

Teaching Activity Guide

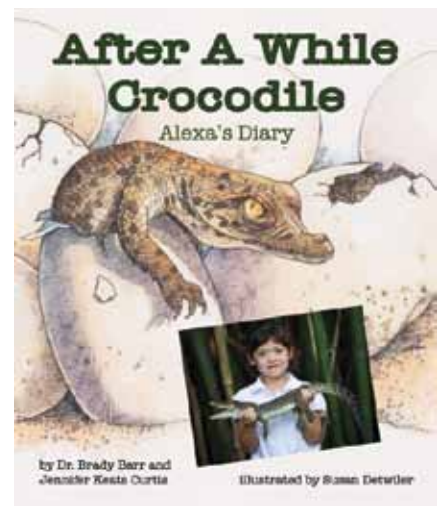
After A While Crocodile

Alexa's Diary

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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. And, 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 nearly 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) 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.

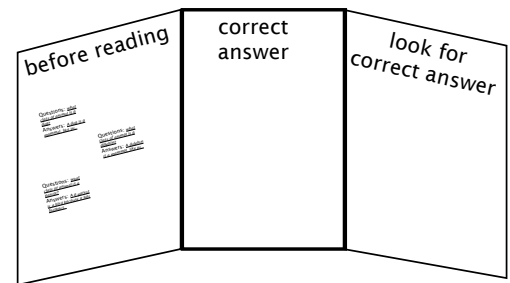
What Do Children Already Know?

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 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

1. What kind (class) of animal is a crocodile: fish, mammal, bird, reptile or amphibian?
2. What's the difference between an alligator and a crocodile?
3. Do you think crocodiles are born alive (like us) or hatch from eggs?
4. What do you think a crocodile nest looks like?
5. Where do you think American crocodiles live? Do any live near where you live?
6. What are some things that crocodiles might eat?
7. American crocodiles are a threatened species. What do you think that means?
8. At the school where Alexa and the other students raise American crocodiles, how do you think they keep the eggs warm?
9. What is a keystone species?
10. What do you think makes American crocodiles a keystone species?
11. Do you think crocodiles make any sounds? If so, what kinds of sounds do you think they make?
12. In what type of habitat do you think American crocodiles live?

Comprehension Questions & Writing Prompts

With prompting and support, identify basic similarities in and differences between two texts on the same topic.

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.

1. Where did this story take place?
2. What was the name of the girl in the story?
3. What did she name “her” American crocodile and why?
4. What was the name of the scientist (co-author of the book) in the story?
5. What was the girl doing at her school?
6. What kind (class) of animal is a crocodile: fish, mammal, bird, reptile or amphibian?
7. What’s the difference between an alligator and a crocodile?
8. What do you think a crocodile nest looks like?
9. Where did the school get the crocodile eggs?
10. How did the students keep the eggs warm at the school?
11. What are some things that Alexa fed to the crocodiles?
12. Why do you think Alexa and her school are raising the crocodiles?
13. What are some animals that might eat crocodile eggs in the wild?
14. What were some of the sounds Jeffe and the other crocodiles made?
15. What did they do to the crocodiles before letting them go?
16. Where did they release the crocodiles?

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.

This book uses a combination of photographs and illustrations to tell the story. Why do you think the book uses both?

How do the authors/illustrator let you know time is passing?

In the photo on the dairy page for April 5, what is the baby crocodile doing?

Look at the photo of Alexa's school. How is her school different than or similar to your school?

Looking at the illustration (diary date April 11), describe the difference between the crocodile's nest and the caiman's nest. Which do you think would be easier to find and why?

What is Alexa doing to the egg in the photograph opposite the nest illustration?

Look at the photos of the crocs hatching and describe what you see.

Look at the illustration of the keystone of a building arch. Look around your town or neighborhood to see if you can spot a keystone in anything.

Looking at photos and illustrations, describe the following body parts of crocodiles:

- eyes
- teeth
- snout (nose)
- feet (are the front feet the same as the back feet?)
- body (what covers its body, how long is it, etc.)
- coloring of body top versus body bottom (why do you think it's light on the bottom?)

Language Arts & Science: Basic Needs

Objective: Describe the basic needs of living things and how they are met.

Plants need water, oxygen, food, light and space to grow and reproduce; animals need water, oxygen, food, and shelter/space to grow and reproduce.

Re-read the story and write down any words that relate to basic needs of crocodiles: water, oxygen, food, light, space. Then see if you can answer these questions.

- Describe the habitat where crocodiles live.
- What do crocodiles eat in the wild?
- What did the school children feed the crocodiles?
- Can you tell whether crocodiles breathe oxygen from the air or from water? How?
- Describe where mother crocodiles lay their eggs.
- Why do you think mother crocodiles don't lay eggs too close to the water?
- Can you describe or draw a picture showing the difference between a crocodile's nest and a caiman's nest?

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.

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

Build a word bank using words found in the story or For Creative Minds.

Adjective	Noun	Verb
hollow	alligator (gator)	attach
large	animals	catch
lower	caiman	grab
narrow	crocodile (croc)	hold
needle-sharp	crocodilian	move
pointed	jaw	show
powerful	mouth	swallow
rounded	nose	
strong	snout	
upper	teeth	
wide		

Cross-Curricular Silly Sentences

1. ______{noun}s, ______{noun}s, and ______{noun} are all called crocodilians.
2. Alligators and caiman have ______{adjective} snouts, like a duck's bill.
3. The ______{noun}'s ______{adjective} snout is better suited for catching and holding large, strong animals.
4. A ______{noun} has a narrow, ______{adjective} nose.
5. When alligators' ______{noun}s are closed, they only show their upper ______{noun}.
6. When ______{noun}s' mouths are closed, they show upper and lower teeth, and a lot of them.
7. Whether croc or gator, these ______{noun} are attached to the most powerful ______{noun}s on the planet.
8. You combine ______{adjective} - ______{adjective} teeth with strong jaws and you have something like a bear trap.
9. Croc teeth are ______{adjective}, ______{adjective} and needle-sharp!
10. Crocs ______{verb} food whole or tear it into pieces that they can swallow.

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

ALLIGATOR
CAIMAN
CROCODILE
EGG
HOLLOW
JAW
REPTILE
TEETH
WIDE

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:

Sequencing: Put “life cycle” events in order or in order of age.

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.



Math: Measuring (Understanding the Numbers)

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.

The average male American Crocodile in Florida is 11 feet (3.35 m).

How big is that?

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

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 many times would your teacher or parent have to lie down?



An American crocodile's egg averages 8 centimeters or 3 inches in length.

What standard measuring tool would you use to measure something in inches or centimeters?

Using that measuring tool, see what things you can find near you that are the same size. Make a list or draw pictures of the items.



Map Activity

Objective: reading maps, geography, know that plants and animals live in different locations

Use the three maps on the next page to answer these questions:

Which type of crocodilian is represented on the map by the color red?

Which type of crocodilian is represented on the map by the color blue?

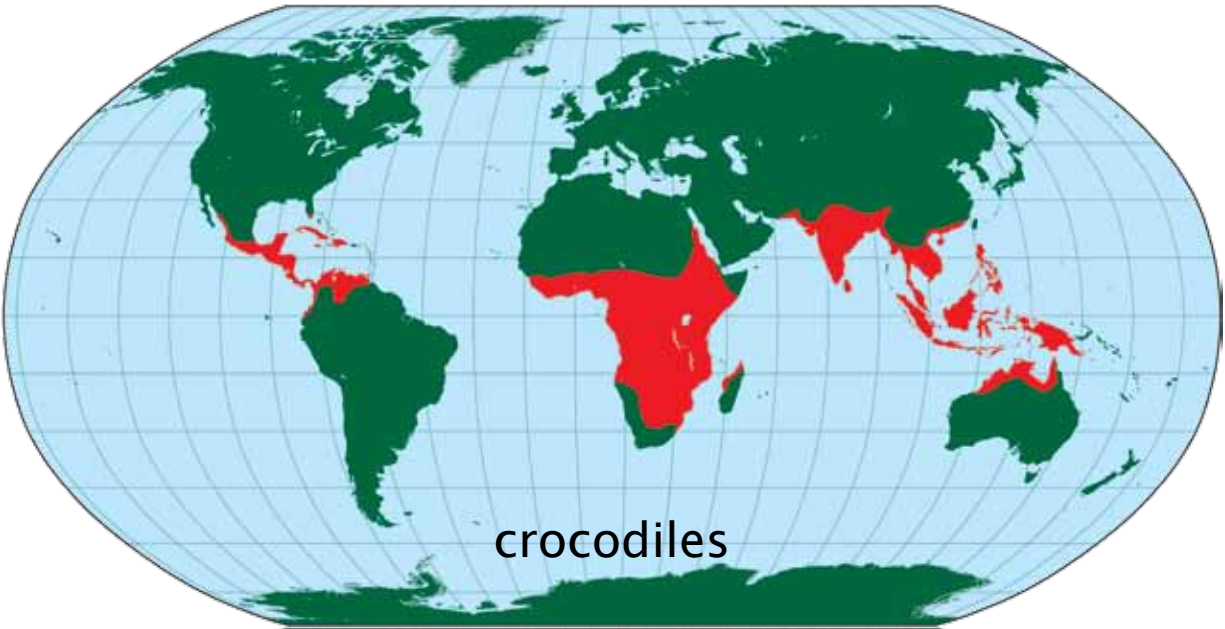
Which type of crocodilian is represented on the map by the color yellow?

Do any crocodilians live near you? If so, which kind(s)?

Which crocodilians live in the same areas of the world?

Which type of crocodilian is found throughout most of the world?

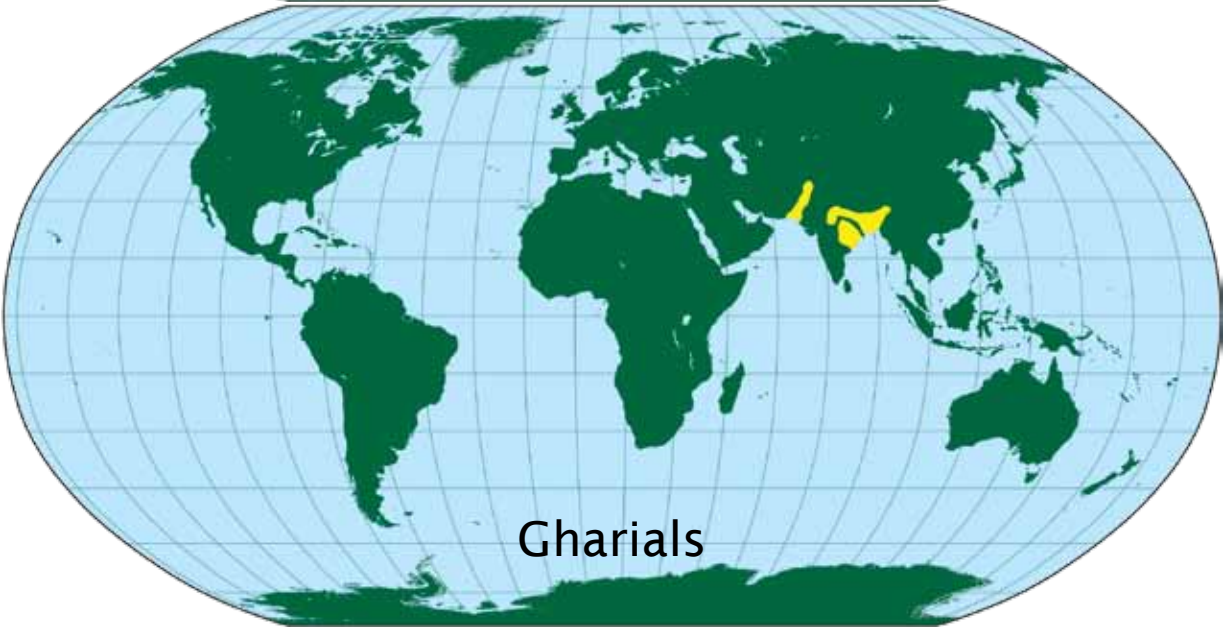
Which type of crocodilian is found in the least amount of the world?



crocodiles



alligators and caimans



Gharials

Answers

Silly Sentences

Crocodiles, alligators, and caiman are all called crocodilians.

Alligators and caiman have rounded snouts, like a duck's bill.

The alligator's wide snout is better suited for catching and holding large, strong animals.

A crocodile has a narrow, pointed nose.

When alligators' mouths are closed, they only show their upper teeth.

When crocodiles' mouths are closed, they show upper and lower teeth, and a lot of them.

Whether croc or gator, these teeth are attached to the most powerful jaws on the planet.

You combine needle-sharp teeth with strong jaws and you have something like a bear trap.

Croc teeth are hollow, strong and needle-sharp!

Crocs swallow food whole or tear it into pieces that they can swallow.

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

Appendix B—Venn Diagram

Compare and contrast crocodiles and alligators

