

Teaching Activity Guide

THE MOST DANGEROUS

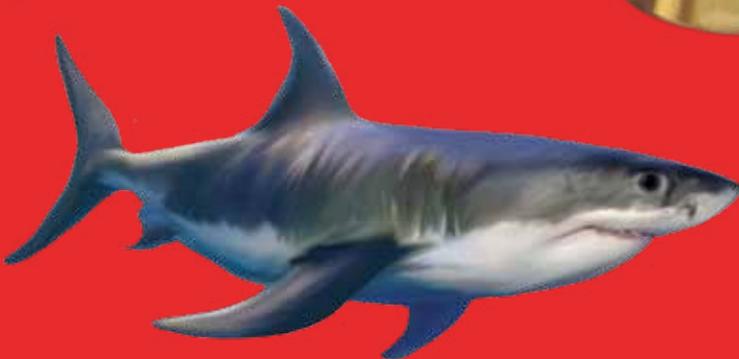
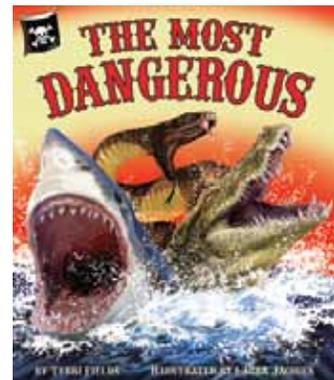


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How to Use This Activity Guide (General)

There are a wide variety of activities that teach or supplement all curricular areas. The activities are easily adapted up or down depending on the age and abilities of the children involved. It is easy to pick and choose what is appropriate for your setting and the time involved. Most activities can be done with an individual child or a group of children.

For teachers in the classroom: We understand that time is at a premium and that, especially in the early grades, much time is spent teaching language arts. All Arbordale titles are specifically selected and developed to get children excited about learning other subjects (science, geography, social studies, math, etc.) while reading (or being read to). These activities are designed to be as comprehensive and cross-curricular as possible. If you are teaching sentence structure in writing, why not use sentences that teach science or social studies? We also know and understand that you must account for all activities done in the classroom. While each title is aligned to all of the state standards (both the text and the For Creative Minds), it would be near impossible to align all of these activities to each state's standards at each grade level. However, we do include some of the general wording of the CORE language arts and math standards, as well as some of the very general science or social studies standards. You'll find them listed as "objectives" in italics. You should be able to match these objectives with your state standards fairly easily.

For homeschooling parents and teachers in private schools: Use as above. Aren't you glad you don't have to worry about state standards?

For parents/caregivers: Two of the most important gifts you can give your child are the love of reading and the desire to learn. Those passions are instilled in your child long before he or she steps into a classroom. Many adults enjoy reading historical fiction novels . . . fun to read but also to learn (or remember learning) about historical events. Not only does Arbordale publish stories that are fun to read and that can be used as bedtime books or quiet "lap" reading books, but each story has non-fiction facts woven through the story or has some underlying educational component to sneak in "learning." Use the "For Creative Minds" section in the book itself and these activities to expand on your child's interest or curiosity in the subject. They are designed to introduce a subject so you don't need to be an expert (but you will probably look like one to your child!). Pick and choose the activities to help make learning fun!

For librarians and bookstore employees; after-school program leaders; and zoo, aquarium, nature center, park & museum educators: Whether reading a book for story time or using the book to supplement an educational program, feel free to use the activities in your programs. We have done the "hard part" for you.

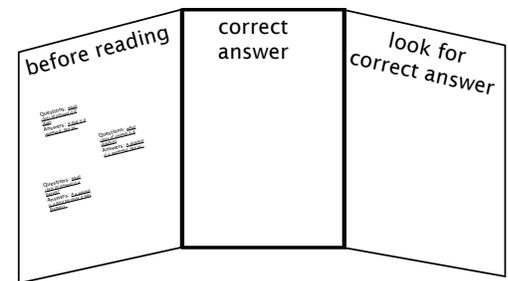
What Do Children Already Know?

Young children are naturally inquisitive and are sponges for information. The whole purpose of this activity is to help children verify the information they know (or think they know) and to get them thinking “beyond the box” about a particular subject.

Before reading the book, ask the children what they know about the subject. A list of suggested questions is below. The children should write down their “answers” (or adults for them if the children are not yet writing) on the chart found in Appendix A, index cards, or post-it notes.

Their answers should be placed on a “before reading” panel. If doing this as a group, you could use a bulletin board or even a blackboard. If doing this with individual children, you can use a plain manila folder with the front cover the “before reading” panel. Either way, you will need two more panels or sections—one called “correct answer” and the other “look for correct answer.”

Do the children have any more questions about the subject? If so, write them down to see if they are answered in the book.



After reading the book, go back to the questions and answers and determine whether the children’s answers were correct or not.

If the answer was correct, move that card to the “correct answer” panel. If the answer was incorrect, go back to the book to find the correct information.

If the child/children have more questions that were not answered, they should look them up.

When an answer has been found and corrected, the card can be moved to the “correct answer” panel.

Pre-Reading Questions

What are some animals that could be dangerous to humans?

What would cause an animal to hurt or kill a human?

What are some animals that hurt humans by biting? Kicking? Venom?

What's the difference between a venomous animal and a poisonous animal?

How could a great white shark hurt a human?

How could a buffalo (or bison) hurt humans?

What are some ways that snakes are dangerous to humans? Are all snakes dangerous?

What are some ways that spiders are dangerous to humans? Are all spiders dangerous?

What are some ways that fish are dangerous to humans? Are all fish dangerous?

Jellyfish found in waters in and around the United States might sting but won't kill. Do you think jellyfish in other parts of the world can kill humans?

Can a mosquito bite kill a human? Why or why not?

What do you think is the most dangerous animal to humans and why?

Discussion Questions & Writing Prompts

Objective Core Language Arts, Speaking and Listening: Ask and answer questions about key details in a text read aloud or information presented orally or through other media.

Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.

Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.

Retell stories, including key details, and demonstrate understanding of their central message or lesson.

Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.

Why are these animals dangerous?

To whom are they most dangerous?

Where do they live?

Do any live near you?

Have you ever seen any of these animals? If so, where?

Which animals live in the ocean?

Which animals live on the continent of Australia, Africa, Asia, Europe, North America and South America?

Do you think the judges picked the most dangerous animal out of the group? Why or why not?

If you were a judge, which animal would you have picked? Why?

Observation Skills: Art Scavenger Hunt

Objective Core Language Arts Integration of Knowledge and Ideas: Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).

Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.

Explain how specific aspects of a text's illustrations contribute to what is conveyed by the words in a story (e.g., create mood, emphasize aspects of a character or setting).

Use illustrations and details in a story to describe its characters, setting, or events.

How did the illustrator show you the habitat in which the animals live AND a close up of the animals?

Which animal do you think looks the most dangerous? Why?

How many skulls can you find in the book?

Language Arts & Science: Five Senses

Objective Core Language Literature 4: Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.

Re-read the story and write down any words that relate to the five senses:

Animal	Touch	Taste	Sight	Smell	Hearing
					
					
					
					
					
					
					
					
					
					

Cross-Curricular Vocabulary Activities

Objective Core Language Arts:

Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade-level reading and content.

Identify new meanings for familiar words and apply them accurately (e.g., duck is a bird & the verb to duck). Use words & phrases acquired through conversations, reading/being read to, and responding to texts.

Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade-level topic or subject area.

Explain the function of nouns, pronouns, verbs, adjectives, and adverbs in general and their functions in particular sentences.

Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.

Use frequently occurring adjectives.

Vocabulary Game: This activity is a very general idea and is designed to get children thinking of vocabulary words that will then be used as the beginning vocabulary list for a science lesson.

Select an illustration from the book and give the children a specific length of time (five minutes?) to write down all the words they can think of about the particular subject. It is helpful to project an illustration on a whiteboard. Use eBook or book preview found at www.ArbordalePublishing.com.

The children's word list should include anything and everything that comes to mind, including nouns, verbs, and adjectives. At the end of the time, have each child take turns reading a word from his/her list. If anyone else has the word, the reader does nothing. However, if the reader is the only one with the word, he/she should circle it. While reading the list, one person should write the word on a flashcard or large index card and post it on a bulletin board or wall.

At the end, the child with the most words circled "wins." And you have a start to your science vocabulary list. Note: if a child uses an incorrect word, this is a good time to explain the proper word or the proper usage.

Glossary/Vocabulary Words: Word cards may be used (see Appendix) or have children write on index cards, a poster board, or on a chalkboard for a "word wall." If writing on poster board or chalkboard, you might want to sort words into nouns, verbs, etc. right away to save a step later if using for Silly Sentences (on the next page). Leaving the words posted (even on a refrigerator at home) allows the children to see and think about them frequently. The glossary has some high-level words. Feel free to use only those words as fit your situation.

Using the Words: The following activities may be done all at once or over a period of several days.

- Sort vocabulary words into nouns, verbs, adjectives, etc. and write what they are on the backs of the cards. When the cards are turned over, all you will see is "noun," etc. (these can then be used for the "silly sentences" on the next page).
- After the cards have been sorted, go over the categories to ensure that all cards have been placed correctly. (Mistakes are a great opportunity to teach!)
- Choose two words from each category and write a sentence for each word.
- Write a story that uses at least ten vocabulary words from the word sort.
- Have children create sentences using their vocabulary words. Each sentence could be written on a separate slip of paper. Have children (individually or in small groups) sort and put sentences into informative paragraphs or a story. Edit and re-write paragraphs into one informative paper or a story.

Silly Sentence Structure Activity: This "game" develops both an understanding of sentence structure and the science subject. Use words from the "word wall" to fill in the blanks. After completing silly sentences for fun, have children try to fill in the proper words by looking for the correct information in the book.

Word Bank

See Glossary for words in Spanish and the definition in English.

Adjective	Noun			Verb
dead	adaptation	feathers	prey	bite
high	Africa	fever	pufferfish	defend
huge	algae	germ	rainforest	eat
poisonous	animal	grassland	rash	hibernate
sharp	Australia	great white shark	river	hunt
sick	bacteria	hippo/ hippopotamus	saltwater crocodile	kill
strong	behavior	horn	savanna	protect
venomous	bite	inland taipan	snake	puff
wild	blood	jaw	spike	release
young	box jelly	meat	teeth	slither
	Cape buffalo	mosquito	tentacles	sting
	carnivore	mouth	territory	survive
	cassowary	nausea	tusk	trample
	death	ocean	venom	
	defense	plant	wandering spider	
	desert	poison	weakness	
	disease			

Word Search

Find the hidden words. Even non-reading children can match letters to letters to find the words! Easy—words go up to down or left to right (no diagonals). For older children, identify the coordinates of the first letter in each word (number, letter).

	A	B	C	D	E	F	G	H	I	J
1	B	E	A	O	X	U	M	A	N	C
2	E	L	M	P	S	K	O	F	I	A
3	P	R	E	Y	P	S	S	I	V	S
4	A	W	R	E	I	H	Q	U	A	S
5	B	T	C	G	D	A	U	T	T	O
6	W	A	N	D	E	R	I	N	G	W
7	K	I	L	L	R	K	T	A	Y	A
8	Z	P	H	I	P	P	O	J	N	R
9	S	A	B	O	X	J	E	L	L	Y
10	H	N	I	D	A	Q	U	I	N	O

BOX JELLY

TAIPAN

SHARK

WANDERING

SPIDER

HIPPO

CASSOWARY

MOSQUITO

KILL

PREY

Edible Sorting and Classifying Activity

Objective Core Language Arts Vocabulary Acquisition and Use: Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.

Objects and materials can be sorted and described by their properties. (color, shape, size, weight and texture)

Use whole numbers, up to 10, in counting, identifying, sorting, and describing objects and experiences.*

Gather a cup of edible “sorting items.” For example:

- As many different kinds of M&Ms as you can find
- Chocolate & peanut butter chips
- Hershey Kisses
- Peanuts or other type of nuts



Ask the children to sort the items into groups. There is no right and wrong, only what makes sense to the child. When finished, ask the child:

What feature or attribute (color, size, ingredient, etc.) did you use to sort the items?

- Are there some items that fit more than one group or don't fit any group?
- If so, how did the child decide which attribute was more important?
- 1. How are various objects similar and different?
- Is it easy to sort or were there some items that were a little confusing?

If more than one person did this, did everyone sort by the same attribute? To extend the learning, graph the attributes used to sort the items (blank graph below).

Graph the attributes that children used to sort their items. (Graph provided on next page).

What was the most common attribute (size, shape, color, etc.) used?

10				
9				
8				
7				
6				
5				
4				
3				
2				
1				
attribute				

Classifying Animals

Objective: Classify organisms according to one selected feature, such as body covering, and identify other similarities shared by organisms within each group formed.

Describe several external features and behaviors of animals that can be used to classify them (e.g., size, color, shape of body parts).

Identify observable similarities and differences (e.g., number of legs, body coverings, size) between/among different groups of animals.

Just as we sort candy, scientists sort all living things into groups to help us understand and connect how things relate to each other. Scientists ask questions to help them sort or classify animals.

Based on the answers to the questions, scientists can sort the living organisms. The first sort is into a Kingdom. There are five commonly accepted Kingdoms: Monera, Protista, Fungi, Plantae, and Animalia. All of the living things in this book belong to Animalia or the Animal Kingdom.

The next big sort is into a Phylum. One of the first questions that a scientist will ask is whether the animal has (or had at some point in its life) a backbone. If the answer is “yes,” the animal is a vertebrate. If the answer is “no,” the animal is an invertebrate.

Each Phylum is broken down into Classes, like mammals, birds, reptiles, fish, insects, or gastropods (snails). Then each class can be broken down even further into orders, families, genus and species, getting more specific.

The scientific name is generally in Latin or Greek and is the living thing’s genus and species. People all over the world use the scientific names, no matter what language they speak. Most living organisms also have a common name that we use in our own language.

Some questions scientists ask:

- Does it have a backbone?
- What type of skin covering does it have?
- Does it have a skeleton? If so, is it inside or outside of the body?
- How many body parts does the animal have?
- Does it get oxygen from the air through lungs or from the water through gills?
- Are the babies born alive or do they hatch from eggs?
- Does the baby drink milk from its mother?
- Is it warm-blooded or cold-blooded?

Using what you know, and information and pictures in the book, see how many Animal Chart squares you can fill in for each animal.

Animal Chart

	Animals		
Appendages	legs (how many)		
	flippers/fins		
	wings		
	tail/no tail		
	horns/antlers		
Feet or hands: if they have; may have more than one	claws		
	web		
	toes		
	opposable thumbs/toes		
	hooves		
Movement: may do more than one	walks/runs		
	crawls		
	flies		
	slithers		
	swims		
	climbs		
	hops		
Backbone	backbone/vertebrate		
	no backbone/invertebrate		
Skeleton	inside skeleton (endoskeleton)		
	outside skeleton (exoskeleton)		
	no skeleton		
Body covering	hair/fur/whiskers/quills		
	feathers		
	dry scales or bony plates		
	moist scales		
	smooth, moist skin		
	hard outer shell		
Color/patterns	stripes or spots		
	mostly one color		
	skin color changes		
	bright, vivid colors		
Gets oxygen	lungs		
	gills		
Body temperature	warm-blooded (endothermic)		
	cold-blooded (ectothermic)		
Babies	born alive		
	hatch from eggs		
	born alive or hatch from eggs		
Metamorphosis	complete		
	incomplete		
	none		
Teeth	sharp		
	flat		
	no teeth (bill/beak)		
Food	plant eater (herbivore)		
	meat eater (carnivore)		
	both (omnivore)		

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	incomplete		
	none		
Teeth	sharp		
	flat		
	no teeth (bill/beak)		
Food	plant eaters (herbivore)		
	meat eater (carnivore)		
	both (omnivore)		

Dichotomous (Yes/No) Key

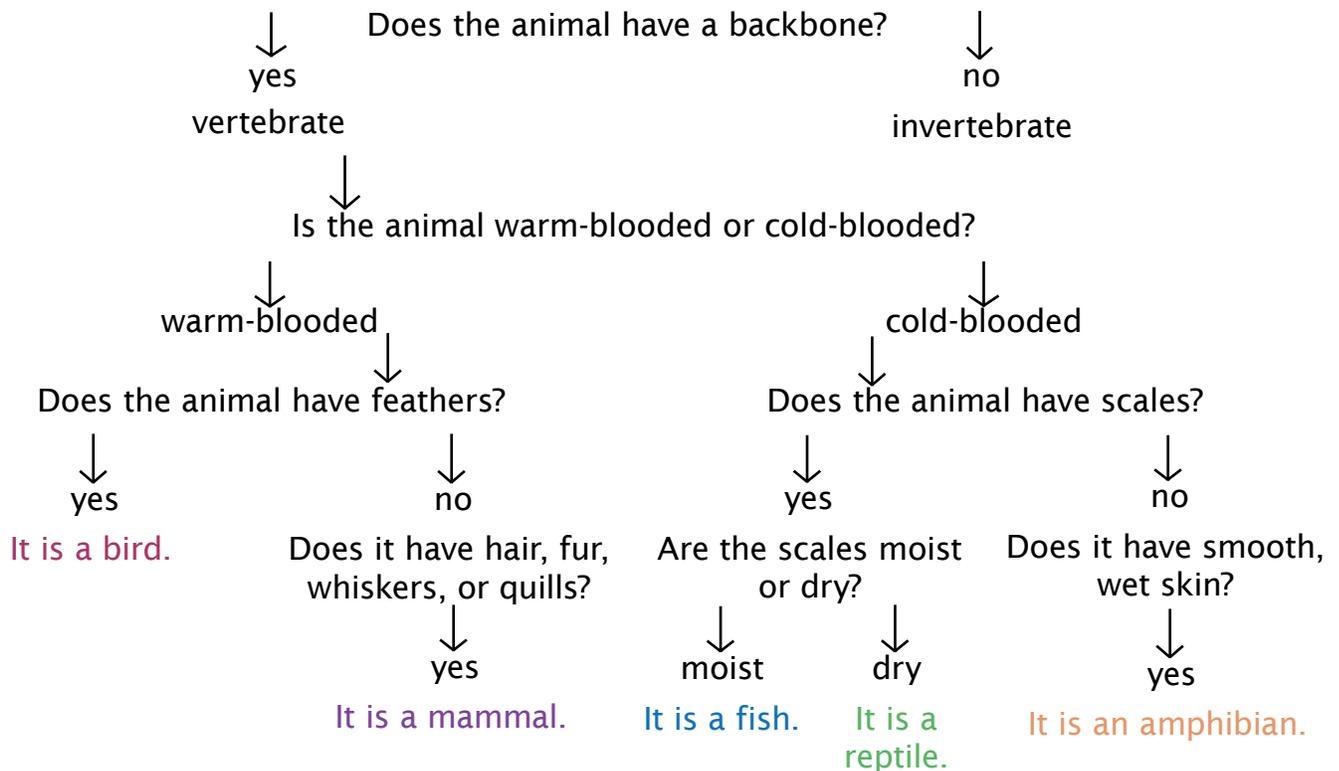
Match the animal to its classification.

Objective: Classify organisms according to one selected feature, such as body covering, and identify other similarities shared by organisms within each group formed.

Describe several external features and behaviors of animals that can be used to classify them (e.g., size, color, shape of body parts).

Identify observable similarities and differences (e.g., number of legs, body coverings, size) between/among different groups of animals.

Develop and use a simple dichotomous key to classify common plants and animals



Vertebrate Classes

Objective: Compare structures (e.g., wings vs. fins vs. legs; gills vs. lungs; feathers vs. hair vs. scales) that serve similar functions for animals belonging to different vertebrate classes

Mammals:



hair, fur, whiskers, or quills at some point during their lives
backbone (vertebrate)
inside skeleton (endoskeleton)
lungs to breathe
most give birth to live young
produce milk to feed young
warm-blooded



Birds:



feathers
backbone (vertebrate)
inside skeleton (endoskeleton)
lungs to breathe
hatch from hard-shelled eggs
warm-blooded

Reptiles:

dry scales or plates
backbone (vertebrate)
inside skeleton (endoskeleton); most turtles also have a hard outer shell
lungs to breathe
most hatch from leathery eggs
cold-blooded



Warm-blooded animals make their own heat and have a constant body temperature

Cold-blooded animals' body temperature comes from their surroundings

Fish:



most have scales covered with a thin layer of slime
backbone (vertebrate)
inside skeleton (endoskeleton)
gills to breathe
babies are either born alive or hatch from jellylike eggs
cold-blooded

Amphibians:

soft, moist skin
backbone (vertebrate)
inside skeleton (endoskeleton)
most hatchlings (jellylike eggs) are called larvae or tadpoles and live in water, using gills to breathe
as they grow, they develop legs and lungs and move onto land
cold-blooded

Using the sorting cards, sort the animals into their class.

Common Invertebrates

Arthropods: Insects:



- hard outer covering
- no backbone (invertebrate)
- outside skeleton (exoskeleton)
- adults have 3 body parts: head, thorax & abdomen
- mouthparts adapted for chewing, biting, sucking and lapping
- breathe through tracheae
- compound eyes
- 3 pairs of legs
- usually 2 pairs of wings and 1 pair of antennae
- most hatch from eggs
- metamorphosis: none, incomplete, or complete
- cold-blooded

Mollusks Bi-valves:

- have a two-part shell with a hinge to open/close
- no backbone (invertebrate)
- outside skeleton (exoskeleton)
- hatch from eggs
- cold-blooded
- marine and freshwater
- symetry:

Cnidaria:



- Polyps have tube-like bodies with opening on top, surrounded tentacles. (sea anenomes)
- Medusae are usually bell-shaped animals with mouths and tentacles that dangle down from their bodies (jellies)
- In both, food goes in through the mouths and the waste (poop) goes out through the mouths too.

Mollusks

Gastropods (Snails):

- most have hard shells
- no backbone (invertebrate)
- outside skeleton (exoskeleton)
- hatch from eggs
- cold-blooded

Arthropod Arachnia (Spiders):



- no backbone
- one or two body segments
- pincers or fangs near mouth
- 4 pairs of legs
- no antennae

Arthropod

Crustaceans (Crabs):

- hard outer covering
- no backbone (invertebrate)
- outside skeleton (exoskeleton)
- mouthparts adapted for chewing
- 5 or more pairs of legs
- claws
- 2 pairs of antennae
- 2 compound eyes on stalks
- adults have 2 or 3 body segments
- hatch from eggs
- cold-blooded

Mosquitoes and Malaria

Mosquitoes live on all continents except for Antarctica.

Female mosquitoes bite to drink blood. Males drink plant juices. Females find their food source (humans) by sight and smell.

Mosquitoes are attracted to dark colored clothes and the smell of soaps and perfumes.

Mosquitoes are more active early in the morning and at dusk. They will also bite throughout the night.

They lay eggs in still (not moving) water. Like many insects, mosquitoes go through four stages (complete metamorphosis): eggs to larva to pupa to flying adult.

According to the World Health Organization, there were approximately new 216,000,000 cases of malaria in 2010. Of those, approximately 655,000 people died. Most of those deaths happened in Africa.

Malaria, yellow fever, and dengue fever are all diseases that are carried by mosquitoes...and all can be deadly.

There are over 3,500 different types of mosquitoes. The type of mosquitoes that carry malaria (*Anopheles* mosquitoes) have been completely destroyed in the United States but not in other parts of the world.

In addition to the specific type of mosquito, the mosquitoes need to drink blood of someone carrying one of the four different parasites that cause malaria (or parasites that cause yellow fever or dengue fever). After they drink the blood, the mosquitoes carry the parasites and give them to anyone else they bite.

The malaria-carrying mosquitoes and parasites live in hot, tropical climates around the world.

Because the specific types of mosquitoes were destroyed in the United States, most of the 1,500 cases of malaria found in the United States each year are people who have travelled to other parts of the world. When travelling to areas where the mosquitoes and parasites live, travellers can (and should) take a medicine to help them avoid getting malaria.

Animal Sorting Cards

Objective: Classify organisms according to one selected feature, such as body covering, and identify other similarities shared by organisms within each group formed.

Describe several external features and behaviors of animals that can be used to classify them (e.g., size, color, shape of body parts).

Identify observable similarities and differences (e.g., number of legs, body coverings, size) between/among different groups of animals.

Animal Card Games:

Sorting: Depending on the age of the children, have them sort cards by:

where the animals live (habitat)	tail, no tail
number of legs (if the animals have legs)	colors or skin patterns
how they move (walk, swim, jump, or fly)	animal class
type of skin covering (hair/fur, feathers, scales, moist skin)	
what they eat (plant eaters/herbivores, meat eaters/carnivores, both/omnivores)	

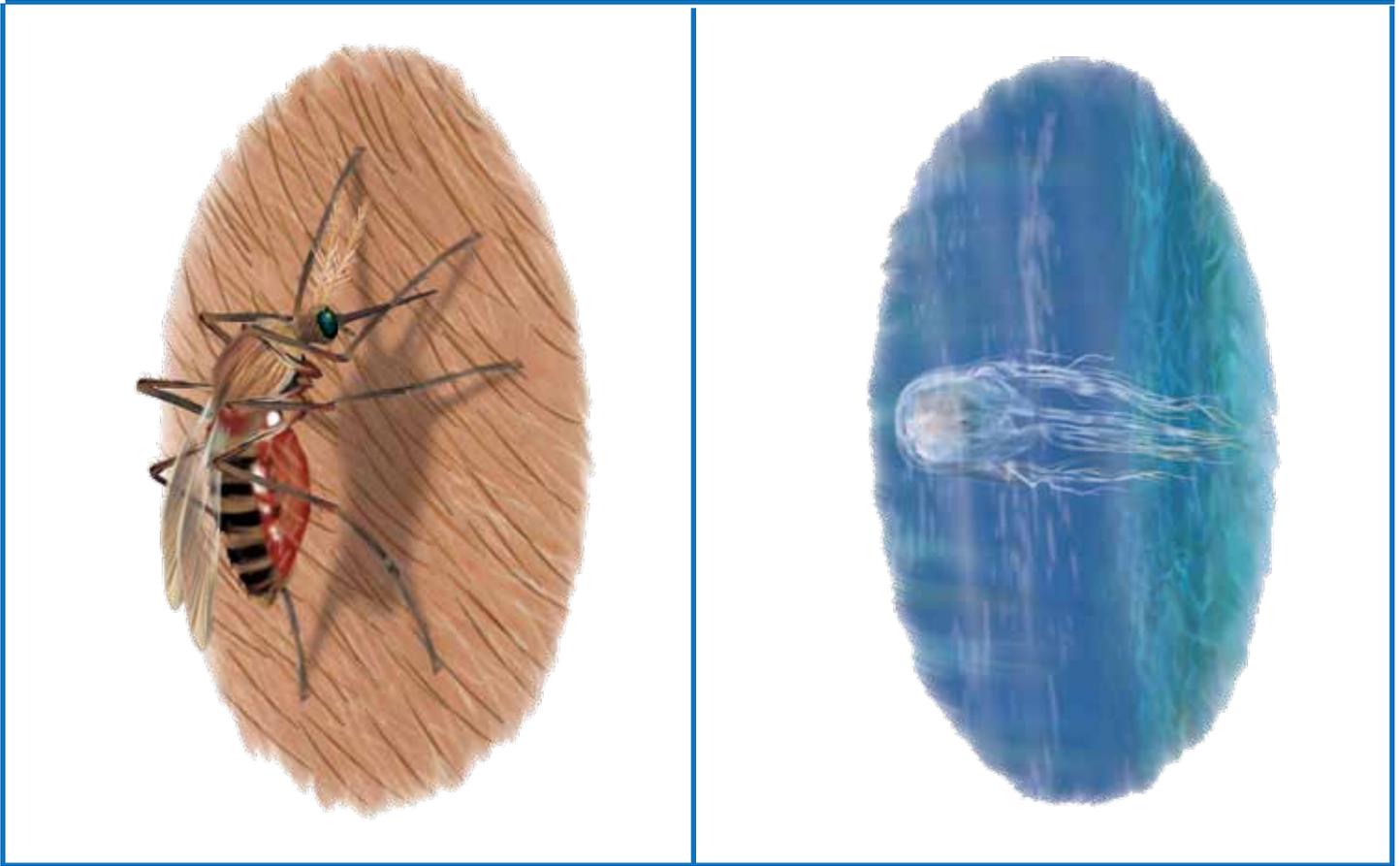
Memory Card Game: Make two copies of each of the sorting card pages and cut out the cards. Mix them up and place them face down on a table. Taking turns, each player should turn over two cards so that everyone can see. If the cards match, he or she keeps the pair and takes another turn. If they do not match, the player should turn the cards back over and it is another player's turn. The player with the most pairs at the end of the game wins.

Who Am I? Copy and cut out the cards. Poke a hole through each one and tie onto a piece of yarn. Have each child put on a "card necklace" without looking at it so the card hangs down the back. The children get to ask each person one "yes/no" question to try to guess "what they are." If a child answering the question does not know the answer, he/she should say, "I don't know." This is a great group activity and a great "ice-breaker" for children who don't really know each other.

Charades: One child selects a card and must act out what the animal is so that the other children can guess. The actor may not speak but can move like the animal and imitate body parts or behaviors. For very young children, you might let them make the animal sound. The child who guesses the animal becomes the next actor.







What habitats?

Which animals live on land, in water, or both?

For those animals that only live in water, do they live in freshwater or saltwater (ocean)?

Which animals live in rainforests?

Which animals live in grasslands?

Which animals (if any) live near where you live?

Habitats

Objective: Identify and describe physical characteristics of a place (physical features, climate, vegetation and animal life)

Identify natural characteristics of places: landforms, bodies of water, natural resources, and weather).

Geography includes the study of Earth's physical features including climate and the distribution of plant, animal, and human life.

Habitats are more than just the plants and animals that live there. They are communities of plants, animals and non-living things that interact in certain locations. There are many different types of habitats all over the world.

Some things might live in more than one kind of habitat. Can you find any plants or animals that are in more than one habitat?

Interaction between living and non-living things within a habitat

What are some of the non-living things in each habitat?

- Water: freshwater or saltwater? Deep water or shallow water? What kind of precipitation? How often and how much?
- Elevation above sea level
- Climate (temperate, tropical, polar)
- Rocks: how big, how many
- Soil: what kind, how does it hold water?

What are some ways that plants or animals interact with each other or non-living things?

What are some ways that a habitat might change?

Meeting Basic Needs

Plants and animals (living things) live in habitats that meet all of their basic needs.

- Animals need food, water, oxygen to breathe, and a safe space for shelter and to give birth to their young.
- Plants need sunlight and heat (temperature), water, soil to grow, and a way for seeds to move (disperse).
- Living things have body parts and behaviors (adaptations) that help them live in their habitats and meet their basic needs.
- Animals need oxygen to breathe. Animals get their oxygen from either the air or the water. What body parts do they use to get the oxygen? What behaviors do they have? (Mammals or reptiles that live in water must come to surface of the water to get the oxygen from the air).
- Most animals move from one place to another. Special body parts help them move in their habitat but not easily in other habitats. For example, which body parts help animals move in the air, land, or water?
- All living things need energy to grow and have body parts to help them get food.

Predator or Prey?

- A carnivore is a predator that has to find other animals to eat (prey).
- A predator of one animal might be prey for another animal.
- Prey are animals that become food for other animals (predators).

Science Journal (Vocabulary)

predator

my definition

my drawing

prey

my definition

my drawing

venomous

my definition

my drawing

poisonous

my definition

my drawing

Dangerous Animals: True or False?

Objective: Critical thinking skills

Do you think the statement is true or false:

1. Not all dangerous animals are big and scary looking.
2. Box jelly stings don't bother sea turtles at all. In fact, sea turtles eat the box jellies.
3. Scientists no longer call jellies "jellyfish" because they are not fish. Along the same lines, a "starfish" should be called a "sea star."
4. The inland taipan changes color, and is lighter in the summer than the winter.
5. When there is only enough food for one shark, great white sharks will have contest by slapping the surface of the water with their and spraying each other. The one with the most slaps gets the food.
6. Though they live in the water, pufferfish aren't very good swimmers.
7. The Brazilian wandering spider is nicknamed the banana spider because they are sometimes found in boxes of bananas. They should not be confused with the common (and not dangerous) banana spider found in North America.
8. Unlike most spiders, Brazilian wandering spiders do not live in webs.
9. Cape buffaloes are said to have excellent memories and can go after a hunter who hurt them many years before.
10. The saltwater crocodile lays 40-60 eggs and guards the nest for about 90 days (how many months is that?). If the nest temperature is above 32 degrees, the hatchlings will be male. Otherwise, they will be female.
11. Hippos produce a red ooze that makes it look as if they are sweating blood. But it's really a layer of mucous that keeps them from getting sunburn—just like a sunscreen!
12. It's the daddy cassowary who sits on the nest for 60 days and then takes care of his babies for sixteen months until he sends them off to live on their own. The mommy lays the eggs and then takes off.
13. Mosquitoes have been around for more than 30 million years and there are 175 different species in the US. Yes, mosquitoes are attracted to some people more than others!
14. The best way to protect yourself from mosquito bites is to use a bug repellent. If camping, sleep under a mosquito net.

Math: Measuring (compare & contrast)

Objective Core Mathematics Measurement:

Order three objects by length; compare the lengths of two objects indirectly by using a third object.

Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length

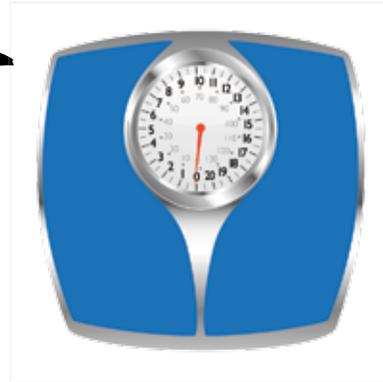
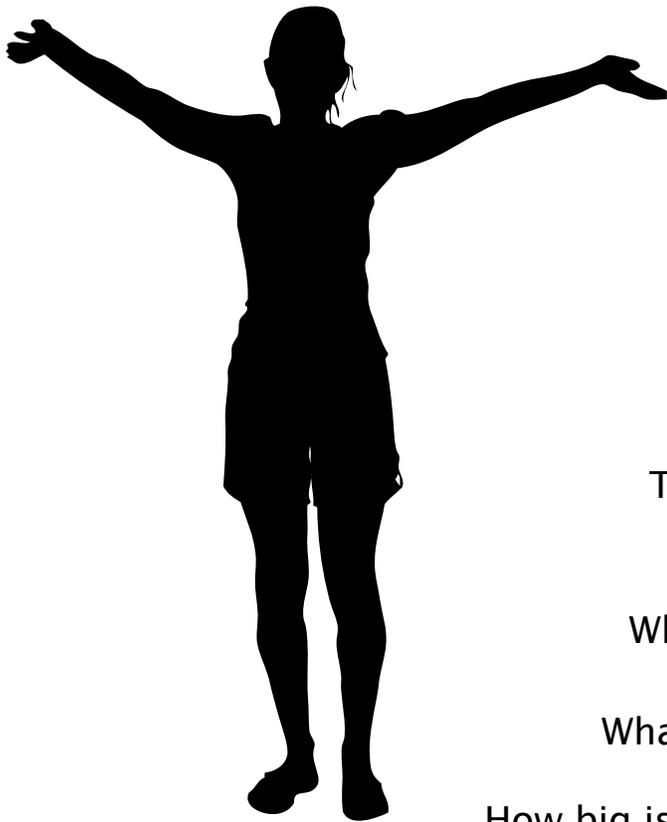
Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. (up to 10)

Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.

Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.

Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.

Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.



Try to imagine how big or small something is compared to something you know.

What are some other things about the same size?

What is something that weighs about the same?

How big is it?

Using the right measuring tool (yard stick or measuring tape) and chalk, mark off how big something is on the playground, sidewalk, or driveway.

If you were to lie down on or next to the line, how many times would you have to lie down in order to equal the size?



How big is a 15 foot (4.5 m) great white shark?

How tall are you?

How tall is your mom, dad, grandparent, or teacher?

Would an adult great white shark fit in your bathtub?



How big is a hippo's 20 inch tooth?

How wide is a/the book when open?

Which is longer, the open book or a hippo's tooth?



An adult Cape buffalo weighs about 1,500 lb. (680 kg)

How much do you weigh?

Find things around your house and weigh them.

What was the heaviest thing you found?

Does it weigh as much as a Cape buffalo?

Which measuring tool will you use to compare each one?



Accidental Death and Shark Attack Chart US 2010

A lot of information can be gotten from reading charts but it's also important to think beyond numbers too. Looking at the chart, see if you can answer the following questions about how many deaths (fatalities) there were in the United States caused by different types of accidents.

- Which type of accident caused the most deaths?
- Which type of accident caused the least deaths?
- Did more people die from shark attacks or lightning? How many more?
- How many people died from drowning?
- How many people died from lightning?
- How many people died from cassowary attacks?
- Can you think of any reason there wouldn't be any cassowary-caused deaths in the United States?
- If several hundred thousand people die from malaria every year, why do you think there are so few malaria deaths in the United States? Hint: if you don't know the answer to this, go back and read "Mosquitoes and Malaria" on page 21.

Accidental Deaths in the United States 2010	
Event	Fatalities
accidental drowning	3,696
cassowary attacks	0
lightning	29
malaria	9
motor vehicle accident	35,080
river flood	36
shark attack	2
tornado	45

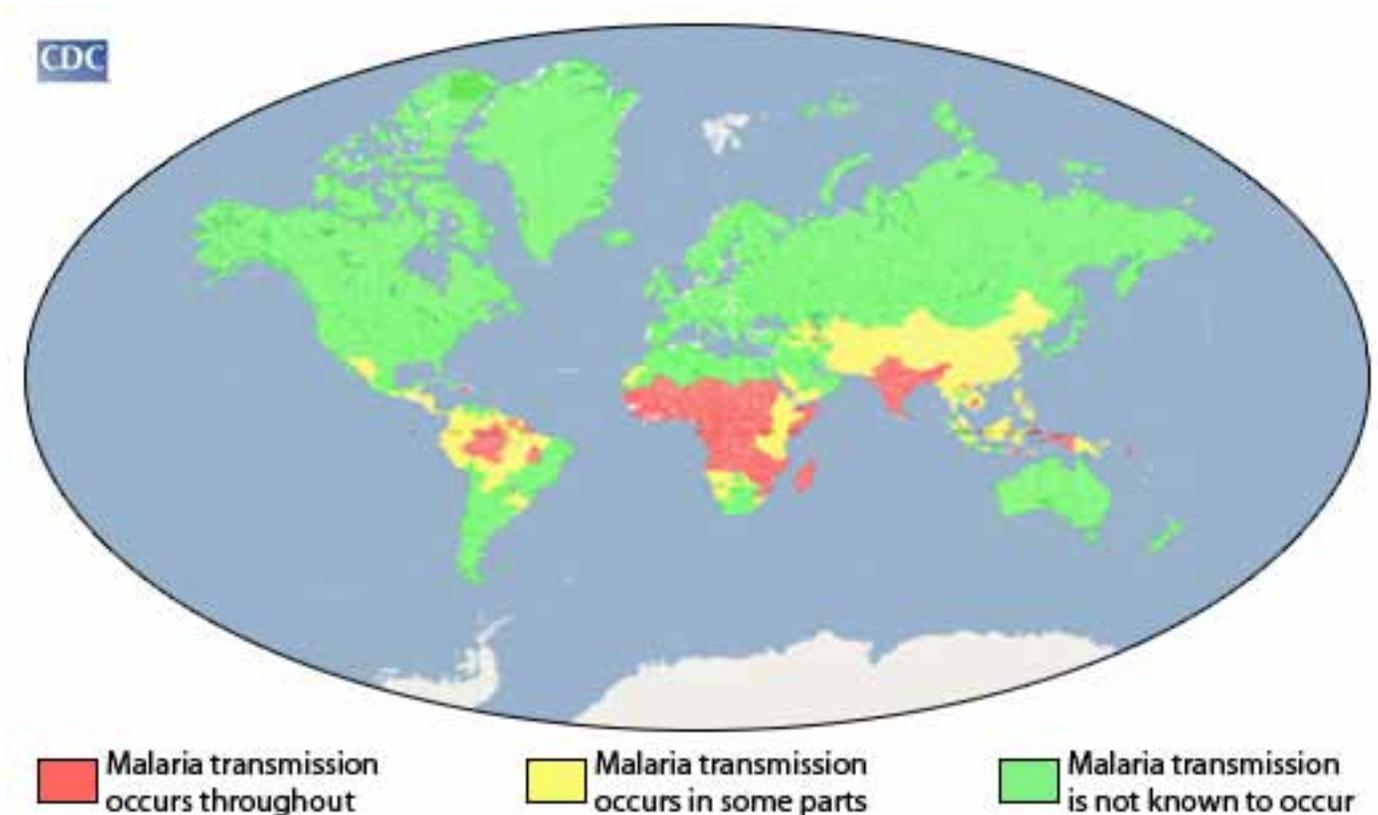
Sources of information:

www.cdc.gov/nchs/data/nvsr/nvsr60/nvsr60_04.pdf

www.nws.noaa.gov/om/hazstats.shtml

www.flmnh.ufl.edu/fish/sharks/attacks/relarisk.htm

Malaria Map



Map Source: Center for Disease Control
www.cdc.gov/malaria/about/distribution.html

What does the “red” mean?

What does the “yellow” mean?

What does the “green” mean?

Why isn't there any information given for Antarctica? Hint: if you don't know the answer to this, go back and read “Mosquitoes and Malaria” on page 21.

Do you think there's a higher risk of getting malaria near the Equator or the North Pole? Why?

Which continent seems to have the worst malaria problem?

Do you think there's a malaria problem by where you live? Why or why not?

Coloring Pages





Glossary

word	Definition	Part of Speech	Spanish
adaptation	a physical or behavioral feature of a plant or animal that allows it to survive in its environment	noun	adaptación
Africa	one of the seven continents	noun	África
algae	very small, simple plants that live in water through photosynthesis, algae are the main producers of food and oxygen in water environments	noun: plant	alga marina
animal	any member of the kingdom Animalia: can move voluntarily, get and eat food, and respond to stimuli	noun	animal
Australia	one of the seven continents	noun	Australia
bacteria	organisms not able to be seen except under a microscope; found in rotting matter, in air, in soil and in living bodies, some being the germs of disease	noun	bacterias
behavior	an organism's actions and responses to its environment and other organisms in that same environment	noun	conducta
bite	the act of cutting or breaking something using teeth or beak in order to eat it	noun	mordedura, picadura
bite	to cut or break skin with teeth or beak to eat	verb	morder, mordiscar
blood	the red liquid inside your body that delivers nutrients and oxygen to the major organs	noun: body part	sangre
box jelly	a box-shaped jelly (jellyfish) with strong venom	noun: animal	cubomedusa
Cape buffalo	a large avage buffalo of southern Africa with upward-curving horns	noun: animal	búfalo cafre

word	Definition	Part of Speech	Spanish
carnivore	an animal that eats the meat of other animals (consumer)	noun	carnívoro/a
cassowary	a large black flightless bird of Australia and New Guinea	noun: animal	casuario
dead	no longer alive	adjective	muerto
death	the state of being dead	noun	muerte
defend	to protect something or someone	verb	defender
defense	an action to avoid being hurt	noun	defensa
desert	land area that receives less than 10-12 inches (25-30 cm) of rain per year	noun: habitat	desierto
disease	an illness	noun	enfermedades
eat	to bite and swallow food as nourishment	verb	comer
feathers	a bird's body covering	noun: body part	plumas
fever	a high body temperature indicating illness	noun	fiebre
germ	a form of bacteria that spreads disease among people or animals	noun	microbio
grassland	an ecosystem with a dry, temperate climate long periods of the summer, and freezes in the winter with grasses but no trees	noun	herbazal
great white shark	a large shark found in coastal waters of all oceans	noun: animal	gran tiburón blanco
hibernate	to spend the winter in close quarters in a dormant condition	verb	hibernar
high	a long way from the ground	adjective	alto
hippopotamus	a large herbivore mammal that spends much of its time sitting in the water	noun: animal	hipopótamo
horn	the bony, permanent, hollow paired growths, often curved and pointed, from the upper part of the head of certain ungulate mammals (cattle, sheep, goats)	noun: body part	cuerno

word	Definition	Part of Speech	Spanish
huge	very large	adjective	gran, grande
hunt	to chase or search for animals for the purpose of catching or killing	verb	cazar
inland taipan	a venemous snake found in Australia	noun	taipán del interior
jaw	the chin and bottom teeth	noun: body part	mandíbula
kill	to stop another living thing from living	verb	matar
meat	food from the flesh of an animal	noun	carne
mosquito	a small flying insect that bites the skin of people and animals in order to feed on their blood, can carry serious diseases	noun: animal	mosquito
mouth	opening of the digestive tract, into which food is taken for digestion	noun	boca
nausea	the feeling of needing to throw up (vomit)	noun	naúsea
ocean	the vast body of salt water that covers almost three fourths of the earth's surface	noun: habitat	océano
plant	any member of the kingdom Plantae that usually produce their own food through photosynthesis	noun: plant	planta
poison	something that harms or destroys	noun	tóxico
poisonous	containing poison	adjective	venenosos
pufferfish	a fish that inflates its as a protection	noun	peces erizo
prey	an animal that is hunted, killed, and eaten by other animals	noun	presa
protect	to provide for, defend	verb	proteger
puff	to fill with air and get bigger quickly	verb	inflar
rainforest	tropical or temperate forest with an average of over 60 inches (152 cm) of rain a year	noun	selva

word	Definition	Part of Speech	Spanish
rash	an area of small red spots caused by an illness or an allergic reaction	noun	erupción
release	to let go, to free	verb	liberar, soltar
river	a large, natural body of running water that flows from its start (headwater) to the ocean	noun: habitat	rio
saltwater crocodile	a crocodile that lives in the ocean	noun	cocodrilo de agua salada
savanna	a tropical or subtropical grassland	noun: habitat	sabana
sharp	a pointed end or an edge that can cut something	adjective	cortante, filosas
sick	not healthy, ill	adjective	enfermo
slither	to move in a sliding motion	verb	culebrear
snake	a legless reptile	noun: animal	serpiente, culebra, víbora
spike	something sharp and pointed that sticks out	noun	esquina
sting	to poke with something sharp	verb	picar, pinchar, punzar
strong	powerful, a great force	adjective	fuerte
survive	to remain alive or in existence	verb	sobrevivir
teeth	1) hard, white mouth parts used for chewing food; 2) small, notched projections along a margin, especially of a leaf	noun	dientes
tentacles	flexible appendages with no rigid skeleton	noun	tentáculos
territory	an individual animal's range that it will defend against intruders	noun	territorio
trample	to put feet down on someone or something in a heavy way that causes injury or damage	verb	derribar

word	Definition	Part of Speech	Spanish
tusk	a long, pointed tooth of an animal (elephant, walrus)	noun: body part	colmillo
venom	the poison an animal ejects by a bite or sting	noun	veneno
venomous	an animal that injects a poisonous substance into a wound (for example, scorpions, jellyfish, and rattlesnakes).	adjective	venenosos
wandering spider	a spider that hunts for prey instead of weaving a web and waiting for food to come to it	noun: animal	arañas errantes
weakness	lacking mental or physical strength	noun	debilidad
wild	in a natural state, not tame	adjective	salvaje
young	someone or something that has not been alive for long	adjective	joven

Answers

Silly Sentences

1. **Wild** animals that eat **meat (carnivores)** must **hunt** and kill their **prey** if they are to survive.
2. Animals **protect** themselves, their **young**, and/or their **territory**.
3. Every animal has **body parts** or special **behaviors (adaptations)** to help find and get food (**plant** or animal) and to protect themselves. Some animals **bite prey** to kill.
4. They often have **huge mouths**, **strong jaws**, and **sharp teeth** to cut through another animal's skin and bones.
5. Venomous animals **release** a poison (venom) with their **bite** or **sting**.
6. These animals **make** the **venom** inside their bodies and use it to **kill prey** (animals they want to eat). They will also use the venom to protect themselves from predators or if scared.
7. **Poisonous** animals don't make the poison in their bodies but usually get the poison from things they **eat**. They only become "**poisonous**" to something that touches or eats them (defense).
8. In some cases, like the **mosquito**, the animal might carry **germs** that are not part of its protection or defense.
9. The germs are just something it picked up from eating something else. But, when it bites or is eaten, the germs are passed along and can make the next animal sick.
10. Mosquitoes may carry many diseases that can cause people to suffer from high fever, nausea, weakness, rashes and death.

	A	B	C	D	E	F	G	H	I	J
1							M			C
2					S		O			A
3	P	R	E	Y	P	S	S			S
4					I	H	Q			S
5		T			D	A	U			O
6	W	A	N	D	E	R	I	N	G	W
7	K	I	L	L	R	K	T			A
8		P	H	I	P	P	O			R
9		A	B	O	X	J	E	L	L	Y
10		N								

BOX JELLY	9,C
TAIPAN	5,B
SHARK	3,F
WANDERING	6,A
SPIDER	2,E
HIPPO	8,C
CASSOWARY	1,J
MOSQUITO	1,G
KILL	7,A
PREY	3,a

What habitats?

Which animals live on land, in water, or both?

Land: inland taipan (snake), Brazilian wandering spider, cassowary, Cape buffalo

Water: great white shark, pufferfish, box jelly

both: hippopotamus, saltwater crocodile

For those animals that only live in water, do they live in freshwater or saltwater (ocean)?

Saltwater

Which animals live in rainforests? Brazilian wandering spider, cassowary

Which animals live in grasslands? Cape buffalo

Which animals (if any) live near where you live? Answers will vary

Accidental Death Chart US 2010

Which type of accident caused the most deaths? motor vehicle accidents

Which type of accident caused the least deaths? shark attacks (cassowary attacks may be an acceptable answer depending on how the child reads the question)

Did more people die from shark attacks or lightning? How many more? lightning by 27

How many people died from drowning? 3696

How many people died from lightning? 29

How many people died from cassowary attacks? 0

Can you think of any reason there wouldn't be any cassowary-caused deaths in the United States? Wild cassowaries don't live in the United States.

If several hundred thousand people die from malaria every year, why do you think there are so few malaria deaths in the United States? (Hint: if you don't know the answer to this, go back and read "Mosquitoes and Malaria" on page 21. The mosquitoes that carry malaria were destroyed in the US. Most people in the US who have malaria got it while travelling in areas where malaria is common.

Malaria Map

What does the "red" mean? The whole area is a malaria risk.

What does the "yellow" mean? Parts of the area are at risk for malaria.

What does the "green" mean? No real risk of malaria.

Why isn't there any information given for Antarctica? No mosquitoes live there.

Do you think there's a higher risk of getting malaria near the Equator or the North Pole? Why? Mosquitoes like the warm, tropical climate near the Equator...higher risk at the Equator.

Which continent seems to have the worst malaria problem? Africa

Do you think there's a malaria problem by where you live? Why or why not? Answers will vary depending on where you live.

Appendix A—“What Children Know” Cards

<p>Question:</p> <p>My answer:</p> <p>This information is correct! This information is not correct; can you find the correct information?</p>	<p>Question:</p> <p>My answer:</p> <p>This information is correct! This information is not correct; can you find the correct information?</p>
<p>Question:</p> <p>My answer:</p> <p>This information is correct! This information is not correct; can you find the correct information?</p>	<p>Question:</p> <p>My answer:</p> <p>This information is correct! This information is not correct; can you find the correct information?</p>

Appendix B—Venn Diagram

Compare and contrast two dangerous animals

