SECTION 1:   **Student Name:** _____

ELA : Read the following African folktale:
  ○ [Why the Sky Is Far Away: A Nigerian Folktale](#)
● After reading one of the folktales, share the following with a parent, caregiver, friend or sibling:
  ○ How was this text different from the Social Studies text on Africa?
  ○ What makes this a folktale?
  ○ What was one fun detail for the story?
  ○ Answer the 4 Questions

Why the Sky Is Far Away: A Nigerian Folktale

When the great King Oba wanted to give a party, his servants would cut out pieces of the sky and shape them into wonderful forms— animals, diamonds, leaves, or flowers. Illustrations: Barbara Paxson

In the beginning, the sky was close to the Earth, and the people didn't have to work for their food. All they had to do was cut away a piece of sky to eat. It tasted delicious, like meat or corn or honey or anything else they felt like eating. Since they did not have to hunt for their food, all they did was weave and carve and tell stories all day.

When the great King Oba wanted to give a party, his servants would cut out pieces of the sky and shape them into wonderful forms — animals, diamonds, leaves or flowers.
But as time went on, the people forgot to appreciate the sky. They took their food for granted, and they became wasteful. They cut far more sky than they needed and threw what they didn't use onto the garbage heap.
The sky became angry because of the waste and the people's ingratitude for his gift. One day, the sky grew very dark. The people were frightened.

"Oba," a voice boomed above the king's palace. "Wasteful one, king of wasteful, ungrateful people. If you continue to waste food, you will have no more of the sky to cut."

Oba was terrified. He sent messengers all over his kingdom. "Take only what you need," they warned. "The sky is angry because of your greed. Stop wasting the sky, or there will be trouble."

For a while, the people were very careful. They cut only what they needed from the sky. They ate all they took. Nothing was thrown on the garbage heap. Nothing was wasted.

Once every year there was a great festival in Oba's kingdom in celebration of his greatness. All the people looked forward to wearing their best clothes, dancing all day and night, and feasting on wonderful foods.
Oba's servants prepared magnificent food. They pulled pieces of sky down and shaped them into flowers and animals and every imaginable form. They colored them and cooked them and placed them on huge platters so that the food looked tempting and inviting.

The people came in gorgeous robes. Music played and everyone danced. Soon the people became hungry and started to eat. The food was so delicious that they ate and ate until everything was gone. But the people were greedy and wanted more, even though they were no longer hungry. They pulled down great quantities of the sky and gobbled them up. What they couldn't stuff into themselves, they threw on the garbage heap. Greedy and wasteful, they forgot all about the sky's warning.

Suddenly, while the festival was still going on, the sky grew ominously dark. Thunder rumbled and roared, and fearsome knives of lightning sliced through the sky.

"People of the Earth," the sky boomed, "you are wasteful and greedy. I warned you. I will no longer give you food. You will have to work to eat."

The sky sailed up high above the Earth, far out of the reach of the tallest person. Ever since then, no one has been able to reach up and grab a piece of it, and the people must work hard on farms and in factories for their food.

Quiz
1 Which event would be necessary to include in a summary of this story?
(A) People dressed in beautiful robes for the party.
(B) The sky warned the king to not waste food
(C) The people loved to eat meat, corn and honey.
(D) Farms and factories are used to make food today.

2 What is the important idea about life that the king learns in the story?
(A) Do not throw lavish parties.
(B) It is best to work for yourself.
(C) Do not be wasteful with food.
(D) It is good to try new foods.

3 Which sentence from the story shows the sky's point of view about the people?
(A) In the beginning, the sky was close to the Earth, and the people didn't have to work for their food.
(B) But as time went on, the people forgot to appreciate the sky.
(C) Suddenly, while the festival was still going on, the sky grew ominously dark.
(D) "People of the Earth," the sky boomed, "you are wasteful and greedy."

4 Is the story written in first person or third person? How do you know?
(A) First person because the sky is telling the story.
(B) First person because the narrator uses the word "I."
(C) Third person because the narrator is not part of the story.
(D) Third person because the king is telling the story.

Social Studies: Explore Africa by reading about one of the earliest civilizations, the Nok!
- ○ Find one fun fact from the text and share it with a caregiver, friend or sibling! Lastly, locate Africa on the map and draw a visual representation of your fun fact. (the last page)
- ○ Answer the 4 Questions

Nok Culture: Sub-Saharan Africa's Earliest Civilization?

The Nok culture may have been one of the oldest organized societies in Africa. It was an advanced society of farmers and builders. Nok people lived in fixed homes instead of moving from place to place. But it is still not clear who the Nok people were, how their culture developed and how it ended.
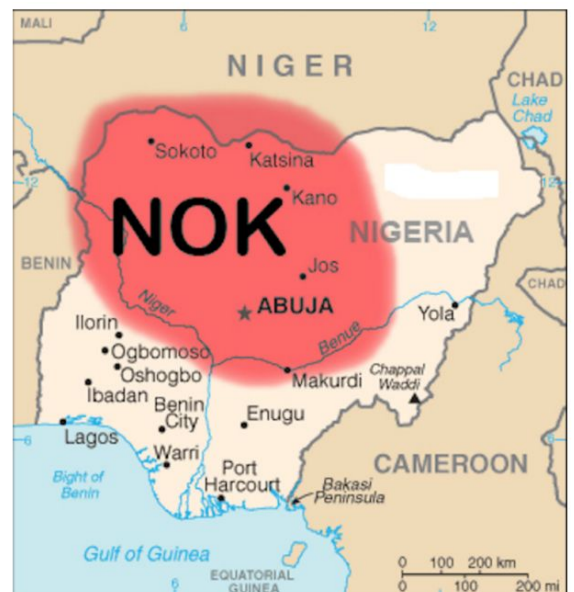
The discovery of Nok culture
In 1943, about 70 years ago, clay shards and a terra-cotta head were discovered in Nigeria. Terracotta is a reddish, brown clay used for pots, art and buildings. Clay is a type of earth that can be molded when mixed with water.

Terra-cotta art with characters and scenes from everyday life in Africa's ancient Nok culture. Photo from Getty Images

Archaeologist Bernard Fagg studied the clay pieces and found out how old they were. Archaeologists are people who learn about the past by looking at old or ancient items. Fagg was the first person to find out that there had been an ancient society in West Africa. This society dated back to at least 2,500 years ago. Fagg named this culture Nok, after the name of the village near where the first discovery was made.

Fagg continued his studies and made more discoveries at different sites. These discoveries gave more detailed information about Nok culture. More of Nok's terra-cotta sculptures, pottery, stone axes and iron gadgets were found. But at the time, not enough people were interested in ancient African cultures. Westerners who were visiting the country were also taking the Nok items back home with them. This made it even harder for archaeologists to learn more about Nok culture.

A complex society

It was not until a few years ago that people started learning more about Nok culture. Now we know that Nok culture lasted from around 3,200 years ago to 1,600 years ago. But we still do not know how the culture started or how it ended.

The skills seen in the many terra-cotta sculptures show that Nok culture was advanced. This is also shown by the fact that Nok people used iron. This was a difficult skill that only experts had. Archaeological digs have also shown that the Nok were farmers. Scientists still aren't sure if the Nok people were ruled by one government. They also don't know if people were ranked based on their class.

An Iron Age without copper

The Nok were also making iron tools by about 2,500 years ago. Experts disagree on whether the Nok people learned this on their own or not. It is possible another group of people taught them.

Both stone and iron tools were also found at some sites. This supports the idea that West African societies skipped the Copper Age. In parts of Europe, the Copper Age lasted for nearly 1,000 years.

This was a time when people in Europe started using tools made of copper, which is a kind of metal. When they discovered iron, which is stronger than copper, they started using that metal instead. But in West Africa, societies seem to have switched from the Stone Age straight into the Iron Age. It is possible this change was led by the Nok.

The terra-cotta statues of Nok culture show what life and society were like in ancient West Africa. But what happened next?

The Nok may have become the Yoruba people, who founded the kingdom of Ife. The brass and terra-cotta sculptures in that area are similar to the ones found at Nok. Still, what happened in the 700 years between the end of Nok and the rise of Ife is a mystery. The Yoruba people still live in Nigeria. Many Yoruba also live in Benin, Ghana, Togo and the Ivory Coast.

Quiz

1 This article is organized using chronological order. Why do you think the author chose to organize the information this way?

(A) to highlight important milestones for the Nok culture

(B) to present the history of technological innovation among the Nok people

(C) to explain why archaeologists struggled to study the Nok people

(D) to describe how the Nok culture rose and fell

2 Read the introduction [paragraph 1] and the final section, "An Iron Age without copper." What is the connection between these two sections?

(A) The introduction explains the historical context of the Nok, while the final section describes the technological exports they spread to other parts of Africa.

(B) The introduction explains why the Nok traveled across Africa, while the final section describes why their culture ultimately disappeared.

(C) The introduction explains the discovery of the Nok culture, while the final section describes how farming allowed them to advance quickly.

(D) The introduction explains some of the mysteries of the Nok people, while the final section describes a possible explanation for one of those mysteries.

3 Use the images and information in the article to select the TRUE statement.

(A) The Nok traveled from the area now known as Niger to settle in modern-day Nigeria.

(B) The Nok initially used stone and copper tools until they developed iron.

(C) The Nok defeated the Yoruba people and founded the kingdom of Ife.

(D) The Nok were skilled in working with clay to make pots and art.

4 Examine the image in the section "The discovery of Nok culture" and read the selection below. Fagg continued his studies and made more discoveries at different sites. These discoveries gave more detailed information about Nok culture. How does the image support the information in the selection above?

(A) by explaining why the Nok people needed to travel a large area in search of resources

(B) by demonstrating how the Nok culture ultimately led to the rise of the Yoruba

(C) by representing the area where archaeologists discovered Nok artifacts

(D) by showing where Nok artifacts were transported by other groups of people

Science: Look at [this picture](#) and read the description of the life cycle of a ladybug. Then, complete the following sentences:
  - I notice _____.
  - I wonder _____.
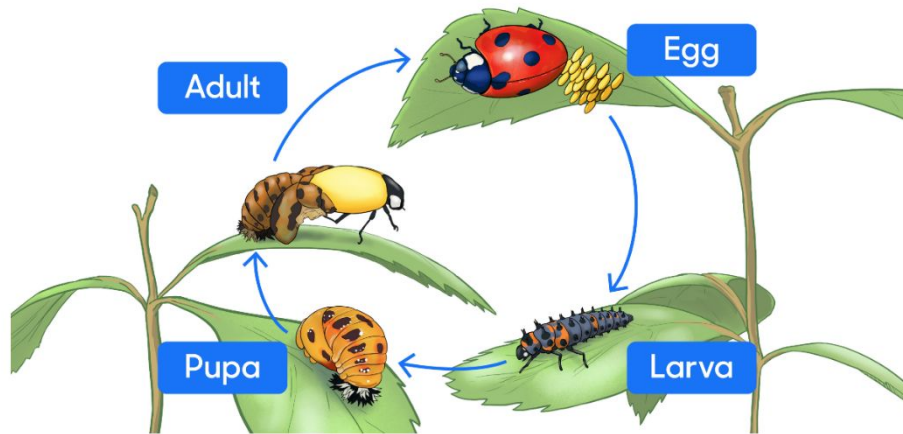
Life cycle of a ladybug

Illustration: Newsela staff

The ladybug is one kind of insect that goes through four stages in its life cycle.

First, a mother ladybug lays her eggs on the bottom side of a leaf. Soon, a baby ladybug, or larva, hatches from the egg. It looks nothing like an adult ladybug. The larva eats and grows, but its exoskeleton does not grow. So the larva molts and crawls out of its old, tight exoskeleton and into a new one that is much looser.
The larva molts many times. When it is big enough, it attaches itself to a leaf and molts again. Its new exoskeleton hardens into a protective case. Now, the ladybug is a pupa.

The pupa does not eat or move. Inside its case, its body is busy changing. The pupa's case splits open, and a soft, pale adult ladybug pushes out. As the ladybug's wings harden, they turn bright red and spots appear. Then, the ladybug can fly away.

- Explore: Mindfulness [5 minutes]Practice this mindfulness breathing exercise with a caregiver, friend, or yourself!
  - First, find a quiet place and take a seat
  - Get into a comfortable seated position
  - Place your hands on your knees, palms facing upward
  - Take note of your feelings at this moment
  - Breathe deeply, feel your lungs expand as you take in air. Hold your breath for two seconds then release your breath slowly.
  - Repeat this breathing step 5 times
  - After completing the breathing exercise, how are you feeling?

SECTION 2:

ELA: Read

After reading this text, share the following with a parent, caregiver, friend or sibling:

- How was this text different from the Social Studies text on Mesoamerica?
- What genre story is this? How do you know?
- What was one fun detail for the text?
- Challenge Alert! Use the information you just read to create a fictional story about the Aztecs or Mayans.
- Answer the 4 Questions

A Short, Sweet History of Chocolate

No one knows exactly when and how the delights of chocolate were first discovered. Some scientists believe that the Olmec people of southern Mexico were the first to plant cacao "farms" 3,000 years ago. Others believe that the Maya first enjoyed this bitter treat about 1,000 years later. What is certain is that the ancient people of Mexico and Central America loved to drink a beverage made from cacao.

Different cultures enjoy different ingredients in their hot chocolate. Today, chocolate, sugar and marshmallows are common. Sometimes, spices such as cinnamon, chili powder or vanilla are added. Photo by: Katya Austin/Unsplash

The Maya used cacao as part of their religious ceremonies, and rich people drank a cacao beverage from special fancy cups. Later, the Aztecs learned about cacao from the Maya. Because they could not grow it themselves, they exchanged other goods with the Maya to get their cacao. Among the Aztecs, cacao beans became very valuable. They were used for money and for trade as well as for drink. Because cacao drinks were made from these valuable beans, usually only rich Aztecs could afford them. This included royalty, rich merchants, and sometimes warriors. At lavish wedding parties and special banquets, guests had cacao drinks instead of champagne. It was like drinking $10 bills!

Both the Maya and the Aztecs prepared their cacao with cold water. It was a spicy, frothy drink, quite different from the way we drink cocoa today. Often, they used no sweetener at all, drinking their cacao bitter, but sometimes they added a little honey. They also added vanilla, chili peppers and cornmeal to thicken it. Finally, they stirred the mixture and poured it back and forth between two cups to froth it up. In fact, the froth was the part they liked the best. Today, we prefer our froth made from whipped cream or marshmallows.

When the Spanish conquistadors (explorers and conquerors) arrived in Mexico in 1519, they were amazed to discover that "money [cacao] grew on trees" there. At first, they didn't like the bitter, spicy drink given to them by the Aztecs, but they quickly understood its importance and the power it held for

those who had it. Slowly, the Spanish came to like the taste, and they sent cacao back to Spain so the people there could try it. The Spanish came up with their own way of making chocolate. They liked it hot, with sugar and cinnamon.

For almost a hundred years, the Spanish and their Portuguese neighbors were the only Europeans who knew about chocolate. In those countries, as among the Aztecs, chocolate was enjoyed by the rich. Then, in the early 1600s, wealthy Italians also began drinking chocolate. From Italy, chocolate quickly spread to other countries.

At that time, coffee and tea were still new to Europe, and soda had not been invented. Drinking chocolate became popular. Over the next 50 years, chocolate houses opened in every large city in Europe. These cafés served chocolate hot, with sugar. They also added many spices. Sometimes they added vanilla, ground almonds, or anise seed (which tastes like licorice). Customers might have asked for lemon peel, nutmeg, mace, or chili powder. In 1650, you could order as many different drinks in a chocolate house as you can order coffee drinks in a café now.

During the 1700s, chocolate continued to be a popular drink. In England, people began making it with milk. Almost everyone liked their chocolate sweet and thick. Many people made it so thick that they ate it with a spoon. By the 1800s, chocolate was no longer an expensive drink only for the wealthy. It became a drink enjoyed by almost everyone – usually at breakfast.

Three important chocolate discoveries and inventions were made in the 1800s: In 1828, C.J. van Houten of the Netherlands invented instant cocoa mixes. These were like the mixes we use today.

In 1847, An English chocolate company invented a delicious solid chocolate. They called it "eating chocolate." Finally, people could eat chocolate bars.

In 1876, Daniel Peter of Switzerland made a new kind of candy. He mixed powdered milk with chocolate to make milk chocolate. This was a big hit; for many people, dark chocolate was just too bitter. Fast Fact The first chocolate-covered ice cream bar was created by accident around 1920 when a high school science teacher dropped a scoop of ice cream into a vat of melting chocolate.

Quiz 1
Read the first paragraph of the article. What does this paragraph show that other paragraphs DO NOT?
(A) who first made instant hot chocolate
(B) when chocolate might have originated
(C) where solid chocolate bars became popular
(D) why people added milk to chocolate beverages

2 Read the following paragraph from the article. During the 1700s, chocolate continued to be a popular drink. In England, people began making it with milk. Almost everyone liked their chocolate sweet and thick. Many people made it so thick that they ate it with a spoon. By the 1800s, chocolate was no longer an expensive drink only for the wealthy. It became a drink enjoyed by almost everyone – usually at breakfast. How does this paragraph contribute to the article's MAIN idea?
(A) It explains when chocolate transitioned from a treat for the rich to a drink that nearly everybody could acquire.
(B) It explains how chocolate made its way to England from Spain, Portugal and Italy.
(C) It explains how adding sugar and powdered milk helped to make chocolate popular all over Europe.
(D) It explains when cafés and chocolate houses began experimenting with chocolate and ice cream.

3 Select the sentence from the article that suggests the Aztecs typically did not add sugar to their cacao beverages.
(A) Both the Maya and the Aztecs prepared their cacao with cold water.
(B) Often, they used no sweetener at all, drinking their cacao bitter, but sometimes they added a little honey.
(C) They also added vanilla, chili peppers and cornmeal to thicken it.
(D) Finally, they stirred the mixture and poured it back and forth between two cups to froth it up.

4 How did the Aztecs acquire cacao? How do you know?
(A) They figured out how to plant and harvest cacao. "Some scientists believe that the Olmec people of southern Mexico were the first to plant cacao 'farms' 3,000 years ago."
(B) The Maya taught them how to grow cacao. "Later, the Aztecs learned about cacao from the Maya."
(C) They traded for cacao. "Because they could not grow it themselves, they exchanged other goods with the Maya to get their cacao."
(D) The Spanish gave cacao to them. "When the Spanish conquistadors (explorers and conquerors) arrived in Mexico in 1519, they were amazed to discover that 'money [cacao] grew on trees' there."

Social Studies: Explore the Americas by reading about one of the last Civilizations in Mesoamerica, the Aztec! Find one fun fact from the text and share it with a caregiver, friend or sibling! Lastly, locate the Americas on the map and draw a visual representation of your fun fact. (the last page)
   ○   Answer the 4 Questions

The Aztec Empire: The Last Great Native Civilization in Mesoamerica

The Aztecs probably began as a nomadic tribe in northern Mexico. They arrived in Mesoamerica, the area between central Mexico and northern Costa Rica, around the beginning of A.D. 1200. The Aztecs brought many of the region's city-states under their control by the 1400s. Invaders, led by the Spanish conquistador Hernan Cortes, overthrew the Aztecs by force and captured their capital city in 1521. This brought an end to Mesoamerica's last great native civilization.

An Aztec dancer poses for a photo during a ceremony celebrating the birth of Cuauhtemoc, the last Aztec emperor, in Ixcateopan, Mexico, February 23, 2009. Cuauhtemoc was tortured and executed by Spanish conqueror Hernan Cortes in 1525. AP Photo/Eduardo Verdugo

Aztecs take root in Mesoamerica
The exact origins of the Aztec people are uncertain. However, many believe this northern tribe of hunter-gatherers came from Aztlan or "White Land." As the Aztecs moved south into Mesoamerica, their arrival may have helped bring about the fall of the Toltec civilization. (The Maya and Olmec civilizations came before the Toltecs in Mesoamerica.)

The Aztecs were also known as the Tenochca or Mexica. In 1325, their first magnificent capital, Tenochtitlan, was built and named for them. It became Mexico City in 1521.

The Aztecs saw an eagle perched on a cactus on the marshy land near the southwest border of Lake Texcoco. They took it as a sign to build their settlement there. Draining the swampy land, they built islands. They planted gardens and built their capital city, Tenochtitlán. Their very successful irrigation and farming methods created crops of corn, beans, squashes, potatoes, tomatoes and avocados. They also supported themselves through fishing and hunting rabbits, armadillos, snakes, coyotes and wild turkeys. A powerful military force also helped the Aztecs build their empire.

Aztec society well established
In 1428, the Aztec leader Itzcoatl joined his forces with the Texcocans and the Tacubans. Together they defeated the Tepanec. When Itzcoatl died in 1440, the great warrior Montezuma I (also spelled Moctezuma), took power. By the early 1500s, the Aztecs ruled over 500 small states with 5 to 6 million people. Tenochtitlán had more than 140,000 inhabitants, which was more than any other city in Mesoamerica.

Some 50,000 people visited Tenochtitlan to shop on days when markets were open. This helped the Aztecs become wealthy. Nobles were at the top of their society. Serfs, who worked on farms, and servants and slaves were at the bottom. The Aztec religion was like other Mesoamerican religions. It included human sacrifice (like the Maya Empire), and the Aztecs worshipped Quetzalcoatl, a feathered serpent god of the Toltecs. In the great cities of the Aztec empire, there were magnificent temples, palaces, plazas and statues devoted to their gods. The Aztec calendar was based on a solar cycle of 365 days. This calendar played a central role in the religion of Aztec society.

Cortes conquers the Aztecs
The first European to visit Mexican territory was Francisco Hernandez de Cordoba. He arrived from Cuba with three ships and about 100 men in early 1517. Two years later, the Spanish governor in Cuba, Diego Velasquez, sent a larger force back to Mexico under the command of Hernan Cortes. Montezuma II was now the ruler of the Aztec empire. Cortes founded the city of Veracruz on the southeastern Mexican coast. Here he trained his army into a disciplined fighting force. Cortes and some 400 soldiers then marched into Mexico, aided by a native woman, known as Malinche, who served as a translator. He found that other native peoples, like the Tlascalans, did not like the Aztecs, so Cortes, along with these other tribes, made a plan to defeat Montezuma II.

In November 1519, Cortes and his men arrived in Tenochtitlan. Montezuma and his people greeted them as honored guests. They thought Cortes looked like the light-skinned Quetzalcoatl, the Aztec god, that would some day return to Mexico. Though the Aztecs had greater numbers, their weapons could not match the guns and cannons of the Spanish.

Cortes quickly defeated them and took control of Montezuma and his nobles. The Spaniards then murdered thousands of Aztec nobles, and Montezuma died while he was under arrest. Cuauhtemoc, his young nephew, took over as the leader of the Aztecs and drove the Spaniards from Tenochtitlan. Cortes fought back and defeated Cuauhtemoc on Aug. 13, 1521. In all, some 240,000 people were believed to have died in the city's conquest.

This ended the Aztec civilization. After his victory, Cortes burned Tenochtitlan and built Mexico City on its ruins. It quickly became the most important European center in the New World.

Quiz
1 Which sentence from the section "Aztecs take root in Mesoamerica" BEST introduces the Aztec people to the reader?
(A) However, many believe this northern tribe of hunter-gatherers came from Aztlan or "White Land."
(B) The Aztecs were also known as the Tenochca or Mexica.
(C) The Aztecs saw an eagle perched on a cactus on the marshy land near the southwest border of Lake Texcoco.
(D) They planted gardens and built their capital city, Tenochtitlán.

2 Why was the Spanish arrival in Aztec territory important?
(A) because the Spanish would bring Aztec ideas back to Europe
(B) because it represented a long partnership between Spain and the Aztecs
(C) because the Aztecs would learn about European culture from the Spanish
(D) because it represented the beginning of the end of the Aztec civilization

3 Read the introduction [paragraph 1]. What does this section show that other sections do not?
(A) It highlights the power that the Aztecs had.
(B) It discusses the Aztecs' role in Mesoamerica.
(C) It gives the reader a basic outline of Aztec civilization as a whole.
(D) It explains how the Spanish eventually conquered the Aztecs.

4 What is the MAIN reason why the author includes the section "Aztecs take root in Mesoamerica?"
(A) The section connects the Aztec capital to modern-day Mexico City.
(B) The section highlights the importance of agriculture and hunting.
(C) The section sets up the reader to understand how the Spanish would eventually defeat the Aztecs.
(D) The section describes how the Aztecs established a powerful civilization.

Science: Read the article Life Cycles: Metamorphosis. Then, tell an adult about something surprising that you read.
- ○ Answer the 8 Questions

Life Cycles: Metamorphosis

The transformation of a crawling caterpillar into a flying butterfly is one of nature's most amazing wonders. This change is an example of metamorphosis.

Metamorphosis is a series of astonishing changes in an animal's body after it hatches or is born. It occurs in thousands of types of insects, amphibians and other animals.

Metamorphosis Might Give Animals An Advantage
Biologists are scientists who study life on Earth. They think that metamorphosis might be a form of adaptation. An adaptation is a change in an animal species, or type, that helps it live better in its environment. Scientists think there are advantages for animals that go through metamorphosis.

For example, an insect might go through four stages of change. First, it is an egg. Then it hatches to become a very hungry, wormlike larva. Next it might go through an inactive pupa stage until it changes into an adult.

This metamorphosis helps the insect in a few ways. During each stage, the insect eats different food, so the parents and offspring don't have to fight over the same food helps protect the insect from

predators. Insects are ectothermic, which means their body temperature is controlled by their environment. An insect's body cools in the fall and winter. This causes the bug to slow down. During these seasons, it is more vulnerable to predators. Luckily for many insects, however, they are in the inactive pupa stage during these colder months. They are not moving around, so predators -- such as birds -- don't notice them. The pupa stage also allows the insects to survive the winter's food shortage.

Stages Of Metamorphosis

Different insect types experience different degrees of metamorphosis. Some, such as beetles, butterflies and flies, undergo a complete, four-stage metamorphosis. Their first stage of life is the egg. The female parent always lays her eggs on a food supply, like a leaf. That prepares for the second, or larval, stage. When the larva hatches, it immediately begins eating the supplied food. A larva resembles a segmented worm.

Life cycle of a butterfly

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An insect larva grows by shedding its hard outer skeleton. This is called molting. The larva can then expand and develop, replacing the outgrown outer skeleton with a new one. A larva usually molts five times.

The third stage of this insect's life is the pupal stage. This stage looks inactive from the outside. But inside the pupa, the final, astonishing transformation is happening. This last stage takes vast amounts of energy. That's why the larva eats so much.

Some pupae build a type of compartment to surround themselves. A butterfly pupa forms a chrysalis, which hangs from a tree. A moth's pupa forms a cocoon. These chambers may be made from woven larval hair, or from leaves. The pupa may also burrow into the soil.

This final metamorphosis can take all winter. The pupa's body tissue is disassembled, which means it comes apart. Then it is reassembled to make the adult form. The adult emerges with all the characteristics of an
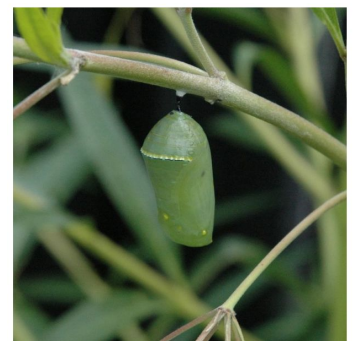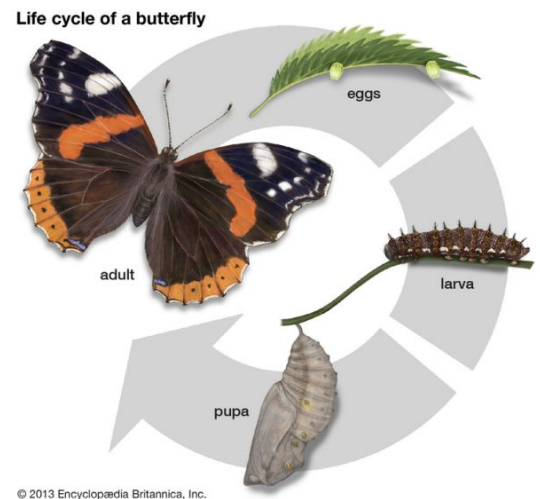
insect: three body sections (head, thorax and abdomen); wings (usually two pairs); and three pairs of legs. The adult insect rarely grows further. Many live for weeks or months. During this stage they reproduce. Their babies will go through the same metamorphosis.

Partial Or No Metamorphosis
Other insects, such as grasshoppers and termites, go through a partial metamorphosis. They pass through only three life stages: the egg, nymph and adult. The nymph that emerges from the egg already looks much like the adult. It even has the basic wing structures, but the wings won't work until the insect becomes a mature adult. As the nymph grows and molts, it develops adult features and grows to an adult size.

The most ancient insect species, such as silverfish and springtails, have no true metamorphosis. The young insects that emerge from the egg look almost exactly like the adults. They just grow until they reach adult size.

Metamorphosis In Other Animals
Metamorphosis is usually associated with insects. But it occurs in other animals, too. Frogs, for example, begin life as tadpoles and grow into adult frogs. Starfish, crabs and lobsters, and snails and clams also go through metamorphosis.

Quiz
1 Which sentence BEST explains how metamorphosis may be an adaptation?
(A) It allows animals to transform and make their environments better.
(B) It allows some animals to avoid predators and reduce competition.
(C) It allows animals to find more food by eating the same diet consistently.
(D) It allows some animals to change as they grow into different species.

2 Which two of the following are MAIN ideas of the article?
    1. Metamorphosis is a series of changes that many animals go through.
    2. Most insects go through a four-stage metamorphosis.
    3. The adult insect has three body sections: head, thorax and abdomen.
    4. Grasshoppers grow into nymphs with basic wing structures.
(A) 2 and 3
(B) 1 and 4
(C) 1 and 2
(D) 2 and 4

3 During which life stage change does a butterfly go through the most dramatic rearrangement of body tissues?
(A) when a pupa transforms into a caterpillar
(B) when a butterfly transforms into an egg
(C) when a pupa transforms into a butterfly
(D) when a an egg transforms into a caterpillar

4 Which detail BEST supports the MAIN idea that metamorphosis helps protect insects?
(A) The pupa stage also allows the insects to survive the winter's food shortage.
(B) Some, such as beetles, butterflies and flies, undergo a complete, four-stage metamorphosis.
(C) The larva can then expand and develop, replacing the outgrown outer skeleton with a new one.
(D) The pupa's body tissue is disassembled, which means it comes apart.

5 Which statement is the MOST accurate?
(A) All insects go through complete metamorphosis, but other animals go through incomplete metamorphosis.
(B) All animals go through complete metamorphosis, but insects go through incomplete metamorphosis.
(C) Some insects go through incomplete metamorphosis, while other animals go through complete metamorphosis.
(D) Some animals go through incomplete metamorphosis, while insects go through complete metamorphosis.

6 Select the paragraph from "Metamorphosis Might Give Animals An Advantage" that uses chronological text structure.

1   2   3   4   5   6   7   8   9   10   11   12   13

7 During what season does a butterfly caterpillar usually transform into a pupa?
(A) during spring because a pupa is an ectotherm that needs to eat a lot
(B) during summer when it is hot enough for the worm-like larva to move around
(C) during fall because it is an ectotherm and needs to eat leaves that have fallen
(D) during winter because it is an ectotherm, and can avoid predators

8 Which of the following BEST describes the structure of "Partial Or No Metamorphosis"?
(A) cause and effect
(B) chronological order
(C) compare and contrast
(D) problem and solution

- Explore: Safari [10-15 min] Mindful Movements [5 minutes]
  Practice mindful movements with a caregiver, friend, or yourself!
    - Find a quiet place where you can focus.
    - Stand with your feet shoulder width apart. Take a deep breath and reach for the sky. Hold this position for two breaths.
    - Then, slowly, reach for your toes. Relax your head and take two breaths. Feel the natural flow of breath - in, out.
    - Repeat this three times. Be sure to move slowly.
- Modification: If you are unable to stand, you can practice this while sitting with your legs in front of you.
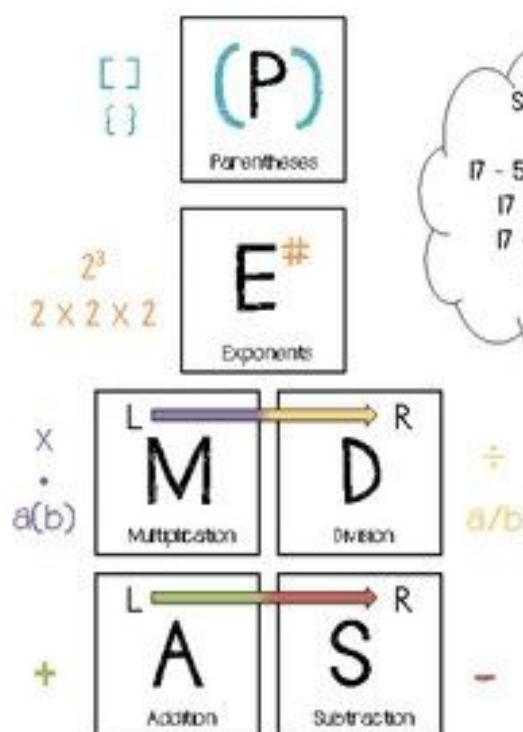
WORLD MAP:

Resource Found at: https://bit.ly/3bbRojf

PEMDAS

Going back to the previous example, $60 - 15 \div (2 - 5) + 7 \times 2^3$

Applying the PEMDAS rule step-by-step:

$60 - 15 \div (2 - 5) + 7 \times 2^3$	Parenthesis
$60 - 15 \div (-3) + 7 \times 2^3$	Exponent
$60 - 15 \div (-3) + 7 \times 8$	Division
$60 - (-5) + 7 \times 8$	Multiplication
$60 - (-5) + 56$	Subtraction
$65 + 56$	Addition
121	

5.OA.1: Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.

Lesson 153 _____

1. Which equation has the same unknown value as 468 □ 13 = ▫

   A. 468 □ ▫ = 13

   B. ▫ □ 468 = 13

   C. ▫ x 468 = 13

   D. 468 x ▫ = 13

2. At Clark High School, ⅔ of the students play an instrument. Of the students who play

   an instrument, ¼ play a string instrument. What fraction of the students at Clark High
   School play a string instrument?

3. Tommy ran the 100 yard dash in 14.87 seconds. His best friend ran the same race in
   13.64 seconds.
   When rounded to the nearest tenth of a second, how much faster was Tommy's friend
   than him?
   Enter your answer in the response box.

4. Patterns A and B are generated using these rules.
   * Pattern A: Start with 10 and add 5.
      * Pattern B: Start with 2 and add 1.
   Which statement **best** describes the relationship between the corresponding terms of
   Pattern A and Pattern B?

   A. Each term is Pattern A is ⅕ of the value of the corresponding term in Pattern B.
   B. Each term in Pattern A is 4 more than the value of the corresponding term in Pattern B.
   C. Each term in Pattern A is 5 times the value of the corresponding term in Pattern B.
   D. Each term in Pattern A is 8 more than the value of the corresponding term in Pattern B.

Lesson 154 _____

1. Mrs. Strumski was cutting some paper for her kindergartners to use in an art project.
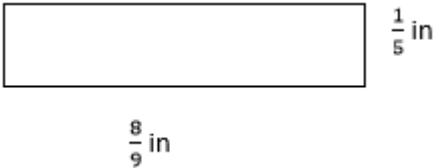
$\frac{1}{5}$ in

$\frac{8}{9}$ in

- The width of the paper is ⅕ inch
- The length of the paper is 8/9 inch

    Enter the area, in square inches, of each piece of paper.

2. Oliver's family planted a tree on his 1st birthday. Each year the tree grows about the same amount. Oliver's family has measured the height of the tree every year on his birthday, except that they forgot to record its height on his 5th birthday.

Oliver's Birthday	1st	2nd	3rd	4th	5th	6th
Height of Tree (feet)	$\frac{5}{12}$	$1\frac{1}{2}$	$3\frac{1}{4}$	$4\frac{2}{3}$	?	$7\frac{7}{12}$
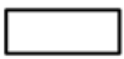
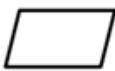Which measurement is the **most reasonable estimate** for the height of tree on Oliver's 5th birthday?

A. $5\frac{1}{12}$

B. $5\frac{3}{8}$

C. $6\frac{1}{6}$

D. $6\frac{11}{12}$

3. Enter the power of 10 that makes an expression equivalent to 70,000.

7 x [   ]

4. Determine if each polygon is also a rhombus. Select Yes for each polygon that is a rhombus and No for each polygon that is **not** a rhombus.

	Yes	No
Rectangle		
Trapezoid		
Square		
Pentagon		
Parallelogram		

Lesson 155

1. The area of the base of this right rectangular prism is 40 square yards and the height is 8 yards.
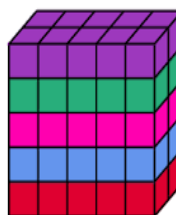
   Enter the volume, in cubic yards, of this prism.

   8 yd
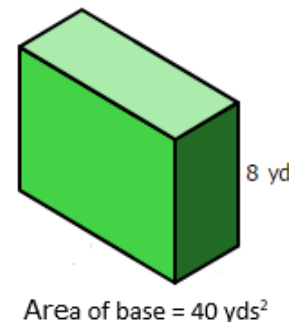
2. Every day, the Clark Pet Store uses 2 bags of dog food to feed the dogs. For how many days will ⅓ of a bag of dog food last?

   Area of base = 40 yds²

3. Which number makes the comparison true?

   408.06 > ▢

   A. 480.06
   B. 408.60
   C. 486.00
   D. 406.08

4. The rectangular prism shown is solid.
   Enter the volume, in cubic centimeters, of the rectangular prism.

Lesson 156

1. Enter the unknown value in the equation. ▢ - 20.45 = 16.9

2. Use the graph to answer the question.
   Which point is located at (1½, 1¼)?
   A. Point A
   B. Point B
   C. Point C
   D. Point D
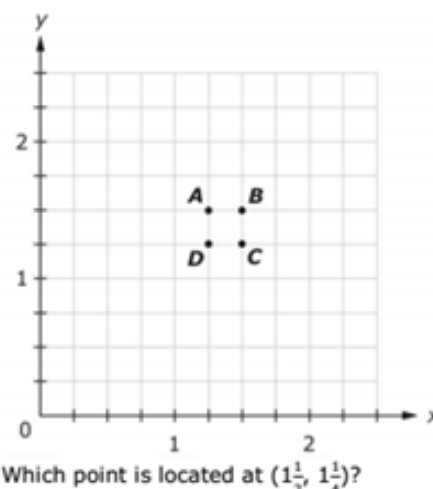
3. Enter the product

   $$607$$
   $$\times\ 727$$

   Which point is located at ($1\frac{1}{2}$, $1\frac{1}{4}$)?

4. Sam had collected 66 leaves to feed to his caterpillar collection. If he wanted to split the leaves equally amongst the 7 cages, how much should he put in each cage?
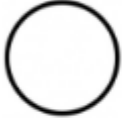
Lesson 157

1. Enter a value for *b* that makes this statement true:

    9 x *b* is less than 27 but greater than 9.

2. A musician's hair was originally 3 inches long. She asked her hairdresser to cut ⅚ of it off. How many inches did she have cut off?

3. Determine whether each polygon is a triangle, quadrilateral, or hexagon.
   Select the box that applies next to each polygon. If the polygon is **not** a triangle, quadrilateral, or hexagon, select None of These.

	Triangle	Quadrilateral	Hexagon	None of These

4. Enter a number equal to the value of the expression:

    (3 x 1000) + (4 x 10) + (7 x 1/100) + (9 x 1/1000)

Name:

Solve each problem.

1) $8 \times (18 \div 6)$

2) $57 + (4 \times 2)$

3) (9×6) - 38

4) $39 + (78 - 26)$

5) $86 + (15 \div 5)$

6) $(20 \div 2) \times 3$

7) $8 + (36 + 76)$

8) $735 - (3 \times 6)$

9) $(61 + 29) \div 4$

10) $(49 \div 7) + 68$

11) $128 - (15 + 39)$

12) $(48 - 12) \div 4$

13) $2 \times (4 + 2)$

14) $60 \div (3 - 2)$

15) $(60 - 17) \times 10$

16) $46 \div (1 + 7)$

17) $(24 + 85)$ - 4

18) $873 - (61 - 61)$

19) $(98 - 19) + 58$

20) $(7 \times 10) \times 5$

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____

16. _____

17. _____

18. _____

19. _____

20. _____

1-10	95	90	85	80	75	70	65	60	55	50
11-20	45	40	35	30	25	20	15	10	5	0

Solve each problem.

1) $8 \times (18 \div 6)$ $8 \times (3) = 24$

2) $57 + (4 \times 2)$ $57 + (8) = 65$

3) $(9 \times 6) - 38$ $(54) - 38 = 16$

4) $39 + (78 - 26)$ $39 + (52) = 91$

5) $86 + (15 \div 5)$ $86 + (3) = 89$

6) $(20 \div 2) \times 3$ $(10) \times 3 = 30$

7) $8 + (36 + 76)$ $8 + (112) = 120$

8) $735 - (3 \times 6)$ $735 - (18) = 717$

9) $(61 + 29) \div 4$ $(90) \div 4 = 22$ r2

10) $(49 \div 7) + 68$ $(7) + 68 = 75$

11) $128 - (15 + 39)$ $128 - (54) = 74$

12) $(48 - 12) \div 4$ $(36) \div 4 = 9$ r0

13) $2 \times (4 + 2)$ $2 \times (6) = 12$

14) $60 \div (3 - 2)$ $60 \div (1) = 60$ r0

15) $(60 - 17) \times 10$ $(43) \times 10 = 430$

16) $46 \div (1 + 7)$ $46 \div (8) = 5$ r6

17) $(24 + 85) - 4$ $(109) - 4 = 105$

18) $873 - (61 - 61)$ $873 - (0) = 873$

19) $(98 - 19) + 58$ $(79) + 58 = 137$

20) $(7 \times 10) \times 5$ $(70) \times 5 = 350$

Answers

1.	**24**
2.	**65**
3.	**16**
4.	**91**
5.	**89**
6.	**30**
7.	**120**
8.	**717**
9.	**22 r2**
10.	**75**
11.	**74**
12.	**9 r0**
13.	**12**
14.	**60 r0**
15.	**430**
16.	**5 r6**
17.	**105**
18.	**873**
19.	**137**
20.	**350**

1-10	95	90	85	80	75	70	65	60	55	50
11-20	45	40	35	30	25	20	15	10	5	0

Name:

Solve each problem.

1) $760 - (7 \times 4)$

2) $22 + (81 + 21)$

3) $(5 \times 6) + 95$

4) $(7 + 7) \times 8$

5) $607 - (65 - 52)$

6) $5 \times (6 + 4)$

7) $(83 - 59) - 22$

8) $8 \times (10 \times 5)$

9) $67 - (16 \div 8)$

10) $12 + (25 \div 5)$

11) $(31 + 90) - 49$

12) $(9 \times 7) \times 3$

13) $(80 \div 8) - 4$

14) $(7 \times 7) \div 4$

15) $369 - (33 + 39)$

16) $(50 \div 10) \times 4$

17) $4 \times (74 - 18)$

18) $98 \div (3 + 3)$

19) $84 + (66 - 41)$

20) $78 + (9 \times 6)$

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____

16. _____

17. _____

18. _____

19. _____

20. _____

1-10	95	90	85	80	75	70	65	60	55	50
11-20	45	40	35	30	25	20	15	10	5	0

Solve each problem.

1) 760 - (7 × 4)　　　　760 - (28) = 732

2) 22 + (81 + 21)　　　　22 + (102) = 124

3) (5 × 6) + 95　　　　(30) + 95 = 125

4) (7 + 7) × 8　　　　(14) × 8 = 112

5) 607 - (65 - 52)　　　　607 - (13) = 594

6) 5 × (6 + 4)　　　　5 × (10) = 50

7) (83 - 59) - 22　　　　(24) - 22 = 2

8) 8 × (10 × 5)　　　　8 × (50) = 400

9) 67 - (16 ÷ 8)　　　　67 - (2) = 65

10) 12 + (25 ÷ 5)　　　　12 + (5) = 17

11) (31 + 90) - 49　　　　(121) - 49 = 72

12) (9 × 7) × 3　　　　(63) × 3 = 189

13) (80 ÷ 8) - 4　　　　(10) - 4 = 6

14) (7 × 7) ÷ 4　　　　(49) ÷ 4 = 12 r1

15) 369 - (33 + 39)　　　　369 - (72) = 297

16) (50 ÷ 10) × 4　　　　(5) × 4 = 20

17) 4 × (74 - 18)　　　　4 × (56) = 224

18) 98 ÷ (3 + 3)　　　　98 ÷ (6) = 16 r2

19) 84 + (66 - 41)　　　　84 + (25) = 109

20) 78 + (9 × 6)　　　　78 + (54) = 132

#	Answer
1.	**732**
2.	**124**
3.	**125**
4.	**112**
5.	**594**
6.	**50**
7.	**2**
8.	**400**
9.	**65**
10.	**17**
11.	**72**
12.	**189**
13.	**6**
14.	**12 r1**
15.	**297**
16.	**20**
17.	**224**
18.	**16 r2**
19.	**109**
20.	**132**

1-10	95	90	85	80	75	70	65	60	55	50
11-20	45	40	35	30	25	20	15	10	5	0

Teaching Set #1

1. Enter the value of 8 + (4 × 12).

[ ]

2. Enter the value of 6 + (3 × 12) — 4.

[ ]

3. Enter the value of (8 × 12) + (36 ÷ 9).

[ ]

4. Enter the exact value of $(5 \times \frac{3}{4}) + (\frac{3}{9} + \frac{1}{9})$.

[ ]

5. Enter the exact value of (3 ÷ 0.1) − (0.5 × 0.2).

[ ]

6. Enter the value of (20 + 5) x (16÷ 4)

[ ]

7. Enter of the value of 70 - (3 x 5) x 4

[ ]

8. Enter the exact value of (6.8 + 4.7) ÷ 0.5

9. Enter the exact value of $(3 \times 2\frac{2}{3}) + (\frac{4}{6} + \frac{1}{3})$

10. Enter of the value of 15 + (4 x 12) - 9

11. Enter the exact value of (16 x 1.2) + (7.2 - 4)

12. Enter the value of $(3 \times \frac{2}{3}) + (\frac{2}{5} + \frac{1}{5})$

13. Enter the exact value of (3.8 + 8.6) ÷ 0.4

14. Enter the value of (9 × 13) + (54 ÷ 6).

Student Set #1

1. Enter the value of 3 + (6 × 12).

[   ]

2. Enter the value of 9 + (4 × 11) — 7.

[   ]

3. Enter the value of (5 × 15) + (24 ÷ 8).

[   ]

4. Enter the exact value of $(3 \times \frac{4}{5}) + (\frac{2}{7} + \frac{3}{7})$.

[   ]

5. Enter the exact value of (5 ÷ 0.1) − (0.6 × 0.3).

[   ]

6. Enter the value of (50 + 3) x (32 ÷ 4)

[   ]

7. Enter of the value of 80 - (7 x 3) x 3

[   ]

8. Enter the exact value of (6.9 + 2.6) ÷ 0.5

[ ]

9. Enter the exact value of $(4 \times 3\frac{2}{3}) + (\frac{5}{8} + \frac{1}{4})$

[ ]

10. Enter of the value of 12 + (3 x 13) - 8

[ ]

11. Enter the exact value of (13 x 1.6) + (4.3 - 2)

[ ]

12. Enter the value of $(5 \times \frac{3}{5}) + (\frac{1}{6} + \frac{3}{6})$

[ ]

13. Enter the exact value of (6.8 + 5.8) ÷ 0.3

[ ]

14. Enter the value of (5 × 12) + (64 ÷ 4).

[ ]

Teaching Set #2

1. Kathy must place parentheses around numbers in this expression in order to make it equal 7.

   60 ÷ 2 + 4 − 3

Which expression equals 7?

    A. 60 ÷ (2 + 4 − 3)
    B. 60 ÷ (2 + 4) − 3
    C. 60 ÷ 2 + (4 − 3)
    D. (60 ÷ 2) + 4 − 3

2. Michael must place parentheses around the numbers in this expression in order to make it equal to 4.

        36 ÷ 5 + 3 - 1

Which expression equals 4?

    A. 36 ÷ (6 + 4 - 1)
    B. (36 ÷ 6) + 4 - 1
    C. 36 ÷ (6 + 4) - 1
    D. 36 ÷ 6 + (4 - 1)

3. Melanie must place parentheses around the numbers in this expression in order to make it equal to 14.

        7 x 12 ÷ 2 x 3

Which expression equals 14?

    A. (7 x 12) ÷ (2 x 3)
    B. (7 x 12) ÷ 2 + 3
    C. (7 x 12 ÷ 2) x 3
    D. 7 x (12 ÷ 2) x 3

4. Jake must place parentheses around the numbers in this expression in order to make it equal to 16.

$$48 \div 8 \times 3 - 2$$

Which expression is equal to 16?

A. $(48 \div 8) - (3-2)$
B. $48 \div (8 \times 3) - 2$
C. $48 \div 8 \times (3 - 2)$
D. $(48 \div 8) \times 3 - 2$

5. Ashlyn must place parentheses around the numbers in this expression in order to make it equal to 4.

$$80 \div 5 + 7 + 8$$

Which expression is equal to 4?

A. $80 \div (5 + 7) + 8$
B. $80 \div (5 + 7 + 8)$
C. $80 \div 5 + (7 + 8)$
D. $(80 \div 5) + (7 + 8)$

6. Joel must place parentheses around the numbers in this expression in order to make it equal to 23.

$$6 \times 9 \div 3 + 5$$

Which expression equals 23?

A. $(6 \times 9) \div (3 + 5)$
B. $6 \times (9 \div 3) + 5$
C. $6 \times 9 \div (3 + 5)$
D. $6 \times (9 \div 3 + 5)$

Student Set #2

1. Iliana must place parentheses around numbers in this expression in order to make it equal 5.

$$40 \div 6 + 7 - 5$$

Which expression equals 5?

   A. $40 \div 6 + (7 - 5)$
   B. $40 \div (6 + 7) - 5$
   C. $40 \div (6 + 7 - 5)$
   D. $(40 \div 6) + 7 - 5$

2. Michael must place parentheses around the numbers in this expression in order to make it equal to 6.

$$72 \div 6 + 2 - 3$$

Which expression equals 6?

   A. $72 \div (6 + 2 - 3)$
   B. $72 \div (6 + 2) - 3$
   C. $72 \div 6 + (2 - 3)$
   D. $(72 \div 6) + 2 - 3$

3. Bailey must place parentheses around the numbers in this expression in order to make it equal to 8.

$$4 + 16 \div 5 \times 2$$

Which expression equals 8?

   A. $(4 + 16) \div (5 \times 2)$
   B. $(4 + 16) \div 5 \times 2$
   C. $(4 + 16 \div 5) \times 2$
   D. $4 + (16 \div 5) \times 2$

4. Martin must place parentheses around the numbers in this expression in order to make it equal to 10.

$$55 \div 8 + 3 \times 2$$

Which expression is equal to 10?

A. (55 ÷ 8) + (3 x 2)
B. 55 ÷ (8 + 3) x 2
C. 55 ÷ 8 + (3 x 2)
D. (55 ÷ 8) + 3 x 2

5. Ryan must place parentheses around the numbers in this expression in order to make it equal to 48.

$$40 \div 10 + 2 \times 8$$

Which expression is equal to 48?

A. (40 ÷ 10 + 2) x 8
B. 40 ÷ (10 + 2 x 8)
C. 40 ÷ 10 + (2 x 8)
D. (40 ÷ 10) + (2 x 8)

6. Liz must place parentheses around the numbers in this expression in order to make it equal to 2.

$$24 + 6 \div 3 \times 5$$

Which expression equals 2?

A. (24 + 6) ÷ (3 x 5)
B. 24 + (6 ÷ 3) x 5
C. 24 + 6 ÷ (3 x 5)
D. 24 + (6 ÷ 3 x 5)

Teaching Set #3

1. Enter the exact value of (5 + 9) (12 ÷ 3)

    A. 56
    B. 18
    C. $\frac{14}{4}$
    D. 10

2. Enter the exact value of (8 x 4.3) x (9 - 0.8)

    A. 42.6
    B. 34.4, 8.2
    C. 282.08
    D. 2,820.8

3. Enter the exact value of (56 - 2) ÷ (2 + 7)

    A. 62
    B. 34
    C. 7
    D. 6

4. Enter the exact value of (3 x 2.7) x (5 - 0.5)

    A. 12.6
    B. 36.45
    C. 40
    D. 20.25

5. Enter the exact value of (3 + 2) x $\frac{1}{3}$ - $\frac{2}{3}$

    A. $\frac{5}{3}$
    B. 1
    C. 2 $\frac{2}{3}$
    D. 3

Student Set #3

1. Enter the exact value of (4 + 3) (21 ÷ 3)

    A. 25

B. 49

C. $\frac{7}{7}$

D. 14

2. Enter the exact value of (3 x 5.7) x (2 - 0.5)

    A. 2565

    B. 33.7

    C. 25.65

    D. 17.1, 1.5

3. Enter the exact value of (33 - 6) ÷ (3 + 6)

    A. 37

    B. 3

    C. 11

    D. 15

4. Enter the exact value of (8 x 1.5) x (6 - 3.3)

    A. 45.6

    B. 68.7

    C. 75.3

    D. 32.4

5. Enter the exact value of (4 + 5) x $\frac{5}{6}$ - $\frac{2}{6}$

    A. $\frac{42}{6}$

    B. $\frac{92}{6}$

    C. 7 $\frac{1}{6}$

    D. 9 $\frac{1}{2}$