Prompt: Write a 5-paragraph explanation of how animals use their bodies to sense the world around them. Your explanation must be based on ideas and information that can be found in the “Animal Senses” passage set.

Manage your time carefully so you can:
- Plan
- Write
- Revise
- edit

Animal Senses

These passages show how alligators and elephants use their bodies to sense the world around them. In passage 1, scientist Dr. Daphne Soares and her team are moving an alligator to a new home.

Passage 1: The Alligator’s Super Sense
by Ana Maria Rodriguez

1 The gator had moved into an area where a lot of people live. Dr. Soares and her co-workers had caught the gator and were taking it away. She noticed many small black bumps on the animal’s face, especially along the jaws. “What are those little spots for?” she wondered.

The Alligator Hunts

2 The alligator is a master hunter. It lies just under the water with its eyes, nose, and mouth at the surface. When a bird, mammal, or fish passes by, the reptile turns and snaps its huge jaws. It has taken another meal.

3 Dr. Soares thought the black bumps might help the alligator sense its prey...but how?

4 To find out, she collected alligator eggs and took them to Woods Hole Oceanographic Institution in Massachusetts. After the eggs hatched, she set up experiments to find out what type of sensors the black bumps were.
Humans and other animals have many kinds of sensors, such as the ones in the tongue for tasting, in the eye for seeing, and in the skin for feeling. When a sensor is activated, nerves carry electrical signals form the sensor to the brain. Dr. Soares wanted to watch the electrical activity of the sensors’ nerves to see what triggered a signal.

She prepared the baby alligators one by one. First, she gave an alligator a drug to make it sleep. Second, she connected tiny electrodes to the sensor nerves. Third, she connected the electrodes to a computer that would show any nerve activity. Then she placed the sleeping gator into a water tank.

No Response!

Dr. Soares shone a light on the little black bumps. The computer showed no nerve activity. Next, she exposed the bumps to small electrical currents and then to smelly odors. None of these things activated the nerves.

Dr. Soares found the answer by chance. She accidentally created ripples in the water. At this moment, the computer buzzed, showing signals from the nerves. The sensors had detected the ripples!

At first, Dr. Soares didn’t believe what she had discovered. But after many experiments, she was convinced the bumps were pressure sensors that detected small changes as the ripples hit them.

The modern alligator’s little black bumps were once a mystery. Now we know that they tell the alligator and its relatives just where and when to chomp.

Glossary

electrodes: metal rods used to make electrical contact with a nonmetal object

Passage 2: The Six-Foot-Long Nose
By Susan Zikoyanis

11 Like other mammals, elephants think, perform jobs, and call out alerts to others in their group. Unlike other mammals, however, elephants use their nose—their trunk—to perform these tasks. More than a nose, an elephant’s trunk is like a “fifth limb.” It is essential to an elephant’s survival.

12 This huge appendage has no bones. Instead, it contains muscles. The muscles allow the elephant to operate its trunk with great flexibility. The trunk is strong enough to lift a fallen tree yet gentle enough to stroke a baby elephant.

13 Tiny hairs cover the trunk, which make it very sensitive. This sensitivity helps the elephant tell the difference between foods and determine the quality of water.

14 Elephants also use their trunk to tell the temperature. The trunk helps them figure out the sharpness of surfaces, too. Elephants also can use their trunks as a snorkel when swimming in water.

15 At the tip of the trunk are two nostrils for breathing and smelling. An elephant tests different smells with its trunk by placing the tip inside its mouth after touching an object. But elephants also use them for drinking. An elephant can inhale up to two gallons of water in one breath. Does he need a shower? No problem, just a few squirts and an elephant is cleaned and cooled.

16 African elephants have two flexible “fingers” around the rim of the nostrils. These fingers are strong enough to strip leaves and tear bark from a tree. The fingers have enough dexterity to manipulate a twig to scratch the elephant’s own back.
Elephants also “talk” with their trunk. The sounds they make with their trunk can travel for miles. Even body gestures send messages. A raised trunk tells predators to stay away, for example.

The elephant's survival depends on this unique fifth limb. Thankfully, the trunk is an efficient tool that allows elephants to maintain, protect, and defend themselves.

**Glossary**

appendage: body part

sensitive: able to feel small changes or differences in things

snorkel: a tube used for breathing when swimming

dexterity: the ability to move easily

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Taken from [https://sat15.cloud2.tds.airast.org/student/V261/Pages/TestShell.aspx](https://sat15.cloud2.tds.airast.org/student/V261/Pages/TestShell.aspx), Sage Portal writing prompt. January 22, 2016
Animals and Their Senses

“When a bird, mammal, or fish passes by, the reptile turns and snaps its huge jaws. It has taken another meal.” (Animal Senses paragraph. 2) Animals use their senses for survival and to sense their world around them. Some use them to hunt, while others use them to communicate. All animals have different senses they rely on to survive. Some of these senses are very different than the ones humans use.

One example is the alligator. The large reptile uses the black bumps on its snout to sense movement in the water. When “dinner” wades into the water where an alligator is waiting, the ripples in the water send a signal to the alligator that prey has approached. According to the article “The Alligator’s Super Senses” by Ana Maria Rodriguez, a scientist, discovered that the black bumps were pressure sensors that are affected by the ripples in the water. That is one way alligators use their bodies to sense the world around them.

Another example is the elephant. The elephant’s trunk doesn’t have any bones. It is made of muscle, which makes it easier for the elephant to use it in many different ways. They can use their trunk to detect temperature, to breathe, and to smell. Elephants can also communicate with their trunk by making different sounds. Additionally, they raise their trunks in the air to scare off predators. In “The Six-Foot –Long Nose” by Susan Zikoyanis, she states that elephants use this “unique fifth limb” in many ways to sense their world.

Although elephants and alligators use their senses differently, both animals need their senses to protect, defend, and survive in their environments. Humans use the five senses of touch, taste, sight, hearing, and smelling to detect everyday changes. Animals need special senses to detect changes in their world. Each animal is different. Some animals do not use the standard 5 senses, but instead use other senses to navigate their natural world.

In conclusion, all animals have special adaptations they need to survive. Some animals use their senses to hunt while others use them to communicate. Without their senses, animals would not be able to sense the world around them.

By: Ms. Stroud
Paragraph 1 (3-7 sentences)
Opening Sentence
Begins with a hook. This can be a quote (remember to give the author credit by citing them), a question, or a bold statement. I have asked the students to use a quote from the provided text in order to introduce the topic.
Middle Sentences
State your thesis. This is in the form of restating the PROMPT.
Closing Sentence
Wrap up your introductory paragraph.

Paragraph 2 and Paragraph 3 (5-7 sentences each)
Opening Sentence
Use a transition or connecting word or phrase and introduce the supporting detail.
Middle Sentences
Continue with supporting detail by adding in facts from the text. Refer to the text specifically. Use at least three domain-specific vocabulary words in each paragraph. Be specific and only talk about one idea in each paragraph.

Paragraph 4 (5-7 sentences)
Opening Sentence
Use a transition word or phrase. This paragraph will COMPARE and CONTRAST the supporting details in paragraphs 2 and 3. Use at least three domain-specific vocabulary words.

Paragraph 5 (3-7 sentences)
Opening Sentence
Use a transition word or phrase. Restate the thesis (your PROMPT). Wrap up any loose ends or ideas.
Name____________________________________

Informational/Explanatory Rubric

Overall/General Criteria

_____/5 5 indented paragraphs
_____/5 Standard font, single spaced, title
_____/15 CUPS (capitalization, word usage, punctuation, spelling), sentences begin with a capital letter, proper nouns are capitalized, subject-verb agreement, each sentence ends with the proper punctuation, and minimal spelling errors).
_____/15 Three copies are submitted. One with COLORS, the second is submitted through Utah Compose and printed, and the third is a clean copy.

Paragraph 1 (Introduction)

_____/5 Begins with a hook- quote that is cited. YELLOW
_____/5 Thesis (prompt) is stated. LIGHT GREEN
_____/3 3-7 sentences.
_____/3 Closing sentence feels natural and fluid. BLUE

Paragraphs 2 and 3 (Body- supporting information to thesis statement)

_____/6 Transition or connecting word is used in the FIRST sentence. PINK
_____/6 Each paragraph has ONE clear subject.
_____/6 Facts from the text are used, text is cited or referred to. GRAY
_____/6 3 domain-specific vocabulary words are used in each paragraph. GREEN

Paragraph 4 (Body- compare and contrast paragraph)

_____/3 Transition or connecting word is used in the FIRST sentence. PINK
_____/3 A compare/contrast statement is used. UNDERLINED
_____/3 3 domain-specific vocabulary words are used. GREEN

Paragraph 5 (Final paragraph)

_____/3 Transition word or phrase is used in the FIRST sentence. PINK
_____/5 Thesis (prompt) is restated. LIGHT GREEN
_____/3 Paper is neatly wrapped up. BLUE

_____/100 Total Points
Informative/Expository Opportunity to Prove Mastery (OPM)

CCSS.ELA-Literacy.W.4.2
Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

CCSS.ELA-Literacy.W.4.2.a
Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension.

CCSS.ELA-Literacy.W.4.2.b
Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.

CCSS.ELA-Literacy.W.4.2.c
Link ideas within categories of information using words and phrases (e.g., another, for example, also, because).

CCSS.ELA-Literacy.W.4.2.d
Use precise language and domain-specific vocabulary to inform about or explain the topic.

CCSS.ELA-Literacy.W.4.2.e
Provide a concluding statement or section related to the information or explanation presented.

Task: You will write an informative/expository essay on the reading prompts that are given. There will be at least two separate texts that are related. After closely reading and annotating each text, you will write a 5-paragraph essay answering the given prompt. Remember to use your writing journal as well as the given rubric. Your essay must be typed and submitted through Utah Compose. I will NOT accept any essay that has not received a minimum of 15 points through Utah Compose. Only those essays that meet the given criteria in my rubric and those that receive at least 18 points in Utah Compose will receive a 3 (mastered) grade. You may revise and resubmit as many times as necessary to achieve the desired grade.
Animals and Their Senses

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Another example is the elephant. Elephants use their trunks for more than eating grass and spraying water. The elephant’s trunk doesn’t have any bones. It is made of muscle, which makes it easier for the elephant to use it in many different ways. They can use their trunk to detect temperature, to breathe, and to smell. Elephants can also communicate with their trunk by making different sounds. Additionally, they raise their trunks in the air to scare off predators. In “The Six-Foot –Long Nose” by Susan Zikoyanis, she states that elephants use this “unique fifth limb” in many ways to sense their world.

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