Summer Break Packet
for
7th Grade Language Arts

The student activities in this packet are designed to reinforce ELA concepts and skills over the summer break. Completing these activities will better prepare students for the expectations of 7th grade ELA at Dickerson.

7th Grade ELA Packet

- There are three types of questions: multiple-choice, short-response "Read, Think, and Explain," and extended-response "Read, Think, and Explain" questions.

- Read the directions carefully. Ask your parents or guardians to help you understand any directions you do not understand.

- Read the passages and questions very carefully. You may look back at a passage as often as you like.

- Use highlighters or pencils to underline important information as you read.

- Answer the questions you are sure about first. If a question seems too difficult, skip it and go back to it later.

- Think positively. Some questions may seem hard, but others will be easy.

- Check each answer to make sure it is the best answer for the question.

How to Answer the "Read, Think, and Explain" Questions

This symbol appears next to questions that require short written answers. Use about 5 minutes to answer each of these questions. You should try to answer these questions even if you are not sure of the correct answer.

A complete and correct answer to each of these questions is worth 2 points. A partial answer is worth 1 point.

This symbol appears next to questions that require longer written answers. Use about 10 minutes to answer each of these questions. You should try to answer these questions even if you are not sure of the correct answer.

A complete and correct answer to each of these questions is worth 4 points. A partial answer is worth 1, 2, or 3 points.

- Read the question carefully.
- If you do not understand the question, go back and review the story.
- Think carefully and organize your thoughts before starting to write your answer.
- Write your answer on the lines provided in the Student Test Book.
- Remember to include details and information from the article in your answer.
- Use clear, concise language to explain your answer.
- Be sure to answer every part of the question.
- Reread the answer to make sure it says what you want it to say.

Directions: **Read the article "Florida's Hummingbirds" and answer questions 1 – 11.**

Florida's Hummingbirds

by Joe Schaefer and Craig Huegel

Hummingbirds live only in the Americas. Of the 338 species known, sixteen are found in the United States and three occur in Florida. Black-chinned and rufous hummingbirds occasionally can be seen in Florida during the winter, but the ruby-throated hummingbird is by far the most common bird in the state. This feathered jewel is about 3 inches (7.5 centimeters) long and weighs as little as a penny (1/4 ounce). Its name describes the most brilliant part of the mature male's plumage. The throat feathers contain air bubbles that give off an iridescent red tone in full light. Both sexes, young and mature birds, have metallic green backs and white-tipped feathers.

The ruby-throat's breeding range extends from central Kansas to the east coast and from Saskatchewan to central Florida. Although some birds may stay in South Florida year-round, most spend the winter in Mexico and South America where the weather is warmer. These tiny hummingbirds, whose wingspans are only 4 inches, fly to and from Florida over the Gulf of Mexico. This represents a trip of 500 to 600 miles that must be made without stopping. To prepare for migration, the birds store up reserves of body fat in order to have sufficient energy. Males arrive back in Florida in March, and females follow them about a week later.

Nesting

Nesting in Florida begins in April. The nest is a walnut-size structure of plant down[1] adorned with lichens and moss and bound with spider webs or fine plant fibers. The nests frequently are built over water. The female lays two eggs less than 1/2 inch (1.2 centimeters) long. After twenty days of incubation and four weeks of growing, young hummingbirds leave the nest. Hummingbirds breed from March to July, and a female may have two or three broods during that time. Breeding ends in July so that the birds have time to put on weight for migration. The young hummingbirds return to Florida as adults and are ready to breed the next spring.

Flying Feats

Migrating annually from South America to Florida and back is only one of the amazing flying feats of the ruby-throated hummingbird. One of the most fascinating things about hummingbirds is their helicopter-like flying stunts. Not only can they suspend their bodies in midair, they also can fly backward, upward, and even upside down. These maneuvers are possible because of a unique design that allows the wing to move very freely and in almost any direction at the shoulder. Since hummingbirds are built more like helicopters than gliders, soaring is the only maneuver that they cannot perform. Contrary to popular belief, hummingbirds do not hum. The sound is made by their rapid wing movements (50 to 200 beats per second).

Feeding

To acquire enough strength to support all of this high-speed activity, hummingbirds need to consume large amounts of high-energy food. Adult hummingbirds feed primarily on nectar. Young birds are fed insects by their parents, but they have switched to a mostly nectar diet by the time they leave the nest. Nectar is an energy-rich food that hummingbirds use rapidly. One hummingbird may need nectar from hundreds of blossoms every day to maintain its body weight.

[1]**down**: soft fibers from seeds, stems, or hairy leaves

Hummingbirds are well adapted to a liquid diet. Long, needlelike bills and specially-adapted tongues allow them to reach nectar in deep tubular flowers. The last half-inch of the long tongue is divided into equal halves, each grooved on the outside edge to form two tube-like structures. Nectar is drawn into the tongue much the same way liquid travels up a straw. Hummingbirds can lick at a rate of 13 times per second, and their stomachs are capable of holding about 0.18 ounces (5 grams) of nectar at one time. They also feed, to a lesser extent, on insects.

For their size, hummingbirds have among the largest appetites in the bird world. They feed every 10 to 15 minutes from dawn until dusk. During this period, they consume more than half their weight in food and eight times their weight in water. Hummingbirds have developed two adaptations to help them survive the hours of darkness when they cannot feed. First, they eat as much as they can just before dark. During the night, their heart rate and body temperature drop to conserve energy, and they perch lifelessly on a branch. If they did not go into this sort of daily hibernation stage, they would be likely to starve.

Gardening for Hummingbirds

To be successful in keeping hummingbirds around your house, you must garden for them. The ideal flower color is red, orange, or pink. Hummingbirds are not born with an attraction to certain colors, but they learn by trial and error which flowers give the best results. Because most nectar-bearing flowers within the range of the ruby-throat are red and orange, they quickly come to favor these colors. Hummingbirds also have been known to show an interest in red-colored lipstick, fingernails, and clothing.

Tubular flowers that are either large and solitary or flowers that hang in loose, drooping clusters are best. Generally, tubular flowers hold large amounts of nectar at their bases.

Blooming season is another important gardening consideration. Nesting hummingbirds will need nectar from March to September. Therefore, your garden should have numerous nectar plants available throughout this time. It is best to plant a variety of species and to arrange these flowers in several groupings. Nesting hummingbirds are very aggressive and territorial around their food source. Having more than one flower garden will allow several birds to feed at the same time without conflict.

Cypress Vine

Butterfly Milkweed

Tables 1 and 2 show some of the plants that are among the favorites used by hummingbirds in North and Central Florida. While red flowers dominate the list, others have been added to allow for a varied planting. Plants native to Florida are preferable when given the proper growing conditions for the species.

Table 1. Hummingbird Plants: Perennials		
Common Name	**Adaptability to Region**	**Blooming Season**
Butterfly Milkweed	Native Species	Spring – Fall
Red Basil	Native Species	Spring
Shrimp Plant	Used as an annual in North Florida	Spring – Summer
Cardinal Flower	Native Species	Summer – Fall
Obedient Plant	Native Species	Summer – Fall

Table 2. Hummingbird Plants: Annuals		
Common Name	**Adaptability to Region**	**Blooming Season**
Scarlet Morning Glory	Native Species	Summer – Fall
Cypress Vine	Native Species	Summer – Fall
Standing Cypress	Native Species	Summer
Four O'Clock	Not recommended for South Florida	Fall

Morning Glory

DIRECTIONS: **Based on the article "Florida's Hummingbirds", answer questions 1 – 11.**

1. Read the sentence from the article.

   Hummingbirds are not born with an attraction to certain colors, but they learn by trial and error which flowers give the best results.

   What does **learn by trial and error** mean?

   (A) follow a routine established in the past
   (B) practice the skills needed by mature animals
   (C) watch others perform successfully and then mimic their actions
   (D) test possible choices and then avoid ones that are not desirable

2. The authors state that the lists of hummingbird flowers in Tables 1 and 2 include other flowers, in addition to red ones, "to allow for varied planting." What does this phrase mean?

   (A) Gardeners can grow flowers of different colors.
   (B) Gardeners can plant flowers during all seasons.
   (C) Gardeners may choose flowers of various heights.
   (D) Gardeners may create more than one flower garden.

3. Why do the authors compare the ruby-throated hummingbird to a jewel?

   (A) It is red and white.
   (B) It is quick and lively.
   (C) It is small and sparkling.
   (D) It is lightweight and rare.

4. The author did not discuss flowers that bloom in October through February because

   (A) gardeners rarely plant flowers in those months.
   (B) there are few hummingbirds to see in those months.
   (C) few nectar-producing plants bloom in those months.
   (D) flowers that bloom in those months are the wrong color.

5. Why did the author write the article “Florida’s Hummingbirds”?

(A) to inform the reader about the characteristics and lifestyles of hummingbirds
(B) to persuade the reader to grow a variety of plants for hummingbirds
(C) to describe the valuable contributions of hummingbirds
(D) to criticize the aggressive nature of hummingbirds

6. People who read this article will learn how to

(A) attract hummingbirds to their gardens.
(B) identify characteristics of native plants.
(C) identify the insects hummingbirds prefer.
(D) locate black-chinned and rufous hummingbirds.

7. According to Figures 1 and 2, which pair of plants would attract hummingbirds throughout three seasons?

(A) Scarlet Morning Glory and Obedient Plant
(B) Shrimp Plant and Standing Cypress
(C) Cardinal Flower and Four O’Clock
(D) Red Basal and Cypress Vine

8. What is the greatest benefit hummingbirds receive from their ability to fly backward, upward, and upside down?

(A) They can feed on one plant for long periods of time.
(B) They can catch insects that fly in different directions.
(C) They can use the energy that they stored up at night.
(D) They can reach blossoms in numerous positions on a plant.

9. What is the primary topic of the first paragraph in the article, “Florida’s Hummingbirds”?

(A) to tell where hummingbirds nest
(B) to explain why hummingbirds hum
(C) to describe how hummingbirds look
(D) to show when hummingbirds migrate

10. Based on all the information given, how might a reader plant a garden to attract hummingbirds? Use details and information from the article to support your answer.

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11. Which sentence gives the best summary of the section entitled “Feeding”?

(A) Hummingbirds hibernate daily to conserve energy.
(B) Hummingbirds are a sturdy species that need insects to survive.
(C) Hummingbirds are high-speed fliers who need a variety of colorful nectars.
(D) Hummingbirds, as a delicate species, have adapted consuming nectar to survive.

Directions: **Read the poem "The Hummingbird's Flight" and answer questions 12 -14.**

The Hummingbird's Flight

by
Deborah Fleck

How come they, so early in the spring
Chill drops upon closed bud do cling
Cold winds still blow, and rains fall down
Like the cloaking of ice covered gown.

Dart through the rain like arrow true
Strangely different petal they pursue
Free spirits they be 'til end of time
Winging their way through temperate clime.

The wind and rain now finally ceased
With shining rainbow found their peace
Water mist hangs low in air
Pearlescent nymphs without a care.

So come and seek in early spring
Mark giddy flight on hovering wing
On sunlit wings they float through air
Adorned with stained-glass plume so fair.

DIRECTIONS: **Based on the poem, "The Hummingbird's Flight", answer questions 12 - 14.**

12. According to the poem, what is the main reason hummingbirds take to the air in unsettling weather?
    (A) to search for food
    (B) to free themselves
    (C) to warm themselves
    (D) to search for a rainbow

13. Which phrase best characterizes the poet's attitude towards hummingbirds?

    (A) "Mark giddy flight on hovering wing"
    (B) "Dart through the rain like arrow true"
    (C) "Water mist hangs low in air, Pearlescent nymphs without a care"
    (D) "How come they, so early in the spring, Chill drops upon close bud do cling "

14. Based on the article "Florida's Hummingbirds" and the poem "The Hummingbird's Flight" the author and the poet share the idea that

    (A) hummingbirds are amusing to watch.
    (B) hummingbirds are cautious creatures.
    (C) hummingbirds are intriguing creatures.
    (D) hummingbirds are critical to the environment.

Directions: **Read the story "The Story of Clever Hans: The Horse Who Knew All the Answers" and answer questions 15 – 20.**

The Story of Clever Hans: The Horse Who Knew All the Answers

by

Margaret Davidson

Hans lived with his master in Berlin, Germany. One day Mr. von Osten invited some friends to his house. He led them to a courtyard where the horse was waiting quietly. "Are you ready, Hans?" he asked.

And the horse nodded!

"How much is four plus three?" Mr. von Osten asked. Hans raised his right foreleg and began to tap his hoof on the old stone floor of the courtyard. "One, two, three," he tapped, "four, five, six, seven"—and stopped.

Everyone began to talk at once. Mr. von Osten just smiled—and asked another question.

Mr. von Osten spread out six squares of cloth, each a different color. "Pick up the green one," he ordered. Hans walked over and stopped in front of the green square, picked it up in his teeth, and carried it back to his master.

For the next hour, Mr. von Osten asked questions—and Hans answered them. He was right almost every time.

All this happened many years ago, when there was no radio or television. Slowly word of the horse and what he could do spread through Berlin, then all of Germany—and at last into other countries. More and more people came to the von Osten courtyard to see the wonder horse perform.

Almost every day Hans showed his eager audiences some new talent. He could tell all sorts of things apart—even if they were almost the same size or shade or shape. Hans could also give the right answer when asked the time.

Hans had one talent that amazed people more than all the rest. Mr. von Osten could stand in front of the horse and just *think* of a question. He didn't move his lips or make the slightest sound. Yet Hans would answer the question anyway. Clever Hans could read his master's mind!

But not everyone agreed that Hans was a real thinking horse. Paul Bushe, a circus animal trainer, watched Mr. von Osten very carefully to see if he was sending signals to the horse to give him the right answer. After careful study, Mr. Bushe admitted that Hans was not getting signals from Mr. von Osten.

Still, people had questions. One of these was a scientist named Oscar Pfungst. Other people had studied Hans for a few hours or a few days. Professor Pfungst would work for as long as it took to finally solve the mystery of Clever Hans. Professor Pfungst started out asking questions, just as other people had done. Hans answered easily. Then one day the scientist thought of something new. He asked the horse a question *he didn't know the answer to himself.* "How far is it from Berlin to London, England?" he asked.

Poor Hans tried again and again to answer that question, but he couldn't do it. The Professor grew more and more excited. He kept asking questions. When he asked a question he knew the answer to, Hans knew the answer. When he asked a question that he didn't know the answer to, Hans didn't either.

Before the day was over, Professor Pfungst knew that Hans couldn't really add or subtract or multiply or divide. He couldn't tell colors or coins or playing cards apart. He couldn't read or tell the time. Hans wasn't a thinking horse at all. He only "knew" as much as the person who was questioning him—and no more!

That meant that the person questioning Hans *was* signaling him. But how? Even the Professor himself must be sending signals—but he had no idea how he was doing it.

Day after day, Professor Pfungst asked Hans questions. He watched as many other people questioned the horse. Little by little, he began to understand.

Most trained animals can follow signals—like a hand movement or a change in the tone of voice. But none of these planned signals had ever been used with Hans. No, Professor Pfungst announced; people who questioned Hans were signaling Hans even though they did not mean to.

First the person asked Hans a question---and naturally he grew a little tense as he waited for the horse's answer. When this happened, many tiny body changes began to take place---changes the person wasn't trying to make at all. He might swallow a few more times than usual. His lips might tighten. Or one of his eyebrows would give the slightest twitch. These signs of tension told Hans to start giving his answer.

Suppose the person had asked Hans how much five plus five is. With each tap of Han's hoof, the person got more and more tense. 1—2—3—4—5—6—7—8—9— Then, as Hans tapped 10, the person relaxed.

Now another whole group of tiny changes began to take place. The person might take a slightly deeper breath—or begin to breathe more slowly. His lips might open a little. His skin might even grow a bit pinker. All these tiny signs of relaxation told Hans to stop.

When someone wanted Hans to nod yes, he couldn't help making some kind of upward motion himself. And when someone wanted Hans to walk over to something he couldn't help making some small movement in that direction. Hans would wander around until he happened to pass in front of what the person was thinking about. Then the person would relax—and Hans would stop. He had given the "right" answer again.

So Clever Hans couldn't really think—not the way people do. Yet he was still a very special horse. He had puzzled one expert after another for a long, long while. He might not have been able to read minds—but he was one of the champion *muscle* readers of all time!

Directions: **Based on the article "The Story of Clever Hans: The Horse Who Knew All the Answers", answer questions 15 – 20.**

15. Which words from the passage have nearly **OPPOSITE** meanings?

(A) question, study
(B) naturally, slightly
(C) relaxation, tension
(D) announced, planned

16. Hans stops tapping his foot when he gets to the correct number because he

(A) can read his master's mind.
(B) knows it is time to walk around.
(C) is trained to do so by his master.
(D) senses the questioner is less stressed.

17. How is Professor Pfungst's breakthrough question different from other questions Hans has been asked?

(A) Pfungst does not ask Hans about colors.
(B) Pfungst asks Hans to divide a large number.
(C) Pfungst does not know the answer to the question.
(D) Pfungst stands very still as he thinks of the question.

18. With which statement would the author most likely agree?

(A) Animals are more intelligent than people think.
(B) It is a mistake to believe that animals can be trained.
(C) It is wrong to trick other people the way von Osten did.
(D) Situations are often different from the way they appear to be.

19. The author's tone in this passage can best be described as

(A) amazed
(B) annoyed
(C) boastful
(D) serious

20. Professor Pfungst can best be described as

(A) helpful and kind.
(B) pleasant and witty.
(C) excitable and nervous.
(D) determined and patient.

DIRECTIONS: Read the article “Sylvia Earle: ‘Her Royal Deepness’ ” and answer questions 21 - 26.

Sylvia Earle: "Her Royal Deepness"

by

Phyllis M. Stanley

Dr. Sylvia Earle, known by her colleagues as "Her Royal Deepness," was full of anticipation as she stepped into *Deep Rover*, the one-person deep ocean vehicle. She knew how the astronauts traveling to the moon must have felt. Sixty miles off the Pacific Coast, she was going where no scientist, explorer, or solo diver had ever gone before—to the deep frontier.

As she closed the domelike top of the vehicle, she checked the control switches for *Rover's* mechanical arms. Earle then turned on the battery-powered thrusters as the research ship dropped her slowly into the frigid sea. It took an hour for her to reach the record-breaking, three-thousand-foot depth. On the way down, Earle spoke to the topside crew by radio, describing the sea life revealed by *Rover's* lights. When she reached her destination in the deep wilderness, she turned off the lights and saw what she described as "deep-sea fireworks." The animals illuminated themselves as if on parade before her eyes.

"I see a beautiful red octopus, a lantern fish, a see-through octopus," she told the crew.

Sylvia had always had an unwavering curiosity about the ocean. It started early in her life during her family's two-week vacation each summer at the New Jersey seashore. The tidal-zone sea life was fascinating to her. It was as an eighteen-year-old biology student that Sylvia made her first scuba dive in the Gulf of Mexico. She immediately knew that she would spend her life working in the realm of the sea.

The next year, at Duke University, she specialized in the study of marine plants. At age twenty, she received a master's degree. It was during this time that Earle began a distinguished ten-year study of algae's relationship to food chains. The research led to her doctorate from Duke University in 1966.

Earle learned that everything on earth, whether above or below the water, depends on plants. Life depends on the sun's energy, which is locked into plants through a process called photosynthesis. This was not a new idea, but she related it specifically to algae and analyzed the deterioration of plant life in Florida's Gulf waters, noting the damage inflicted by pollution.

One outcome of her studies was the idea for marine sanctuaries, which protect some of the ocean waters today. The U.S. Marine Protection, Research and Sanctuaries Act was passed in 1972.

As Earle studied the effects of pollution, she voiced her concerns about Florida's Fenhallow River. She was concerned about the Fenhallow's impact on river life and on the sea-grass meadow as it flowed into the Gulf. She saw creatures she had known as a child---sea horses, puffer fish, pink urchins, basket stars—diminish in numbers, and then disappear.

She also observed the damage to undersea systems caused by the dredging operations in Tampa Bay in the 1950's and 1960's. No one listened to her warnings about ocean damage.

Earle realized that she would have to gain wider experience and become more knowledgeable in the field of marine science before anyone would hear her plea for the oceans. She knew that a major obstacle to ocean research, likes space research, would be getting there—going deep enough to discover all the parts of the ocean ecosystem.

In the 1970's, biosphere experiments were being conducted to find out how human beings would react to extended isolation in space and under the sea. The United States government sponsored the Tektite I and II underwater research projects.

In the Tektite II project, Earle headed an all-female team of four other marine scientists living fifty feet underwater for two weeks near a coral reef in the Virgin Islands. The aquanauts lived in a four-room habitat composed of two towers. One tower contained a lockout hatch[1] and support equipment. The other tower contained comfortable living quarters with warm showers and hot meals.

This type of "saturation diving" permitted unhurried observations. Earle classified and cataloged the plants in the area. Of the 153 species of plants that she observed, 26 had never before been seen in the coastal waters. She used her camera to document her discoveries. When the scientists emerged from their two weeks of isolation, they were hailed as heroes, given a ticker-tape parade in Chicago, and invited to the White House. The Tektite experiment had been a success both in terms of the scientists' proven ability to live underwater and in the data they gathered.

Tektite had provided Sylvia with a unique opportunity to introduce the public to the deep frontier because of her firsthand knowledge of ocean life. As Earle accepted invitations to speak of her discoveries, she used the opportunity to also deliver warnings about ocean pollution. In various articles and speeches she declared the responsibility all humanity shares to protect the ocean's incredible diversity of life. She said, "The ocean covers nearly three-quarters of our planet, and about ninety percent of all living things are found there."

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[1] **lockout hatch:** an airtight door leading outside

DIRECTIONS: Based on the article “Sylvia Earle: 'Her Royal Deepness' ", answer questions 21 – 26.

21. How was Sylvia Earle's trip in the *Deep Rover* similar to her participation in the Tektite II experiment?

(A) During each project, she spent about two weeks underwater.
(B) Both projects involved teams of scientists working underwater.
(C) Both projects took place at a depth of about three thousand feet.
(D) During each project, she described the organisms she observed.

22. The recognition Sylvia Earle received following the Tektite II project gave her more opportunities to

(A) study deep-ocean life aboard the *Deep Rover.*
(B) complete an advanced degree at Duke University.
(C) warn the public about the dangers of ocean pollution.
(D) write articles about algae's relationship to food chains.

23. With which statement would the author most likely agree?

(A) Sylvia Earle's most important work was done in the *Deep Rover*.
(B) Sylvia Earle's lifelong curiosity led her to become a marine scientist.
(C) The Tektite II project would have failed without Sylvia Earl's leadership.
(D) The public became aware of the process of photosynthesis because of Sylvia Earle.

24. What two words best describe Sylvia Earle?

(A) ignored, diverse
(B) isolated, accepted
(C) unwavering, alarmed
(D) controlling, knowledgeable

25. On which facts are Sylvia Earle’s opinion about ocean conservation based?

(A) Ninety percent of all living things are in danger of becoming extinct.
(B) Pollution and dredging of the ocean floor disturb and eliminate plant life and sea creatures.
(C) Marine science requires finding special funding in order to explore the depth of the ocean.
(D) Dr. Earle’s “saturation diving” supports the categorization of numerous plants in the coastal waters.

26. What is the greatest benefit to the environment that has resulted from Sylvia Earle's curiosity about the ocean? Use details and information from the article to support your answer.

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