Teacher Version			
Grade	**4**	**Title/Subject**	**Pythons**

The following sections are included in this Teacher Version:

- **Overview**
- **Process: Day 1, 2 and 3**
- **Teacher Directions for Scoring Rubric**
- **Student Directions and Articles**

Overview

On Day 1 students will engage in a video viewing and a shared reading and note-taking activity using informative texts to learn about pythons. After the group activity, they will be directed to plan their writing. On Day 2 they will draft an informative writing piece about pythons utilizing the information they read in the texts as well as notes they took during the shared lesson. On Day 3 students will finish their drafts, revise and edit their writing, and type a final copy.

Process

DAY 1: Video Viewing, Shared Reading, and Note-taking: Up to 60 minutes

Step 1: Connect to Background Knowledge ~ 5 minutes

Provide an introduction to the classroom activity by indicating that after this activity, students will be writing an essay focused on the topic of pythons. Ask students to share orally what they might know about pythons. Possible questions could include:

"What is a python? What do pythons look like? Where do they live? Why do you think they are a problem in the Florida Everglades? What else do you know about pythons?"

For active engagement encourage pair or group sharing, before sharing out with whole group.

Step 2: Accessing the Information ~ 35 minutes

1. Explain: *"Now we will watch a video and read two sources about pythons."* Watch the video and read both sources, pointing out important facts and features (pictures, captions, etc.) Use ONLY the sources provided in this prompt packet.

2. Lead a whole class discussion about the sources, during which students generate a key word list, list the "gist" next to each paragraph, highlight important words/phrases, or participate in pictorial narrative input (large teacher-created drawing with labels).

3. Think-Pair-Share: *"Tell your partner what you learned about pythons."* Make sure both partners have time to share with each other.

   Have the class watch this video clip:

   https://www.youtube.com/watch?v=P_LIuzEoJ_Y

Step 3: Clarify Expectations for the Writing Task:

Explain: *"Now you will have a chance to look at the sources, plan, and write a draft to explain to me what you learned about Pythons. Tomorrow you will have a chance to write a draft and the next day you will revise and edit your work to write a final revision."*

Review the student directions and checklist for the writing assignment and give each student a sheet of blank paper for planning and lined paper for writing.

Step 4: Planning for Writing: ~ 20 minutes

Tell students to begin planning their writing on the blank sheet of paper. You can remind them of planning strategies you have taught in your classroom such as outlining, lists, webs, or drawing. Don't provide a plan yourself just remind them of the strategies for planning.

Collect all materials from Day 1 after the 60 minutes total is complete.

DAY 2: Writing Up to 45 minutes

1. Allow students to access the sources, their notes, the classroom activity charts/key word lists, and their draft.

2. Students read the prompt, review their writing plan and draft their essays.

3. Remind students when 10 minutes remain to re-read their writing and check for missing information, or confusing sentences.

4. Collect all student writing materials.

DAY 3: Revising and Editing Up to 45 minutes

1. Students edit and write final revision of essay. Provide additional lined paper for revisions and final copies as needed. Students may have time to create a final copy, or may revise and edit from their draft as time allows.

2. At teacher discretion, students may use word processing for draft or revision as long as spelling and grammar correction tools have been disabled.

3. Inform students when 10 minutes remain.

4. Collect all student writing materials.

Teacher Directions for Scoring Rubric:

Student responses to Part 2 will be scored using the Common Core based Informative/Explanatory Writing Rubric. A score will be given in each of the rubric categories. For grades 3-6, student **revisions** will be scored.

Each student's final scores should indicate a 1, 2, 3, or 4 in each of the categories (no partial scores such as 2.5, 3+, etc.). A score of 3 or 4 in each category is considered a passing score and a total of 6-8 points or higher out of 12 total is considered a passing overall score.

Grade	4	Informative/Explanatory Writing Rubric		
Level		**INFORMATIVE/EXPLANATORY WRITING**	**LANGUAGE CONVENTIONS**	**WITH GUIDANCE and SUPPORT FROM ADULTS**
4 Exceeds		☐ Meets all expectations set forth in 3 ☐ Document is well organized and connected with smooth transitions ☐ Both introduction and conclusion are clear and well stated ☐ Facts are well organized with appropriate details	**Mostly correct** use of language conventions, and some above grade level skills used, for example: ☐ Meets all expectations set forth in 3 ☐ Uses underlining, quotation marks, or italics for titles of works ☐ Recognizes and corrects inappropriate shifts in verb tense.	Guidance & Support Level of guidance and support from adults before writing: Check off what was done before the student wrote the piece being scored.
3 Meets		**INFORMATIVE/EXPLANATORY WRITING (W2)** ☐ Introduces topic clearly (W1a) ☐ Groups related information in paragraphs and sections (W2a) ☐ Includes formatting (headings, etc.), illustrations, and multimedia when they aid comprehension (W2a) ☐ Develops topic with facts, definitions, concrete details, quotations, or other information/examples related to the topic (W2b) ☐ Links ideas within categories of information using words/phrases such *another, for example, also, because* (W2c) ☐ Uses precise language and domain-specific vocabulary to inform/explain the topic (W2d) ☐ Provides a concluding statement or section related to the information/explanation presented (W2e) **WRITING PROCESS (W4-W8)** ☐ Uses clear and coherent writing in multi-paragraph texts that is appropriate to task, purpose, and audience (W4) ☐ **WGASFA*** Develops/strengthens writing by planning, revising, editing (W5) ☐ **WGASFA*** Uses a variety of digital tools to write and publish writing (W6) ☐ **WGASFA*** Can keyboard/ type a minimum of one page in a single sitting (W6) ☐ Takes notes, paraphrases, and categorizes information, and provides a list of sources (W8) ☐ Draws evidence from text (W9)	**Adequate** use of correct sentence formation, punctuation, capitalization, grammar usage and spelling for grade level, for example: ☐ Produces complete sentences, recognizing and correcting inappropriate fragments and run-ons (L1f) ☐ Correctly uses frequently confused words (e.g., *to, too, two; there, their*) (L1g) ☐ Writes fluidly and legibly in cursive or joined italics (L1h) ☐ Uses correct capitalization (L2a) ☐ Uses commas and quotation marks to mark direct speech and quotations from a text (L2b) ☐ Uses a comma before a coordinating conjunction in a compound sentence. (L2c) ☐ Spells grade-appropriate words correctly, consulting references as needed. (L2d) ☐ Chooses words and phrases to convey ideas precisely (L3) ☐ Chooses punctuation for effect (L3)	☐ Discussion ☐ Read aloud or shared reading ☐ Drawing ☐ Vocabulary word bank ☐ Shared or interactive writing ☐ Graphic organizer ☐ Language frames
2 Almost Meets		☐ Has clear topic but some facts are not well-developed ☐ May not write multi-paragraphs ☐ Has limited planning for writing ☐ Uses some linking words/phrases ☐ Has informal vocabulary or is not aligned with topic	**Limited** use of correct sentence formation, punctuation, capitalization, grammar usage and spelling for grade level, for example: ☐ Uses some punctuation correctly ☐ Uses some sentence variety correctly ☐ Spells most words correctly	
1 Does Not Meet		☐ Provides few details or facts ☐ Writes only single paragraph ☐ Has no planning for writing ☐ Copies sentences directly from text in articles in prompt	**Infrequent** use of correct sentence formation, punctuation, capitalization, grammar usage and spelling for grade level, for example: ☐ Has many words spelled incorrectly ☐ Has many errors in capitalization ☐ Writes few complete sentences or only simple sentences ☐ Has many errors or is missing punctuation	

- **WGASFA**: "with guidance and support from adults"

This rubric was adapted from rubrics at sbusd.org and information from Smarter Balanced Assessments (www.**smarterbalanced**.org) using the California Common Core Standards at www.cde.**ca**.gov.

Smarter Balanced Assessment Consortium

Student Version			
Grade	4	**Title/Subject**	Pythons

Student Prompt:

You have learned a lot about pythons from the video and articles. Please write a multi-paragraph informative essay which explains what you have learned about pythons and why they are becoming a problem in the Florida Everglades.
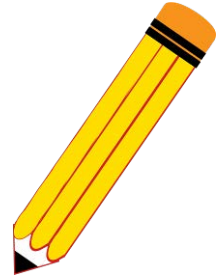
Writing Tips:

☐ Be sure to introduce the topic and group related facts together.

☐ Use facts from the two sources to develop your ideas.

☐ You may want to include definitions and illustrations to help your teacher clearly understand what you learned.

☐ End with a conclusion.

Reminders:

☐ You can look at the sources and your key word list to help you with your writing.

☐ You might begin by making a plan or drawing a graphic organizer help you with your thinking.

☐ Do not copy sentences from the sources.

Step 1: Plan

Plan: review the texts and your notes

☐ Make a plan on the blank paper for your writing.

Step 2: Draft

☐ Write a topic sentence with your main idea.

☐ Write sentences with several facts, definitions, and concrete details to develop points.

☐ Group information together as you write.

☐ Use linking words such as *also, another, and, more, but, another, for example, because* to connect ideas.

☐ Use precise language and domain-specific vocabulary to inform or explain your topic.

☐ Write a concluding sentence or paragraph.

☐ Provide a list of sources

			Student Version
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Step 3: Reread and Revise

☐ Does it make sense?

☐ Have you used science words from the text?

☐ Is there missing information you want to add?

Step 4: Edit

☐ Capitals at the beginning of sentences

☐ Capitals for proper nouns

☐ Punctuation: (end points) **. ! ?**

☐ Commas **,** quotation marks **" "**

☐ Spelling

☐ Complete sentences (avoid fragments and run-ons)

Step 5: Final Draft

☐ Recopy and fix your mistakes.

Good work!

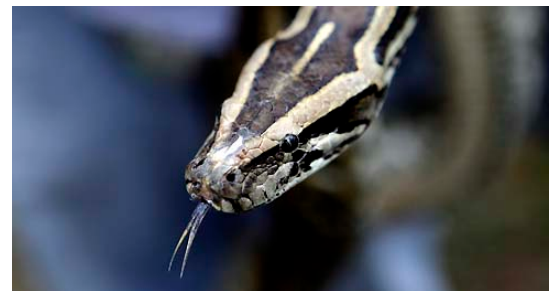**http://www.timeforkids.com/node/28101/print**

Pythons Attack the Everglades

An increase of pythons in Florida causes problems for the food chain

FEB 01, 2012 | **By Stephanie Kraus**

LYNNE SLADKY—AP

Burmese pythons are native to India and parts of Southeast Asia. But they have found a new place to lurk. A study by the Proceedings of the National Academy of Sciences (PNAS) shows that the pythons are now a big threat to parts of Florida, especially the Everglades.

What brought the pythons from thousands of miles away to the Sunshine State? The reptile trade is big business. So many snakes are shipped to Florida to be bought as pets. In fact, the American Pet Products Manufacturers Association says the reptile trade is worth more than two million dollars a year. Over the years, some of the pet pythons have either escaped or were turned loose after they grew too big for their owners to care for. (An average python can be anywhere from 12- to 19-feet long.) Others may have slithered from pet shops during Hurricane Andrew in 1992.

LORI OBERHOFER—NATIONAL PARK SERVICE/AP

A Burmese python fights with an alligator in the Florida Everglades.

Now, in a hunt for food, they are wiping out native species including raccoons, opossums, bobcats and other mammals in the Everglades. According to the PNAS study, in areas where pythons are present, sightings of medium-sized mammals are down as much as 99%. Researchers found a large decrease in the small mammals that are part of a

python's diet. They also found there were more of those mammals living in areas without any pythons.

In January, U.S. Interior Secretary Ken Salazar announced a federal ban on the import of Burmese pythons and three other species of snakes to the United States. On Monday, he said that the recent PNAS report shows why the ban was needed.

"The study paints a picture of the real damage that Burmese pythons are causing to native wildlife and the Florida economy," Salazar said. Some snakes, including the boa constrictor, are still allowed to be imported.

A New Predator

Pythons thrive in the warm, humid climate of the Everglades. But a U.S. Fish and Wildlife Service report found that the huge snakes are learning to adapt to colder climates too. This will allow them to spread to other areas.

ALAN DIAZ—AP

In January, U.S. Interior Secretary Ken Salazar announced a federal ban on the import of Burmese pythons to the United States.

The increase in pythons is causing a huge problem for local officials protecting endangered animals. Michael Dorcas is a researcher who worked on the PNAS study. He says pythons are a new top predator—enemy—and shouldn't be in the Everglades.

"We have documented pythons eating alligators, and alligators eating pythons," he said. "It depends on who is biggest during the encounter."

Snake Census

Since 2000, the National Park Service has counted 1,825 Burmese pythons that have been caught in and around the Everglades. Among the largest was a 156-pound, 16.4-foot python captured last month.

Experts fear the pythons will continue to disrupt the food chain and upset the Everglades' delicate environmental balance. Even though wildlife officials have tried to remove the snakes in the past, they say the population is now too big to be controlled. The problem could become worse as the snakes continue to breed and multiply.

ReadWorks

Sneaky Sssnakes

A new report shows pythons are spreading.

What's 23 feet long, as thick as a telephone pole, and slithering into a state near you? A Burmese python!

Newscom

Pythons and other giant snakes are worming their way into Florida and other states. That is the finding of a new report by the U.S. Geological Survey. The species are not native to, or originally from, the area. They might have started out as pets that were set free. Many pythons are native to Asia.

Today, there are tens of thousands of pythons in Florida. They may one day creep into almost one-third of the United States, scientists say.

"They [can move] long distances in a short period of time," scientist Gordon Rodda told WR News. He worked on the study. "We had a python in Florida that in a few weeks ... traveled 30 miles."

That's bad news for ecosystems. Those are groups of plants and animals that live in the same area. The snakes eat everything from birds to bobcats. They lie still until an animal comes near. Then the reptiles strike. Reptiles are cold-blooded animals that often have scales.

U.S. officials are coming up with ways to stop the snakes. One idea is to ban people from bringing pythons into the country. To ban is to prevent.

ReadWorks.org

People who own pet snakes can help too, Rodda says. If you have a snake that gets too big for your home, take it to a zoo. "We don't want to create a problem by [setting free] an animal we no longer want to take care of," says Rodda.

AP Images
People in Florida move an 18-foot-long python to a safer home.

Joel Sartore

National Park Service

Snake Bytes

What makes giant snakes special? Wrap your head around these python facts to find out.

The Big Squeeze

How do pythons constrict, or squeeze, prey? They loop their bodies around the prey and tighten their muscles to kill the animals. Then they swallow them.

Gator Haters

Only alligators are tough enough to eat adult giant snakes. Don't feel bad for the snakes, though. They eat alligators!

McDonald Wildlife Photog./Animals Animals/Earth Scenes

Joel Sartore
National Park Service
Non-fiction: Sneaky Sssnakes

Mamma Mia!

Female pythons can lay up to 100 eggs at a time. The snakes stay on the eggs for two to three months to keep them warm until they hatch.