-Friendly Definition</th>
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<tbody>
<tr>
<td>enemies</td>
<td>Someone or something that wants to do bad things to you. <em>The mouse has many enemies and must always be aware of its surroundings.</em></td>
</tr>
<tr>
<td>actions</td>
<td>Things that animals do. <em>The cheetah made quick actions when hunting.</em></td>
</tr>
<tr>
<td>balance</td>
<td>To stay up straight, like on a bicycle, without wobbling or falling over. <em>The spider balanced on the thread that made up its web.</em></td>
</tr>
<tr>
<td>gather</td>
<td>To collect. <em>The bird gathers sticks to build her nest.</em></td>
</tr>
<tr>
<td>warn</td>
<td>To let someone know there is danger. <em>The bird made a loud noise to warn other birds of a predator.</em></td>
</tr>
<tr>
<td>shoo</td>
<td>To use part of your body to get someone or something to leave. <em>The mother elephant used its trunk to shoo the flies away.</em></td>
</tr>
</tbody>
</table>

“Animal Body Coverings”

<table>
<thead>
<tr>
<th>Word</th>
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</tr>
</thead>
<tbody>
<tr>
<td>hair</td>
<td>Threadlike fur that grows on people and some animals. <em>The horse had long, black hair growing from its tail.</em></td>
</tr>
<tr>
<td>smooth skin</td>
<td>Skin that is not bumpy or scaly and doesn’t have hair. <em>The shark has a very smooth skin for an outer covering.</em></td>
</tr>
<tr>
<td>classify</td>
<td>To put into groups. <em>The scientist sorts objects to classify them by color.</em></td>
</tr>
<tr>
<td>outer</td>
<td>On the outside. <em>The crab has an outer shell for protection.</em></td>
</tr>
<tr>
<td>plates</td>
<td>Thin, flat pieces of horn or bone that covers and protects an animal. <em>The armadillo has a protective shell made of bony plates.</em></td>
</tr>
<tr>
<td>smooth</td>
<td>Not bumpy or wrinkled; you can easily run your hand across it. <em>The shark has a very smooth skin for an outer covering.</em></td>
</tr>
</tbody>
</table>
### How Do They Move?

<table>
<thead>
<tr>
<th>Word</th>
<th>Student-Friendly Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>wings</td>
<td>A part of an animal’s body that is used for flying or gliding. <em>The penguin’s wings are too small to use for flying, but they help them to swim.</em></td>
</tr>
<tr>
<td>flippers</td>
<td>One of two flat body parts that stick out from the side of a seal, whale, etc., and are used by the animal for swimming. <em>The seal’s flippers help them to swim.</em></td>
</tr>
<tr>
<td>fins</td>
<td>A thin flat part that sticks out from the body of a fish and is used in moving or guiding the fish through water. <em>Fish use their fins to help them swim.</em></td>
</tr>
<tr>
<td>land</td>
<td>The solid part of the surface of the Earth or an area of ground. <em>An elephant lives most of its life on land.</em></td>
</tr>
<tr>
<td>swinging</td>
<td>Moving backward and forward or from side to side while hanging from something. <em>The monkey moves from tree to tree by swinging.</em></td>
</tr>
</tbody>
</table>

### Animal Eyes

<table>
<thead>
<tr>
<th>Word</th>
<th>Student-Friendly Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>strange</td>
<td>Not usual; odd. <em>Some animal eyes can look very strange.</em></td>
</tr>
<tr>
<td>dots</td>
<td>A small, round mark or spot. <em>It has eight eyes that look like little dots.</em></td>
</tr>
<tr>
<td>clearly</td>
<td>Able to be seen or understood. <em>Most spiders can’t see clearly.</em></td>
</tr>
<tr>
<td>well</td>
<td>It is good. <em>The owl’s eyes help it to see well at night.</em></td>
</tr>
<tr>
<td>tiny</td>
<td>Very, very small. <em>The dragonfly has eyes that are made up of many tiny eyes.</em></td>
</tr>
</tbody>
</table>
**“Animal Adaptations for Kids”**

<table>
<thead>
<tr>
<th>Word</th>
<th>Student-Friendly Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>adapt</td>
<td>A change to be able to live in your environment. The bear hibernates in order to adapt to the winter.</td>
</tr>
<tr>
<td>adaptation</td>
<td>A change in the body that helps you to live. <em>The polar bear has a large layer of blubber as an adaptation to help it stay warm.</em></td>
</tr>
<tr>
<td>natural</td>
<td>Happens without making it happen, like growing. <em>Learning how to walk for a baby deer is natural, no one has to teach it.</em></td>
</tr>
<tr>
<td>habitats</td>
<td>The places where animals live. <em>The ocean is the habitat for many salt water animals and plants.</em></td>
</tr>
<tr>
<td>aquatic</td>
<td>From the water. <em>A fish is an aquatic animal.</em></td>
</tr>
<tr>
<td>desert</td>
<td>A dry, sandy place with very little water. <em>It does not rain a lot in the desert.</em></td>
</tr>
<tr>
<td>terrestrial</td>
<td>Lives on the land only. <em>Giraffes live on land; they are terrestrial animals.</em></td>
</tr>
<tr>
<td>polar</td>
<td>An animal that is from the North or South Pole. <em>A polar bear is a polar animal that lives in the North Pole.</em></td>
</tr>
<tr>
<td>arboreal</td>
<td>Animals that live in trees. <em>Monkeys are arboreal animals; they spend a lot of time in trees.</em></td>
</tr>
<tr>
<td>features</td>
<td>Words that describe how something looks. <em>The cat has long fur and whiskers as features.</em></td>
</tr>
<tr>
<td>hump</td>
<td>A large bump on an animal’s back. <em>The camel has a hump that they use to store water.</em></td>
</tr>
<tr>
<td>oxygen</td>
<td>Air. <em>The frog breathes oxygen using its lunges.</em></td>
</tr>
<tr>
<td>gills</td>
<td>Lines on the side of the head of a fish. <em>Fish breathe through gills under water.</em></td>
</tr>
<tr>
<td>blubber</td>
<td>Thick fat that some sea animals have, like whales and seals, to keep them warm in the cold water. <em>Whales have a thick layer of blubber that helps them stay warm.</em></td>
</tr>
</tbody>
</table>
survive
To stay alive
*Adaptations are changes to animals’ bodies that help them to survive.*

“Adaptation”

<table>
<thead>
<tr>
<th>Word</th>
<th>Student-Friendly Definition</th>
</tr>
</thead>
</table>
| variety | A number of different things in a group or class  
*Living things have a variety of adaptations.* |
| feature | A part or quality of something  
*Adaptations can include size, color, shape, behavior, and other features.* |
| particular | Being the only one in mind or referred to out of many possibilities; specific; special  
*Many adaptations help living things survive in a particular type of place.* |
| enable  | To give means or power to; make able; allow  
*This adaptation enables them to make more food.* |
| trait   | A characteristic or quality that makes a person or animal different from others  
*Different animals have a similar trait but use it differently.* |
| reproduction | The process by which living things create young or offspring.  
*Both flowers and fruits have adaptations that help in reproduction.* |