

Week 6

2nd
Grade

Independent Study Packet

Education.com



5 MORE Days of
Independent Activities in
Reading, Writing, Math,
and Other Fun Stuff

ANSWER KEYS
INCLUDED

Helpful Hints for Students and Families

Materials You Will Need:

- Pencils
- Extra paper or a notebook/journal. You may put everything into one notebook if you like.
- Colored pencils, markers, or crayons for some of the activities








Directions & Tips



- There is a schedule for each day. You may complete the activities in any order.
- Read the directions carefully before completing each activity.
- Check off each of the activities when you finish them on the activity menu.
- Make sure an adult signs the activity menu before you bring it back to school.

Activity Menu

	Day 1	Day 2	Day 3	Day 4	Day 5
Reading 	Read for 20 minutes and complete the independent reading activity.				
	Character Trading Card	Who, What, Where	Inferring with Quotes	Graphic Organizer Template: Frayer Model	Sticky Note Stop and Jot
	Compare and Contrast: Awesome Athletes!	All About Wangari Maathai	Spiders and Their Webs	All About Katherine Johnson	Make a Summary: Butterflies
Writing 	We Are All Artists	Let's Make Change	What Do You Want to Be When You Grow Up?	Listening to What Matters and Using Requests	Loving Kindness Notes
Grammar Practice 	Long "o" Sound	Irregular Verb Match	Long and Short Vowel Review	'Bee' Garden	Antonyms: Opposites Attract
Math 	Make Change: Sport Shop	Making Change at the Toy Store	Word Problems: Addition	Double-Digit Addition & Subtraction	Add & Spell the Hidden Word 6
Other Fun Stuff 	Make a Bedroom Planetarium! Build a Rocket Ship Outer Space Word Search Neil Armstrong Coloring Page Color Bookmarks from Space!				

Parent/Guardian Signature: _____

Day 1

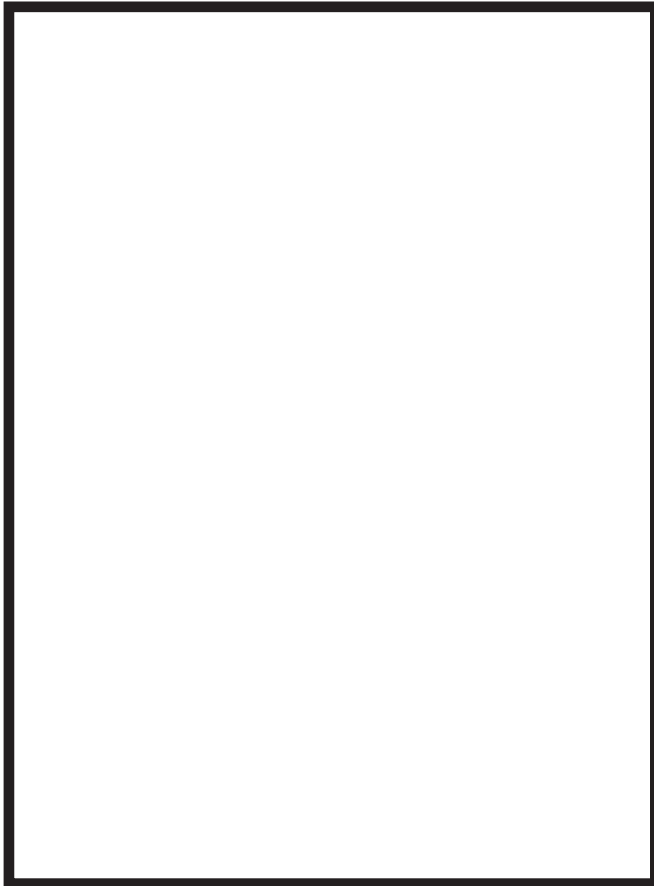
Independent Reading Activity	Pick a character you love from the book you're reading, and create your very own trading card!
Reading	Read about two awesome athletes and then compare and contrast your findings.
Writing	Channel your inner artist by thinking about what an artist is and why creativity is important.
Grammar Practice	Find the words with long vowels and use them to complete the sentences.
Math	Apply math to real-life situations as you practice adding up money amounts and subtracting to make change.





Character Trading Card

Choose a character from the book you've read
and create a trading card that features that character.
Fill in the appropriate stats and don't forget to draw a portrait!



Character Stats

Name:

Nickname:

Book/Story:

Personality Traits:

Likes/Dislikes: _____

What makes the character special? _____

I am like / unlike _____ **because** _____

(circle one)

(character name)



Character Trading Card

Choose a character from the story you've read
and create a trading card all about him/her!

Draw his/her portrait on the front and add character stats on the back. When you
are finished, cut each side out and glue together!

Front



**Be sure to write
the name**





Character Trading Card

Now, fill in cool facts about the character you've chosen!

Back

Character Stats

Book/Story:

Name:

Cool Facts:

1. _____

2. _____

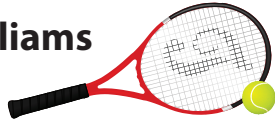
3. _____

Compare and Contrast: Awesome Athletes!

Part 1:

Read about each athlete.

Serena Williams



Serena Williams is an American tennis player. She has changed women's tennis with her incredible talent and powerful style of play.

Serena was born on September 26, 1981, in Saginaw, Michigan. Serena's sister, Venus, is also a **professional** tennis player. Their father taught them how to play tennis when they were very small.

Serena has won gold medals at the *Olympics*. She has also won tennis tournaments including the *French Open*, *U.S. Open*, *Wimbledon*, and the *Australian Open*.

Being a professional athlete takes hard work, **training**, and **dedication**! Serena Williams has **paved** the way for female tennis players around the world!

Marisol Hamm



Some people believe that Marisol Hamm, known as Mia, is the world's best women's soccer player.





Mia was born on March 17, 1972, in Selma, Alabama. When she was 15 years old, Mia became the youngest member of a U.S. national soccer team.

Mia has won *World Cup* championships and gold medals at the *Olympics*. She has set almost every soccer **record**!

Mia believes in the **power** of teamwork and is **dedicated** to winning. Mia has **paved** the way for female soccer players around the world!

Part 2:

1. Use the key below to highlight the answers in the text.
2. Next, use the information you learned to finish the sentence frames.

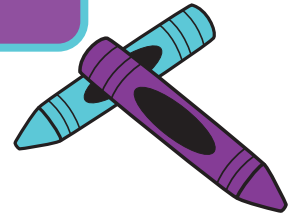
 Sport
 Place of Birth
 Accomplishments
 Beliefs

Serena plays _____.	Mia plays _____.
Serena was born _____.	Mia was born _____.
Serena's accomplishments include _____ _____.	Mia's accomplishments include _____ _____.
Serena believes _____.	Mia believes _____.

Name _____

Date _____

We Are All Artists



Student Directions: Answer the questions below. Next, create some art!

What is an artist?

An artist is someone who _____

Everyone can be an artist! What types of art do you like to create? (e.g., drawings, sculptures, mixed media, paintings, collages, etc.) How do you feel when you create something?

I like to create _____ because _____

I feel _____ when I create art.

Why do you think it's important for people to create things?

I think it's important for people to create things because _____

If people didn't create art, the world would be _____

Name _____

Date _____

We Are All Artists

Use a variety of creative materials to create something below.

Express yourself!



Long "o" Words

Complete each sentence with a **long o** word from the word box.

gold	phone	home	grows	joke
Joe	snow	alone	hole	toad

At the end of the rainbow, there is a pot of _____ !

I made an angel in the _____ .

I forgot my coat at _____ .

My cat does not like to be left all _____ .

I went to the park with my brother _____ .

I told a very funny _____ .

The plant _____ bigger every day.

The rabbit lives in a _____ .

A frog is very similar to a _____ .

I call my grandma every Sunday on the _____ .



The Sport Shop

Peter and his friends are at the sport shop getting ready for some summer fun! Figure out how much change they'll have left after they pick their summer sport.



Tennis Racket
\$1.07



Tennis Ball
27¢



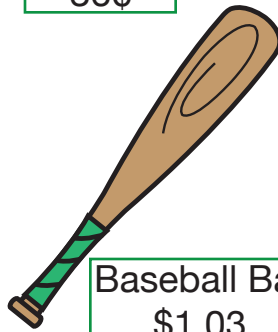
Baseball
36¢



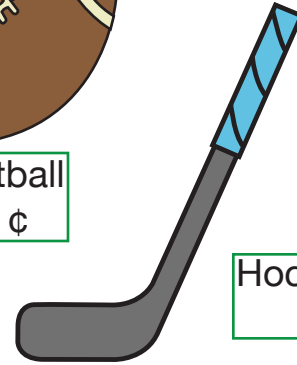
Football
51¢



Soccer Ball
97¢



Baseball Bat
\$1.03



Hockey Stick
\$1.15



Hockey Puck
42¢

Peter has

\$2.05

$$\begin{array}{r}
 \text{Racket} \quad \$ _._._ \\
 + \text{Ball} \quad + \$ _._._ \\
 + \text{Ball} \quad + \$ _._._ \\
 \hline
 \$ _._._
 \end{array}$$

$$\begin{array}{r}
 \$ _._._ \\
 - \$ _._._ \\
 \hline
 \$ _._._ \\
 \text{Change}
 \end{array}$$

Tina has

\$1.75

$$\begin{array}{r}
 \text{Football} \quad \$ _._._ \\
 + \text{Stick} \quad + \$ _._._ \\
 \hline
 \$ _._._
 \end{array}$$

$$\begin{array}{r}
 \$ _._._ \\
 - \$ _._._ \\
 \hline
 \$ _._._ \\
 \text{Change}
 \end{array}$$

Vince has

\$3.00

$$\begin{array}{r}
 \text{Soccer Ball} \quad \$ _._._ \\
 + \text{Stick} \quad + \$ _._._ \\
 + \text{Puck} \quad + \$ _._._ \\
 \hline
 \$ _._._
 \end{array}$$

$$\begin{array}{r}
 \$ _._._ \\
 - \$ _._._ \\
 \hline
 \$ _._._ \\
 \text{Change}
 \end{array}$$

Lisa has

\$4.00

$$\begin{array}{r}
 \text{Bat} \quad \$ _._._ \\
 + \text{Ball} \quad + \$ _._._ \\
 + \text{Racket} \quad + \$ _._._ \\
 \hline
 \$ _._._
 \end{array}$$

$$\begin{array}{r}
 \$ _._._ \\
 - \$ _._._ \\
 \hline
 \$ _._._ \\
 \text{Change}
 \end{array}$$

Day 2

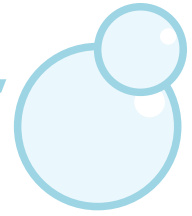
Independent Reading Activity	Use this graphic organizer to write about the characters, setting, and important events in your book.
Reading	Read all about Wangari Maathai, the first African American woman to win the Nobel Peace Prize.
Writing	Write about some of the ways you'd like to create change in the world.
Grammar Practice	Match the irregular verbs to their past tense form.
Math	Solve word problems about making change on a trip to the toy store.



Name: _____

Date: _____

Who, What, Where



Setting (where)

Character (who)

Events
(what happened)

My favorite part was _____.

All About Wangari Maathai

Wangari Maathai was an activist. She loved the earth and she was a leader. She was the first African woman to win the Nobel Peace Prize.

Wangari Maathai was born in 1940 in Kenya. She grew up in a small village where her father was a farmer. She would collect firewood and help out at home. When she was 8 years old, she started school. She loved to learn and was a good student. When she was older, she won a scholarship to study in the United States. She earned many degrees. In 1971, she went to the University of Nairobi. She was the first woman in East Africa to earn a doctorate degree. In 1976, she started to work at the university.



When she came back to Kenya, she was sad to learn about all of the trees being cut down. People wanted to make room for big buildings. She wanted to help the earth. She also wanted to help women find work. In 1977, she started the Green Belt Movement. This movement helped women by paying them to plant trees all over Kenya. These trees added some green to Kenya again. Wangari helped to plant over 30 million trees in Kenya. She also helped over 30,000 women find work.

Wangari was an activist for the earth. She protested the construction of big buildings because cutting the trees down hurt the environment. She asked to plant more trees. She was arrested many times for protesting the government's actions. After many years of protesting, a new government came into power. In 2002, Wangari became the assistant minister of environment, natural resources, and wildlife.

Wangari kept helping women and the earth. In 2004, she became the first African woman to win the Nobel Peace Prize. In 2006, she wrote a book called *Unbowed* to share her story. Wangari died in 2011 when she was 71 years old.

All About Wangari Maathai

Directions: Answer the questions about the text.

Why is Wangari Maathai famous?

Finish the sentence: Wangari Maathai became the first _____

What were some of the challenges Wangari faced?

Where did Wangari study?

Why was Wangari known internationally?

What else would you like to know about Wangari Maathai? Share your questions with a friend.

Let's Make Change

Name: _____

Date: _____

Think about something you would like to see changed in the world. Use the graphic organizer below to organize your ideas.

1. State your opinion (what would you like to see changed?)

2. Describe the change in detail (how would things change?)

3. Describe the benefits of your suggestions (why should this change be made?)

Irregular Verb Match

Draw a line from the present tense to the past tense of each verb below.
The first one is done for you.

say

tell

go

win

teach

make

draw

meet

come

take

find

cry

run

went

taught

took

said

came

told

made

won

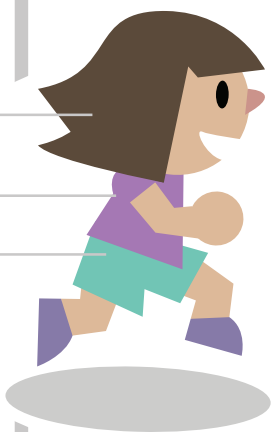
cried

found

ran

met

drew

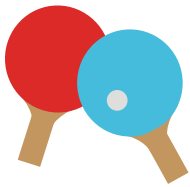


Toy Store

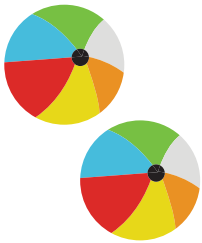
Sally and her friends are at the toy store. Answer each problem about **making change**. Show your work!



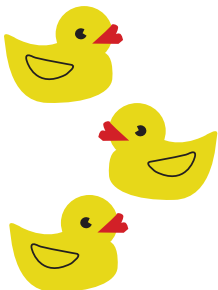
Sally has 65 cents. If she buys a teddy bear for 32 cents, how much change will she get back?



Alex has 82 cents. If he buys a ping-pong ball set for 64 cents, how much change will he get back?



Devon has 76 cents. Each beach ball costs 35 cents. If he buys two beach balls, how much change will he get back?

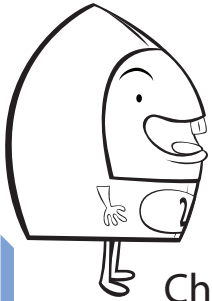


Maria has 98 cents. She wants to buy three rubber ducks. Each rubber duck costs 32 cents. Does she have enough money?

Day 3

Independent Reading Activity	Practice making inferences using quotes from characters in the book you are reading.
Reading	Think like a scientist as you read about spiders and answer questions to demonstrate your understanding.
Writing	From artists to athletes to mathematicians and scientists, there are so many careers to choose from! What will you be when you grow up?
Grammar Practice	Determine which words have a long or short vowel.
Math	Practice solving story problems that involve adding two-digit numbers.



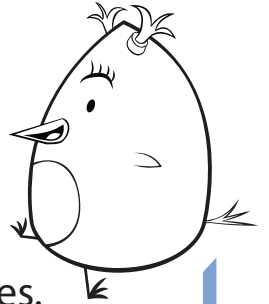


Name: _____

Date: _____



Inferring with Quotes



Book Title _____

Choose three short quotes about a character from the text and write them in the boxes.

Then make an inference about the character below—what can you reasonably guess about the person based on things they said or did?

Quote 1

Quote 2

Quote 3

Page _____

Page _____

Page _____

I can infer...

Spiders and Their Webs

Read about spiders and their webs and then fill in the diagram.

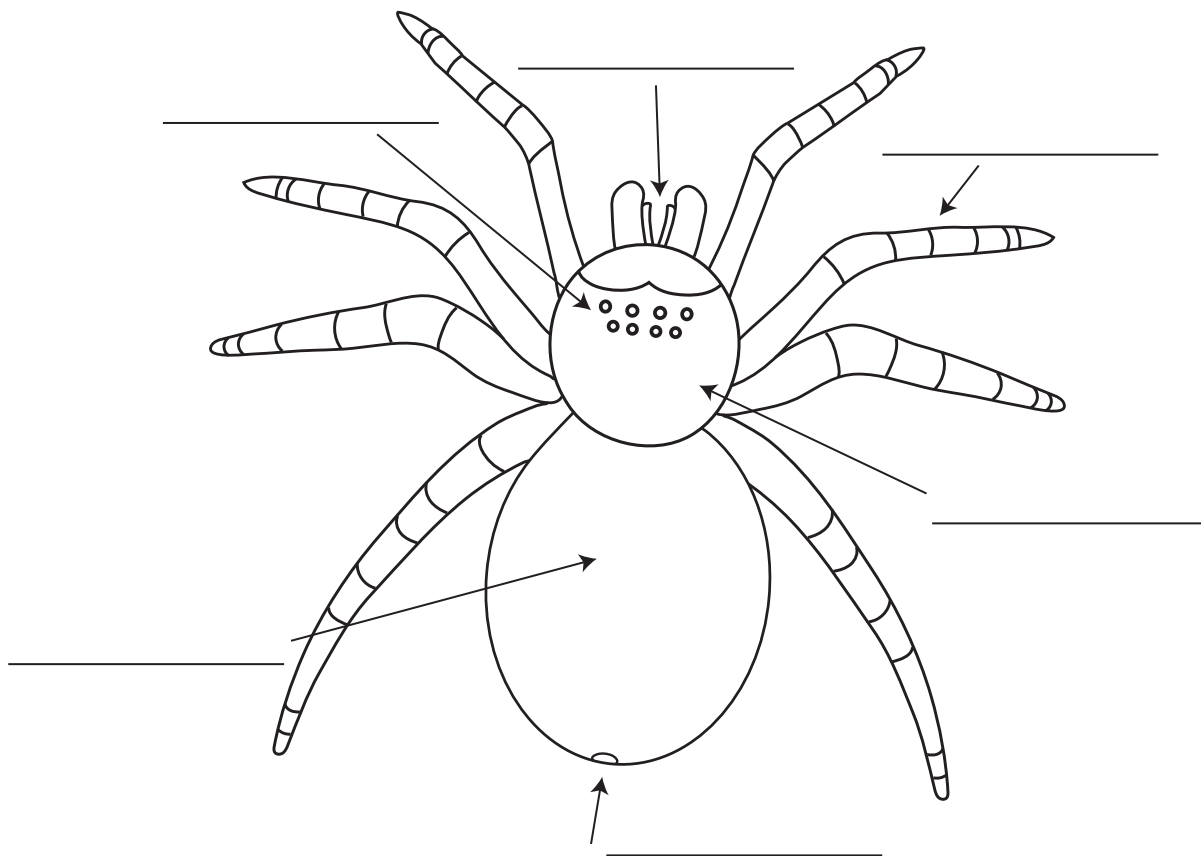
Spiders are arachnids. They have two parts to their bodies. The top part of the body is the cephalothorax. Arachnids have eight legs. The legs are connected to the cephalothorax.

The bottom part of the body is called the abdomen. At the bottom of their abdomen, most spiders have three spinnerets. Spinnerets make the silk spiders use to create spider webs.

Spider silk is one of the strongest natural threads in the world. The silk needs to be strong because spiders create spider webs to catch prey. Spider webs are not the only thing that catches prey. Sometimes spiders make simple webs to jump onto their prey.

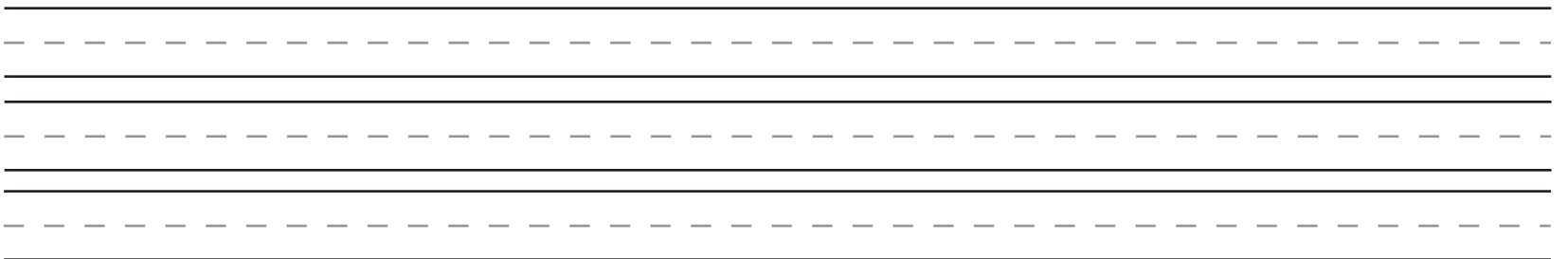
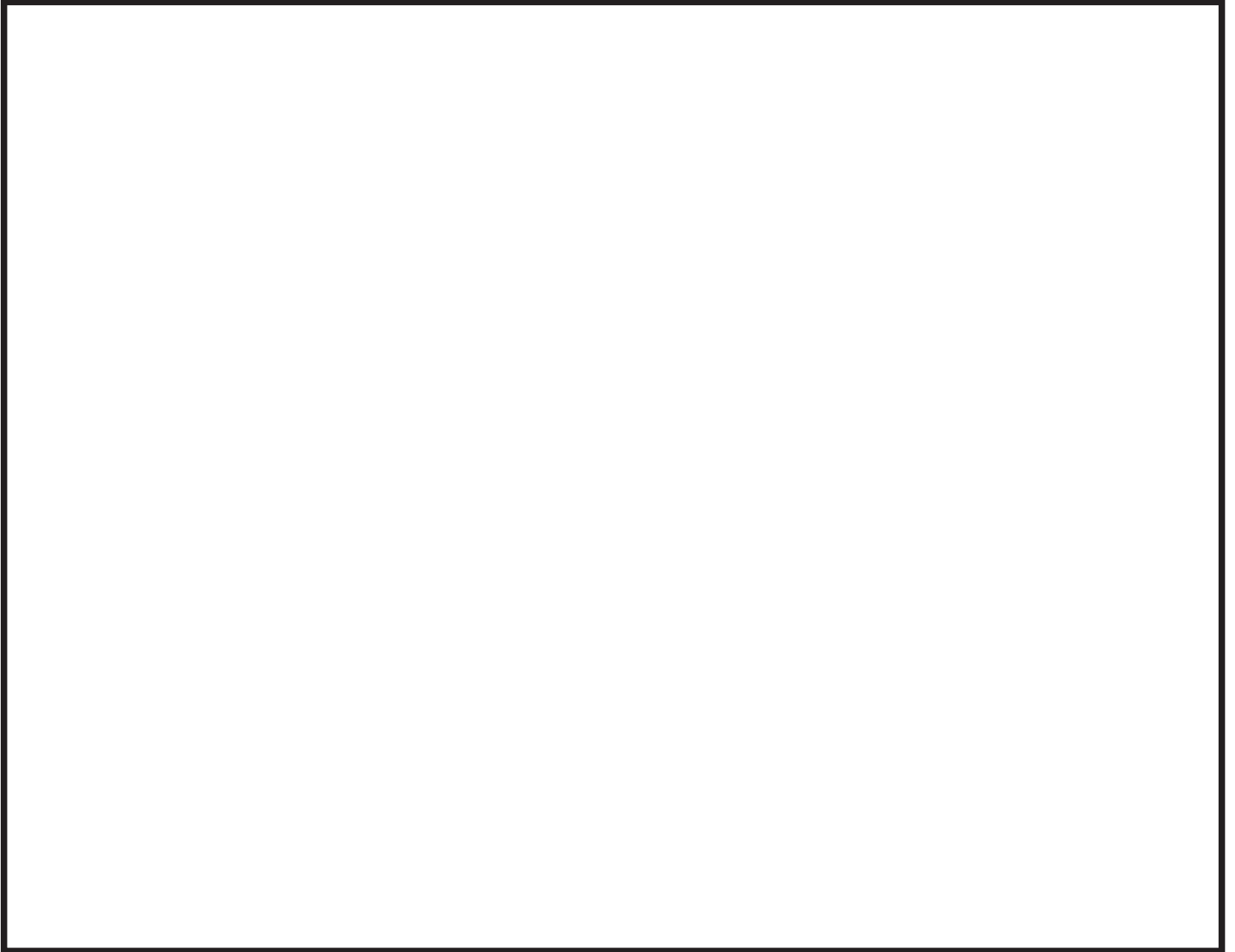
Word Bank:

leg eyes cephalothorax abdomen spinnerets jaws



What Do You Want to Be When You Grow Up?

Draw what you want to be when you grow up in the box below.
Write a few sentences about what you want to be.



Short and Long Vowel Review

Name: _____

Date: _____

When a vowel sounds like its name, it's a long vowel. If a vowel does not sound like its name, it's a short vowel. Circle the correct sound of the words below.

Examples: **A. rate**

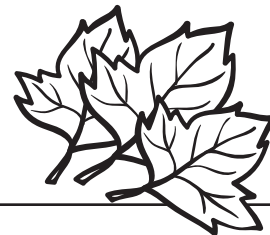
short a

long a

B. that

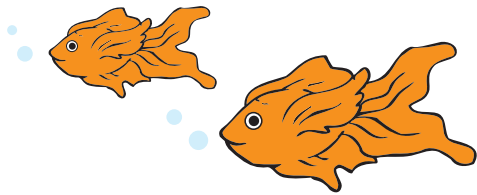
short a

long a



1. bake short a long a	2. let short e long e	3. strong short o long o
4. miss short i long i	5. cat short a long a	6. bed short e long e
7. he short e long e	8. up short u long u	9. phone short o long o
10. ride short i long i	11. rain short a long a	12. use short u long u
13. stand short a long a	14. throw short o long o	15. fall short a long a





Word Problems: Addition

Read each word problem below.
Write a number sentence and solve the problem.

Example:

There are 14 baby chicks in the hen house. 10 more baby chicks are born. How many baby chicks are in the hen house now?

$$\begin{array}{r} 14 \\ + 10 \\ \hline 24 \end{array}$$

Sara has 15 goldfish. Aunt Trish gives her 16 more goldfish. How many goldfish does Sara have now?

Will finds 48 seashells at the beach. Joy finds 36 seashells. How many seashells do they have total?

Dad plants 22 flowers in the yard. Mom plants 15 more flowers. How many flowers are in the yard now?

Lily has 30 pieces of candy. Rick has 27 pieces of candy. How many pieces of candy do they have total?

Tim has 13 shiny rocks in his fish tank. He places 18 more shiny rocks into the tank. How many shiny rocks are in the fish tank now?

Day 4

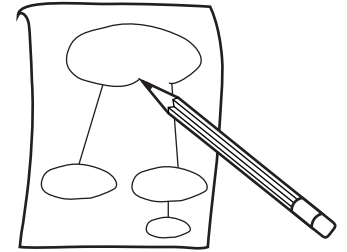
Independent Reading Activity	Pick out a tricky vocabulary word from your book and dive deep into the word's meaning by completing a Frayer Model.
Reading	Read all about the inspiring mathematician and physicist Katherine Johnson.
Writing	Reflect on how you can use your listening skills to communicate positively with your family members about your needs.
Grammar Practice	Fill in the blanks with different words that begin with be .
Math	Put on your mathematician hat and practice solving double-digit addition and subtraction problems.



Name: _____

Date: _____

Frayer Model



Directions: Write your vocabulary word in the “Vocabulary Term” oval. Complete the rest of the sections for the vocabulary term in your own words.

Definition:	Sentence:
Vocabulary Term:	
Examples:	Non-Examples:
Image Representation:	

All About Katherine Johnson

Katherine Johnson was an African American physicist and mathematician. She worked to calculate the first mathematical problems to send humans into space. She is famous for her long career at NASA. In 1959, she calculated the flight path for the first American, Alan Shepard, to go into space.



She was born on August 26th, 1918, in West Virginia. She was the youngest of four children and was always curious.

She was born on August 26th, 1918, in West Virginia. She was the youngest of four children and was always curious. From a young age, her parents encouraged her to focus on her education. When she finished elementary school, she had a hard time finding a place to study. The schools near her were segregated and only accepted white students.

Katherine was a brilliant student and skipped many grades. She was able to attend the high school on the campus of the historically black West Virginia State College. She started college when she was 15. She graduated in 1937 with a degree in Math Education and French. Later, she taught math, French, and music in the public schools of black Americans.

In 1939, Katherine was selected as one of three African American students to attend graduate school at West Virginia University. By that time, the school had begun to desegregate, meaning they let whites and blacks learn together. She decided to leave school before graduating to get married and start a family.

In 1952, she applied for an open position with the West Area Computing section at the National Advisory Committee for Aeronautics (NACA). The position was at the Langley Research Center. NACA would later become NASA in 1958. There, she worked as a human computer. She solved math problems and checked data for the first space flights. In 1962, she checked the math problems by hand to make sure that John Glenn's orbit around the Earth was correct. Among her many other successes, in 1969, Katherine also calculated the flight path for Apollo 11's flight to the Moon.

When Katherine Johnson started working at NASA, women were not given credit for their work on any written report. In 1961, she became the first woman in her division to receive credit as the author of a research report. She was hired in an all-male division. She faced challenges as an African American woman in both a male-dominated and segregated work environment.

Katherine worked for NASA for 33 years and retired in 1986. Much of her work at NASA was not recognized until much later. In 2015, when she was 97 years old, President Barack Obama awarded her the Presidential Medal of Freedom. This is the highest civilian honor civilians can receive. She died at the age of 101 on February 24th, 2020.

All About Katherine Johnson

Directions: Answer the questions about the text.

1. Why is Katherine Johnson famous?

2. What were some of the challenges Katherine faced?

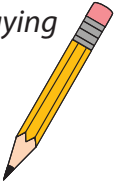
3. Where did Katherine study?

4. What was Katherine's job at NASA?

5. What else would you like to know about Katherine Johnson? Share your questions with a friend.

Listening to What Matters and Using Requests

1. Write down one thing that you have felt you needed in the past week, but did not receive. (*A turn playing video games? Ice cream?*)



2. How did it feel when you did not receive this? (*Hurt? Angry? Sad?*)

3. Write down why receiving this was important to you.

("I think it is important to take turns and my brother would not let me play when it was my turn. I wanted my brother to listen to me and to be fair.")

4. Using your answers above, what could you have said to your brother (when you were calm) to help him understand your feelings, needs, and requests after this happened?

("I felt hurt when I could not have a turn playing video games. I would like to be heard and to have a turn when it is my turn.")



Bee Garden



Fill in the blanks with the correct word that begins with "be".

believe become before between beware
 because begins beyond belongs

1. I was late to school _____ I missed the bus.
2. Don't eat dessert _____ you finish your dinner.
3. Flowers grow the fastest once springtime _____.
4. Could you _____ what she said?
5. We live _____ Stevenson Street and Pine Road.
6. I can't wait until summer vacation _____!
7. My sister wants to _____ a science teacher.
8. That pencil _____ to Mark.
9. _____ of bees! They might sting you!



Addition & Subtraction

$$\begin{array}{r} 10 \\ + 15 \\ \hline \end{array}$$

$$\begin{array}{r} 44 \\ + 36 \\ \hline \end{array}$$

$$\begin{array}{r} 81 \\ + 27 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ + 88 \\ \hline \end{array}$$

$$\begin{array}{r} 24 \\ - 16 \\ \hline \end{array}$$

$$\begin{array}{r} 59 \\ - 40 \\ \hline \end{array}$$

$$\begin{array}{r} 99 \\ - 32 \\ \hline \end{array}$$

$$\begin{array}{r} 63 \\ - 29 \\ \hline \end{array}$$

$$\begin{array}{r} 35 \\ + 35 \\ \hline \end{array}$$

$$\begin{array}{r} 76 \\ + 25 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ + 52 \\ \hline \end{array}$$

$$\begin{array}{r} 48 \\ + 16 \\ \hline \end{array}$$

$$\begin{array}{r} 92 \\ - 18 \\ \hline \end{array}$$

$$\begin{array}{r} 30 \\ - 21 \\ \hline \end{array}$$

$$\begin{array}{r} 76 \\ - 57 \\ \hline \end{array}$$

$$\begin{array}{r} 84 \\ - 61 \\ \hline \end{array}$$

Day 5

Independent Reading Activity	As you read your book, stop and jot to answer the questions on the worksheet.
Reading	Read all about the changes that take place during a butterfly's life cycle and write a short summary.
Writing	Take time to remember your uniqueness, gifts, and other positive traits.
Grammar Practice	Find the antonym and make sure you don't get tricked by the synonyms.
Math	Hone your math skills and addition fact fluency, and uncover a secret word.



Sticky Note Stop and Jot for:

(Chapter)

(Book Title)

Name: _____ Date: _____

Write your Stop & Jots on sticky notes, then place them in the squares below.

Connection

Prediction

What connections to yourself, other texts, or the world can you make?

What do you think will happen next?

Question

Strong Reaction

What do you wonder?

What made you feel something? Why?

Name: _____

Date: _____



Make a Summary: Butterflies

Directions: Circle new vocabulary words. Then use a crayon or highlighter to underline the most important parts of the text. Finally, write a 3–4 sentence summary.

Butterflies start life as tiny eggs laid on top of leaves. The butterfly lays eggs on leaves they like to eat. When the egg hatches, out comes the larva, or caterpillar. They eat and eat. As they grow, they shed their skin, or exoskeleton. When the caterpillar has grown to its full size, it makes a chrysalis. This is called the pupa stage. When the caterpillar is done forming inside the pupa, a butterfly will come out. At first its wings are folded and wet, but in a few hours they are dry and are ready to fly.





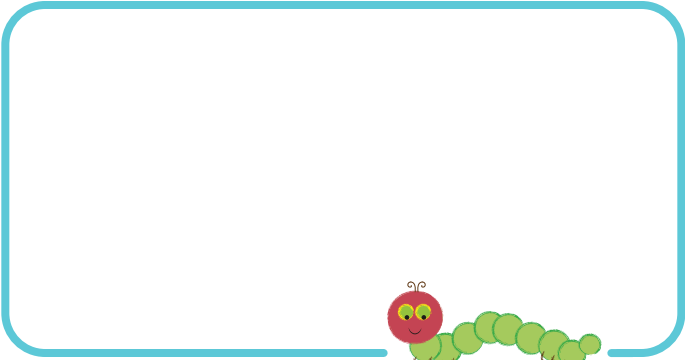
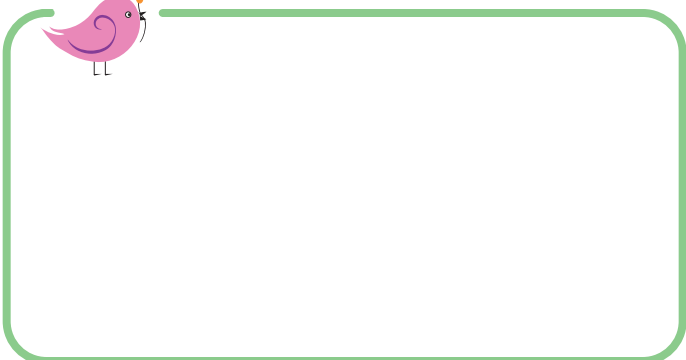
Loving Kindness Notes

Remembering your uniqueness, gifts, and positive traits can be powerful!

Directions:

- * Write loving kindness notes to place around your home. These will serve as a reminder for yourself and others to see the positive traits and goodness within!
- * After writing your positive notes, color and design each one with happy and colorful pictures.
- * Cut out your notes and paste them around your house in places where you and others may find them unexpectedly (such as in a kitchen cabinet or on a bathroom mirror).
- * When you read each one, take a few moments to repeat them in your mind and to feel what it is like to think positive thoughts of yourself.
- * Teach others in your home how to read these loving phrases as a reminder to see the goodness within themselves, too!

Examples of Loving Kindness notes:

 <p>I am loved.</p>	 <p>I am beautiful.</p>
	

Name _____

Date _____

Loving Kindness Notes



A pink rounded rectangular box with a blue flower illustration in the top-left corner.

An orange rounded rectangular box with a purple butterfly illustration in the bottom-right corner.

A light blue rounded rectangular box with a green caterpillar illustration in the bottom-right corner.

A green rounded rectangular box with a pink bird illustration in the top-left corner.

A pink rounded rectangular box with a blue flower illustration in the top-left corner.

An orange rounded rectangular box with a purple butterfly illustration in the bottom-right corner.

A light blue rounded rectangular box with a green caterpillar illustration in the bottom-right corner.

A green rounded rectangular box with a pink bird illustration in the top-left corner.

Opposites Attract

Color the **antonym** of the underlined word in each sentence.

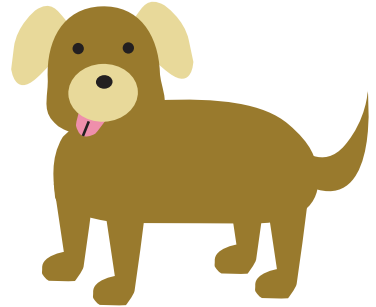
Antonyms are words that have opposite meanings.

My dog Paws is very large!

giant

small

big



This pillow feels cozy and soft.

fluffy

hard

comfy

She is happy today!

glad

sad

joyful

The towel feels wet.

damp

moist

dry

The bird flew up in the air.

down

high

right

Add & Spell The Hidden Word

Add these numbers to find the letters that spell out the hidden word. You may need to carry.

$$\begin{array}{r} \text{G } 58 \\ + 39 \\ \hline \end{array}$$

$$\begin{array}{r} \text{F } 88 \\ + 46 \\ \hline \end{array}$$

$$\begin{array}{r} \text{I } 65 \\ + 30 \\ \hline \end{array}$$

$$\begin{array}{r} \text{Y } 47 \\ + 46 \\ \hline \end{array}$$

$$\begin{array}{r} \text{R } 54 \\ + 89 \\ \hline \end{array}$$

$$\begin{array}{r} \text{T } 59 \\ + 96 \\ \hline \end{array}$$

$$\begin{array}{r} \text{L } 86 \\ + 44 \\ \hline \end{array}$$

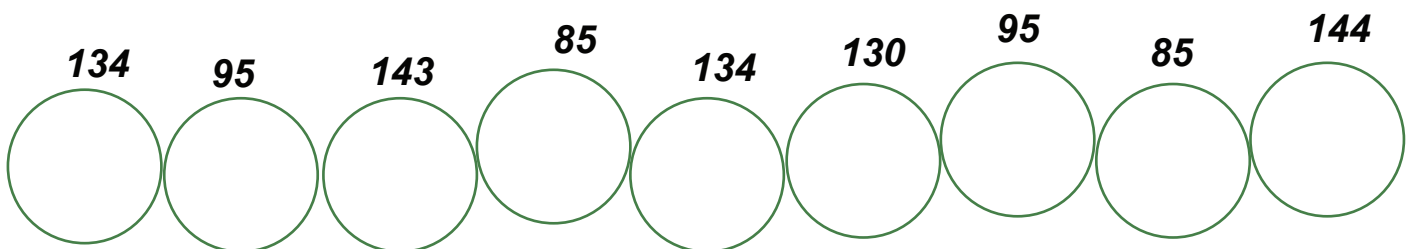
$$\begin{array}{r} \text{W } 37 \\ + 81 \\ \hline \end{array}$$

$$\begin{array}{r} \text{N } 60 \\ + 38 \\ \hline \end{array}$$

$$\begin{array}{r} \text{H } 52 \\ + 54 \\ \hline \end{array}$$

$$\begin{array}{r} \text{S } 79 \\ + 65 \\ \hline \end{array}$$

$$\begin{array}{r} \text{E } 19 \\ + 66 \\ \hline \end{array}$$



Other Fun Stuff

Make a Bedroom Planetarium!

Build a Rocket Ship

Outer Space Word Search

Neil Armstrong Coloring Page

Color Bookmarks from Space!



Make a Bedroom Planetarium!

If you're lucky enough to live near a museum or a university with a planetarium, you'll definitely want to take your child for a visit to explore outer space with them. But you don't need to pay the price of admission for this delightful constellation craft...you'll just need an old round oatmeal container, a flashlight, and a few other common materials. Help your child learn to recognize constellations with this fun and easy activity. Then, on the next clear night, take a walk and see if they can find them in the sky!

What You Need:

- Round cardboard oatmeal container with a plastic lid, clean and dry
- Plain flashlight
- Black paper
- Tape
- White crayon
- Constellation book
- Push pin
- Pencil
- Construction paper, gold stars, and clear contact paper

What You Do:

1. Start by decorating your Starfinder: Have your child glue or tape sheets of construction paper around the outside of the container, and decorate it with as many of the gold stars as they would like. (You might even encourage them to mark out a few constellations right on the container.)
2. When they have finished, help them to cover the whole design with clear contact paper. (Later, you'll be pulling tape on and off, and the contact paper will protect the design.)
3. Now help your child cut a hole in the plastic lid with scissors or a craft knife, so that the flashlight can fit through.
4. Tape the lid around the edge so that the flashlight is secure.
5. Cut the round cardboard bottom out of the oatmeal can. Now use it to mark several circles on your black paper. Your circles should be larger than the original circle being used as a template. Trace a circle that is about $\frac{1}{2}$ " wider (all the way around) than the original circle cut from the oatmeal container.
6. Look up some key constellations in a science book (constellations like the Big Dipper, Little Dipper, Draco, Andromeda, and Orion) or you can surf the internet to find pictures of constellations. You can make copies or print these templates out and then have your child trace them onto white paper. Cut around them to fit the inner circle of your Starfinder, and glue them onto one of the black circles you and your child cut out. Then take a thumbtack and lightly poke a hole where every star in that constellation appears. Help your child do this several times on several different circles.
7. Now put your whole Starfinder together. Tape one black constellation circle to the end of your Starfinder, and then pop the plastic lid onto the top, with the flashlight inside, facing toward the constellation end of the Starfinder. Each time your child wants to look at a new constellation, you can replace the constellation circle on the Starfinder with a different one.
8. Turn all the lights off in your child's room, turn on the flashlight in the Starfinder, and see what you can see! Be prepared for oohs and aahs. With this activity, you and your child can bring the giant night sky into your very own home and do some star gazing from the comfort of your beds!



Build a Rocket Ship

Plan a trip to the moon or through the rings of Saturn while you show your child how to make a [rocket ship](#). Fortunately, you don't need a NASA budget to make this rocket a reality. This activity requires time and patience, but it's a great way to teach kids about construction and measurement. Your child will put their creativity to use as they paint, decorate, and design. This project requires a lot of cutting with a sharp utility knife. Make sure you do these steps yourself, but encourage your child to help with measuring and assembling whenever they can.

What You Need:

- A large cardboard box (such as a cabinet box or a dishwasher box)
- Additional corrugated cardboard
- Utility knife (and an adult to use it)
- Straight edge
- Pencil
- Packaging or duct tape
- Tempera or other craft paint
- Paintbrush
- Optional decorations including glow-in-the-dark stickers

What You Do:

1. The large box is the base of the rocket. Start by cutting a door so that little astronauts can enter and leave their rocket ship. You can cut three sides of the door and fold it back so that it is "hinged" or simply cut it out entirely to leave an opening. For an especially big rocket, cut port hole windows as needed to light the interior.
2. Nothing is worse than an unstable rocket. Cut several triangles from the extra pieces of cardboard and help your young astronaut tape these tail fins to the base of each corner.
3. Now it's time to make the nose of your rocket. This will require four corrugated cardboard triangles. Pick one side of the box and attach the triangle to it. The base of the triangle should be the same as the side of the box. Use the straight edge to add the remaining two sides of the triangle; make them equal in length and note this length for the remaining triangles. Repeat this step to make three more identical triangles.
4. Tape the triangles together to form a pyramid. Then tape the pyramid to the top of your rocket.
5. Help your astronauts decorate their rocket ship. They can use paint, glow-in-the-dark stickers, or markers.
6. Once the rocket ship is all decorated, use it in some imaginary game play!



Outer Space Word Search

BLAST OFF!

Find and circle
all of the words
in the list
below.

P	A	S	T	R	O	N	A	U	T
M	E	T	E	O	R	B	H	I	R
I	W	P	Z	C	O	M	E	T	E
S	G	L	A	K	C	S	M	A	B
S	S	A	T	E	L	L	I	T	E
I	U	N	F	T	M	O	O	N	P
O	N	E	D	J	L	E	X	Q	K
N	I	T	G	A	L	A	X	Y	L

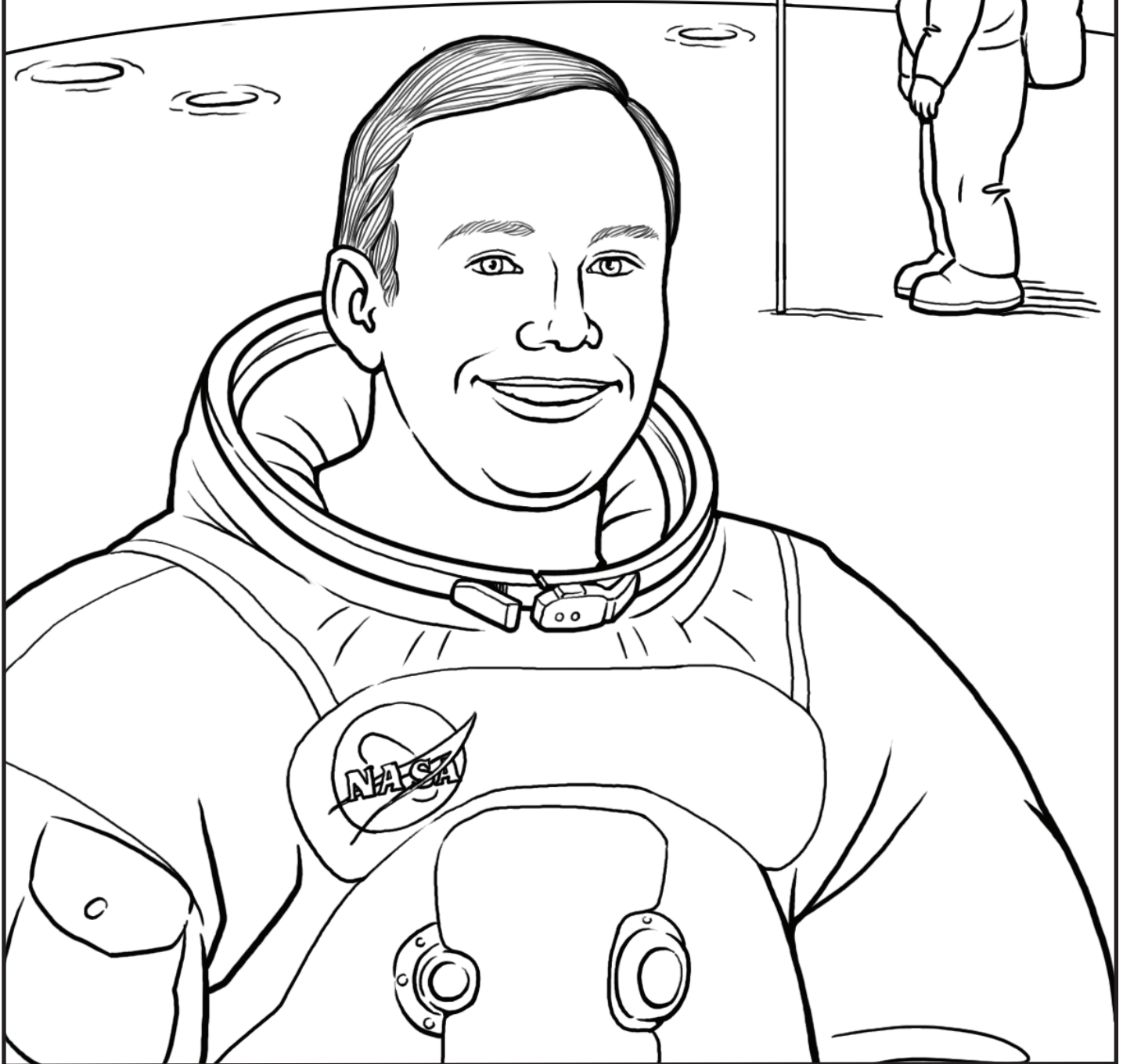
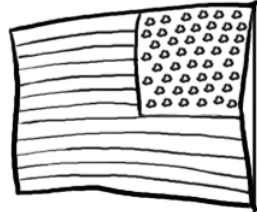
ROCKET
MISSION
PLANET
COMET
METEOR

SUN
GALAXY
MOON
ASTRONAUT
SATELLITE

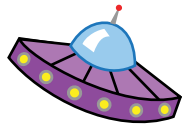
Neil Armstrong

Born August 5, 1930

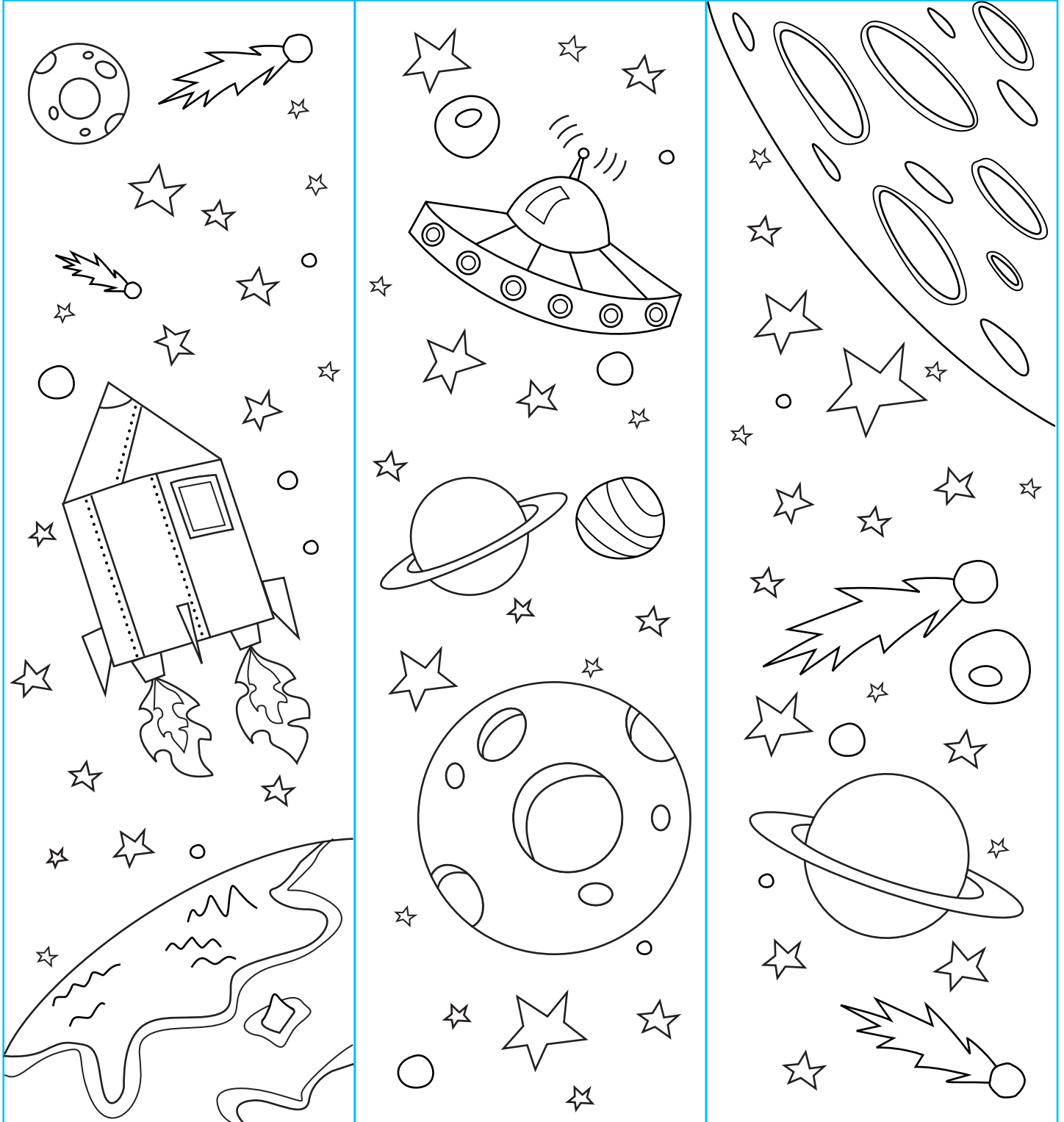
Command Pilot for Gemini 8,
Mission Commander on Apollo 11,
First person to stand on the moon.



SPACE Bookmarks!



Ask a grown-up to help cut these out after coloring.
This project works best printed on thicker paper!



Week 6

Independent Study Packet

ANSWER KEYS

**Use these answer keys
to check your work!**

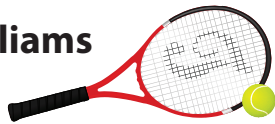


Answers Compare and Contrast: Awesome Athletes!

Part 1:

Read about each athlete.

Serena Williams



Serena Williams is an American **tennis** player. She has changed women's tennis with her incredible talent and powerful style of play.

Serena was born on September 26, 1981, in **Saginaw, Michigan**. Serena's sister, Venus, is also a **professional** tennis player. Their father taught them how to play tennis when they were very small.

Serena has won gold medals at the *Olympics*. She has also won tennis tournaments including the *French Open*, *U.S. Open*, *Wimbledon*, and the *Australian Open*.

Being a professional athlete takes hard work, **training**, and **dedication**! Serena Williams has **paved** the way for female tennis players around the world!

Mariel Hamm



Some people believe that Mariel Hamm, known as Mia, is the world's best women's **soccer** player.

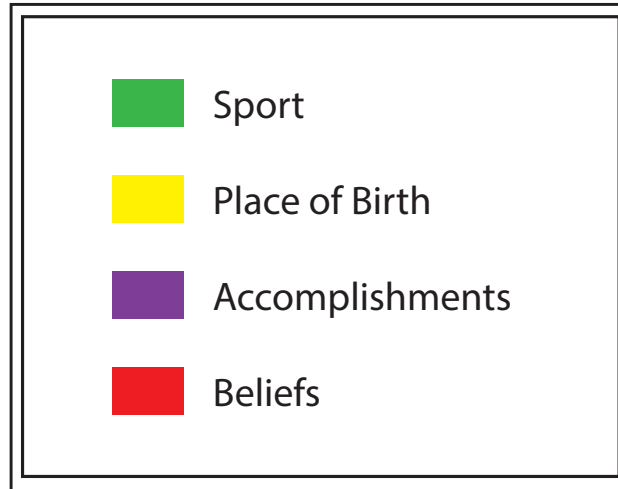
Mia was born on March 17, 1972, in **Selma, Alabama**. When she was 15 years old, Mia became the youngest member of a U.S. national soccer team.

Mia has won *World Cup* championships and gold medals at the *Olympics*. She has set almost every soccer **record**!

Mia believes in the **power** of teamwork and is **dedicated** to winning. Mia has **paved** the way for female soccer players around the world!

Answers**Part 2:**

1. Use the key below to highlight the answers in the text.
2. Next, use the information you learned to finish the sentence frames.



Serena plays **tennis** _____.

Mia plays **soccer** _____.

Serena was born **in Saginaw, Michigan** _____.

Mia was born **in Selma, Alabama** _____.

Serena's accomplishments include
winning gold medals at the Olympics.

Mia's accomplishments include
winning the World Cup and gold medals

She has also won many tennis
tournaments

at the Olympics. She has also set almost
every soccer record

Serena believes **in hard work, training,**
and dedication

Mia believes **in teamwork and is**
dedicated to winning

Long "o" Words **Answers**

Complete each sentence with a **long o** word from the word box.

gold	phone	home	grows	joke
Joe	snow	alone	hole	toad

At the end of the rainbow, there is a pot of gold !

I made an angel in the snow .

I forgot my coat at home .

My cat does not like to be left all alone .

I went to the park with my brother Joe .

I told a very funny joke .

The plant grows bigger every day.

The rabbit lives in a hole .

A frog is very similar to a toad .

I call my grandma every Sunday on the phone .



Answers **The Sport Shop**

Peter and his friends are at the sport shop getting ready for some summer fun! Figure out how much change they'll have left after they pick their summer sport.



Peter has

\$2.05

$$\begin{array}{r}
 \text{Tennis Racket} \quad \$1.07 \\
 \text{Tennis Ball} \quad +\$0.27 \\
 \text{Tennis Ball} \quad +\$0.27 \\
 \hline
 \$1.61
 \end{array}$$

\$2.05

-\$1.61

\$0.44

Change

Tina has

\$1.75

$$\begin{array}{r}
 \text{Football} \quad \$0.51 \\
 \text{Hockey Stick} \quad +\$1.15 \\
 \hline
 \$1.66
 \end{array}$$

\$1.75

-\$1.66

\$0.09

Change

Vince has

\$3.00

$$\begin{array}{r}
 \text{Soccer Ball} \quad \$0.97 \\
 \text{Hockey Stick} \quad +\$1.15 \\
 \text{Hockey Puck} \quad +\$0.42 \\
 \hline
 \$2.54
 \end{array}$$

\$3.00

-\$2.54

\$0.46

Change

Lisa has

\$4.00

$$\begin{array}{r}
 \text{Baseball Bat} \quad \$1.03 \\
 \text{Baseball} \quad +\$0.36 \\
 \text{Tennis Racket} \quad +\$1.07 \\
 \hline
 \$2.46
 \end{array}$$

\$4.00

-\$2.46

\$1.54

Change

Answers **All About Wangari Maathai**

Wangari Maathai was an activist. She loved the earth and she was a leader. She was the first African woman to win the Nobel Peace Prize.

Wangari Maathai was born in 1940 in Kenya. She grew up in a small village where her father was a farmer. She would collect firewood and help out at home. When she was 8 years old, she started school. She loved to learn and was a good student. When she was older, she won a scholarship to study in the United States. She earned many degrees. In 1971, she went to the University of Nairobi. She was the first woman in East Africa to earn a doctorate degree. In 1976, she started to work at the university.



When she came back to Kenya, she was sad to learn about all of the trees being cut down. People wanted to make room for big buildings. She wanted to help the earth. She also wanted to help women find work. In 1977, she started the Green Belt Movement. This movement helped women by paying them to plant trees all over Kenya. These trees added some green to Kenya again. Wangari helped to plant over 30 million trees in Kenya. She also helped over 30,000 women find work.

Wangari was an activist for the earth. She protested the construction of big buildings because cutting the trees down hurt the environment. She asked to plant more trees. She was arrested many times for protesting the government's actions. After many years of protesting, a new government came into power. In 2002, Wangari became the assistant minister of environment, natural resources, and wildlife.

Wangari kept helping women and the earth. In 2004, she became the first African woman to win the Nobel Peace Prize. In 2006, she wrote a book called *Unbowed* to share her story. Wangari died in 2011 when she was 71 years old.

Answers All About Wangari Maathai

Directions: Answer the questions about the text.

Why is Wangari Maathai famous?

She was the first African woman to win the Nobel Peace Prize. She started the Green Belt Movement.

Finish the sentence: Wangari Maathai became the first woman in East Africa to earn a doctorate degree.

What were some of the challenges Wangari faced?

She was arrested many times for her beliefs and her protests.

Where did Wangari study?

She studied in the USA, Germany, and at the University of Nairobi.

Why was Wangari known internationally?

She was an environmental activist who started the Green Belt Movement.

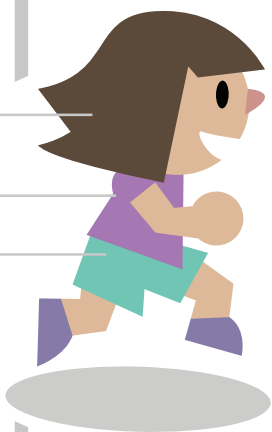
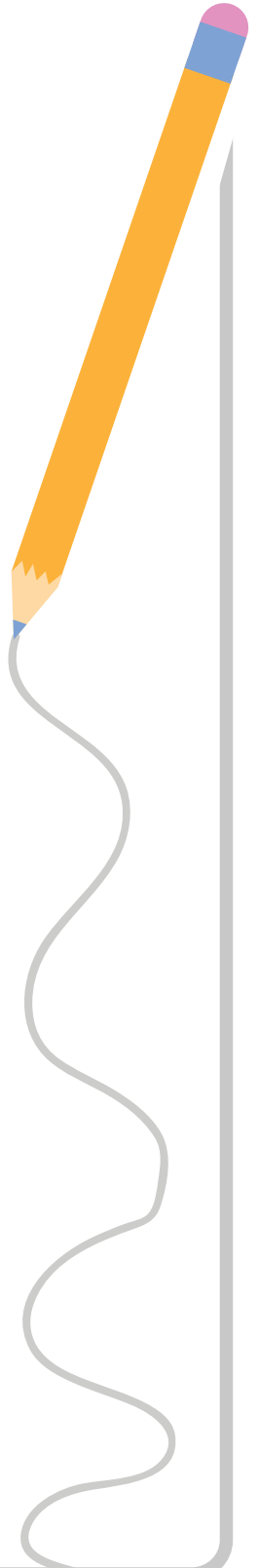
What else would you like to know about Wangari Maathai? Share your questions with a friend.

Answers will vary

Irregular Verb Match **Answers**

Draw a line from the present tense to the past tense of each verb below.
The first one is done for you.

say	_____	went
tell	_____	taught
go	_____	took
win	_____	said
teach	_____	came
make	_____	told
draw	_____	made
meet	_____	won
come	_____	cried
take	_____	found
find	_____	ran
cry	_____	met
run	_____	drew



Toy Store **Answers**

Sally and her friends are at the toy store. Answer each problem about **making change** Show your work!



Sally has 65 cents. If she buys a teddy bear for 32 cents, how much change will she get back?

$$65 \text{ cents} - 32 \text{ cents} = 33 \text{ cents}$$



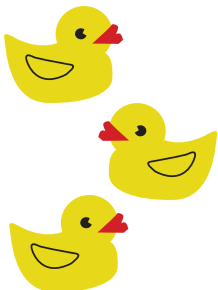
Alex has 82 cents. If he buys a ping-pong ball set for 64 cents, how much change will he get back?

$$82 \text{ cents} - 64 \text{ cents} = 18 \text{ cents}$$



Devon has 76 cents. Each beach ball costs 35 cents. If he buys two beach balls, how much change will he get back?

$$76 \text{ cents} - (35 \text{ cents} + 35 \text{ cents}) = 6 \text{ cents}$$



Maria has 98 cents. She wants to buy three rubber ducks. Each rubber duck costs 32 cents. Does she have enough money?

$$98 \text{ cents} - (32 \text{ cents} + 32 \text{ cents} + 32 \text{ cents}) = 2 \text{ cents};$$

yes, she has enough money

Answers Spiders and Their Webs

Read about spiders and their webs and then fill in the diagram.

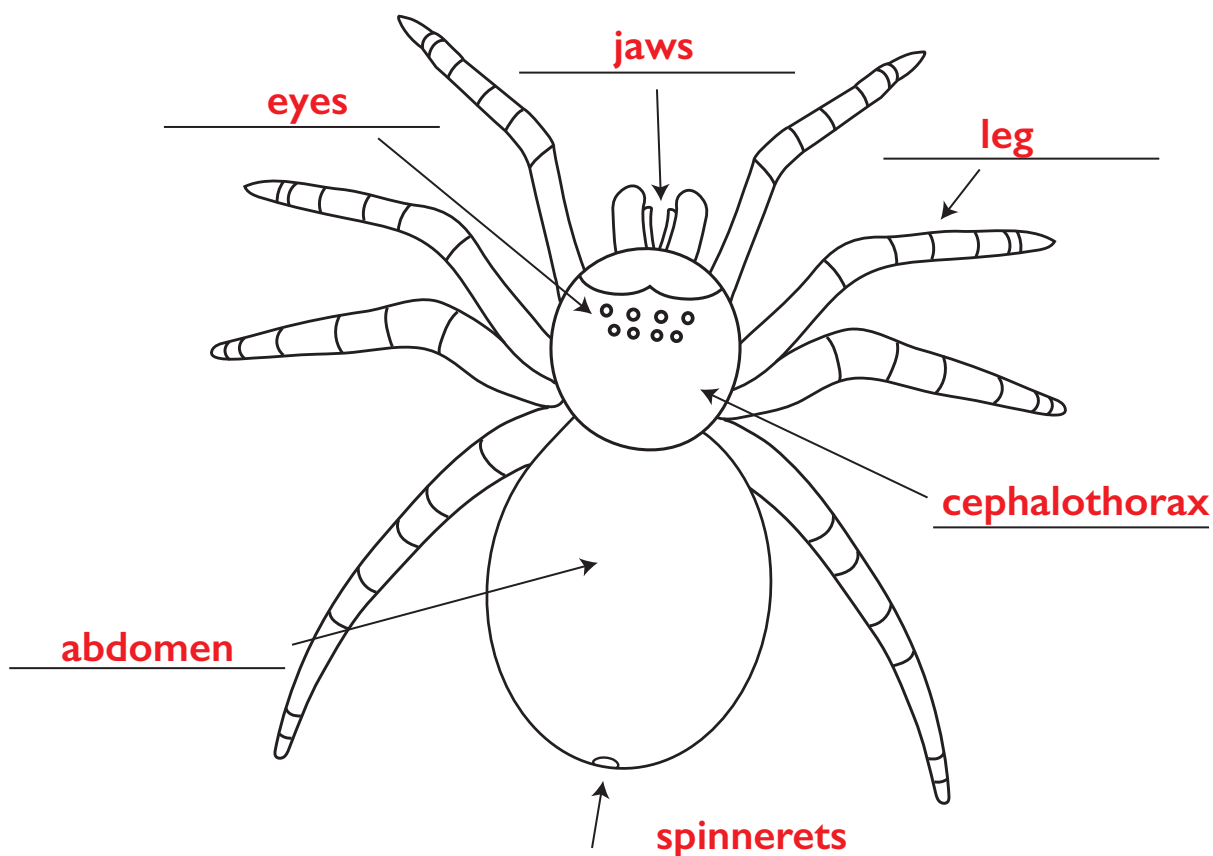
Spiders are arachnids. They have two parts to their bodies. The top part of the body is the cephalothorax. Arachnids have eight legs. The legs are connected to the cephalothorax.

The bottom part of the body is called the abdomen. At the bottom of their abdomen, most spiders have three spinnerets. Spinnerets make the silk spiders use to create spider webs.

Spider silk is one of the strongest natural threads in the world. The silk needs to be strong because spiders create spider webs to catch prey. Spider webs are not the only thing that catches prey. Sometimes spiders make simple webs to jump onto their prey.

Word Bank:

leg eyes cephalothorax abdomen spinnerets jaws



Answers Short and Long Vowel Review

Name: _____

Date: _____

When a vowel sounds like its name, it's a long vowel. If a vowel does not sound like its name, it's a short vowel. Circle the correct sound of the words below.

Examples: **A. rate**

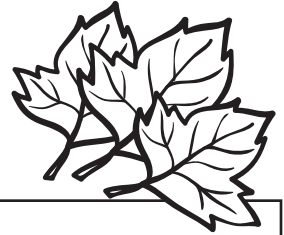
short a

long a

B. that

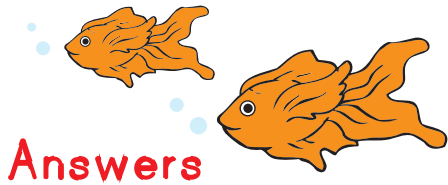
short a

long a



1. bake short a long a	2. let short e long e	3. strong short o long o
4. miss short i long i	5. cat short a long a	6. bed short e long e
7. he short e long e	8. up short u long u	9. phone short o long o
10. ride short i long i	11. rain short a long a	12. use short u long u
13. stand short a long a	14. throw short o long o	15. fall short a long a





Word Problems: Addition

Read each word problem below.
Write a number sentence and solve the problem.

Example:

There are 14 baby chicks in the hen house. 10 more baby chicks are born. How many baby chicks are in the hen house now?

$$\begin{array}{r} 14 \\ + 10 \\ \hline 24 \end{array}$$

Sara has 15 goldfish. Aunt Trish gives her 16 more goldfish. How many goldfish does Sara have now?

$$\begin{array}{r} 15 \\ + 16 \\ \hline 31 \end{array}$$

Will finds 48 seashells at the beach. Joy finds 36 seashells. How many seashells do they have total?

$$\begin{array}{r} 48 \\ + 36 \\ \hline 84 \end{array}$$

Dad plants 22 flowers in the yard. Mom plants 15 more flowers. How many flowers are in the yard now?

$$\begin{array}{r} 22 \\ + 15 \\ \hline 37 \end{array}$$

Lily has 30 pieces of candy. Rick has 27 pieces of candy. How many pieces of candy do they have total?

$$\begin{array}{r} 30 \\ + 27 \\ \hline 57 \end{array}$$

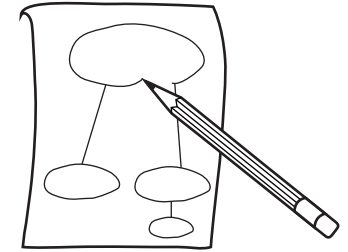
Tim has 13 shiny rocks in his fish tank. He places 18 more shiny rocks into the tank. How many shiny rocks are in the fish tank now?

$$\begin{array}{r} 13 \\ + 18 \\ \hline 31 \end{array}$$

Name: _____

Date: _____

Answers Frayer Model



Directions: Write your vocabulary word in the “Vocabulary Term” oval. Complete the rest of the sections for the vocabulary term in your own words.

<p>Definition:</p> <ul style="list-style-type: none">- It's the central idea of the text.- What the text is mostly about.- The gist of the text.	<p>Sentence:</p> <ul style="list-style-type: none">- Every paragraph and non-fiction text has a main idea.- Every main idea should have supporting details.
<p>Vocabulary Term:</p> <p>Main Idea</p>	
<p>Examples:</p> <ul style="list-style-type: none">- Main Idea: sports teams- Football, basketball, softball	<p>Non-Examples:</p> <ul style="list-style-type: none">- A fact- A stand-alone detail- A group of details related to one topic
<p>Image Representation:</p> <pre>graph TD; A([main concept]) --- B([linking idea]); A --- C([linking idea]); A --- D([linking idea]); A --- E([linking idea]);</pre>	

Name _____

Date _____

All About Katherine Johnson

Katherine Johnson was an African American physicist and mathematician. She worked to calculate the first mathematical problems to send humans into space. She is famous for her long career at NASA. In 1959, she calculated the flight path for the first American, Alan Shepard, to go into space.



She was born on August 26th, 1918, in West Virginia. She was the youngest of four children and was always curious.

She was born on August 26th, 1918, in West Virginia. She was the youngest of four children and was always curious. From a young age, her parents encouraged her to focus on her education. When she finished elementary school, she had a hard time finding a place to study. The schools near her were segregated and only accepted white students.

Katherine was a brilliant student and skipped many grades. She was able to attend the high school on the campus of the historically black West Virginia State College. She started college when she was 15. She graduated in 1937 with a degree in Math Education and French. Later, she taught math, French, and music in the public schools of black Americans.

In 1939, Katherine was selected as one of three African American students to attend graduate school at West Virginia University. By that time, the school had begun to desegregate, meaning they let whites and blacks learn together. She decided to leave school before graduating to get married and start a family.

In 1952, she applied for an open position with the West Area Computing section at the National Advisory Committee for Aeronautics (NACA). The position was at the Langley Research Center. NACA would later become NASA in 1958. There, she worked as a human computer. She solved math problems and checked data for the first space flights. In 1962, she checked the math problems by hand to make sure that John Glenn's orbit around the Earth was correct. Among her many other successes, in 1969, Katherine also calculated the flight path for Apollo 11's flight to the Moon.

When Katherine Johnson started working at NASA, women were not given credit for their work on any written report. In 1961, she became the first woman in her division to receive credit as the author of a research report. She was hired in an all-male division. She faced challenges as an African American woman in both a male-dominated and segregated work environment.

Katherine worked for NASA for 33 years and retired in 1986. Much of her work at NASA was not recognized until much later. In 2015, when she was 97 years old, President Barack Obama awarded her the Presidential Medal of Freedom. This is the highest civilian honor civilians can receive. She died at the age of 101 on February 24th, 2020.

All About Katherine Johnson

Directions: Answer the questions about the text.

1. Why is Katherine Johnson famous?

She was a mathematician and worked at NASA. She calculated the flight trajectory for the first American, Alan Shepard, to go into space.

2. What were some of the challenges Katherine faced?

The schools near her home were segregated and it was a challenge to find a school to attend. She was also not given credit for her work because she was a woman.

3. Where did Katherine study?

West Virginia State College and West Virginia University.

4. What was Katherine's job at NASA?

She was a human computer. She made calculations for astronauts to go into space.

5. What else would you like to know about Katherine Johnson? Share your questions with a friend.

Answers will vary

Answers



Bee Garden



Fill in the blanks with the correct word that begins with "be".

believe become before between beware
 because begins beyond belongs

1. I was late to school because I missed the bus.
2. Don't eat dessert before you finish your dinner.
3. Flowers grow the fastest once springtime begins.
4. Could you believe what she said?
5. We live between Stevenson Street and Pine Road.
6. I can't wait until summer vacation begins!
7. My sister wants to become a science teacher.
8. That pencil belongs to Mark.
9. Beware of bees! They might sting you!

Addition & Subtraction

Answers

$$\begin{array}{r} 10 \\ + 15 \\ \hline 25 \end{array}$$

$$\begin{array}{r} 44 \\ + 36 \\ \hline 80 \end{array}$$

$$\begin{array}{r} 81 \\ + 27 \\ \hline 108 \end{array}$$

$$\begin{array}{r} 12 \\ + 88 \\ \hline 100 \end{array}$$

$$\begin{array}{r} 24 \\ - 16 \\ \hline 8 \end{array}$$

$$\begin{array}{r} 59 \\ - 40 \\ \hline 19 \end{array}$$

$$\begin{array}{r} 99 \\ - 32 \\ \hline 67 \end{array}$$

$$\begin{array}{r} 63 \\ - 29 \\ \hline 34 \end{array}$$

$$\begin{array}{r} 35 \\ + 35 \\ \hline 70 \end{array}$$

$$\begin{array}{r} 76 \\ + 25 \\ \hline 101 \end{array}$$

$$\begin{array}{r} 13 \\ + 52 \\ \hline 65 \end{array}$$

$$\begin{array}{r} 48 \\ + 16 \\ \hline 64 \end{array}$$

$$\begin{array}{r} 92 \\ - 18 \\ \hline 110 \end{array}$$

$$\begin{array}{r} 30 \\ - 21 \\ \hline 51 \end{array}$$

$$\begin{array}{r} 76 \\ - 57 \\ \hline 19 \end{array}$$

$$\begin{array}{r} 84 \\ - 61 \\ \hline 23 \end{array}$$

Opposites Attract Answers

Color the **antonym** of the underlined word in each sentence.

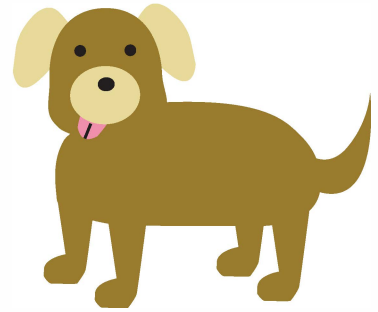
Antonyms are words that have opposite meanings.

My dog Paws is very large!

giant

small

big



This pillow feels cozy and soft.

fluffy

hard

comfy

She is happy today!

glad

sad

joyful

The towel feels wet.

damp

moist

dry

The bird flew up in the air.

down

high

right

Add & Spell The Hidden Word

Answers

Add these numbers to find the letters that spell out the hidden word. You may need to carry.

$$\begin{array}{r} \text{G} \ 58 \\ + 39 \\ \hline \end{array}$$

97

$$\begin{array}{r} \text{F} \ 88 \\ + 46 \\ \hline \end{array}$$

134

$$\begin{array}{r} \text{I} \ 65 \\ + 30 \\ \hline \end{array}$$

95

$$\begin{array}{r} \text{Y} \ 47 \\ + 46 \\ \hline \end{array}$$

93

$$\begin{array}{r} \text{R} \ 54 \\ + 89 \\ \hline \end{array}$$

143

$$\begin{array}{r} \text{T} \ 59 \\ + 96 \\ \hline \end{array}$$

155

$$\begin{array}{r} \text{L} \ 86 \\ + 44 \\ \hline \end{array}$$

130

$$\begin{array}{r} \text{W} \ 37 \\ + 81 \\ \hline \end{array}$$

118

$$\begin{array}{r} \text{N} \ 60 \\ + 38 \\ \hline \end{array}$$

98

$$\begin{array}{r} \text{H} \ 52 \\ + 54 \\ \hline \end{array}$$

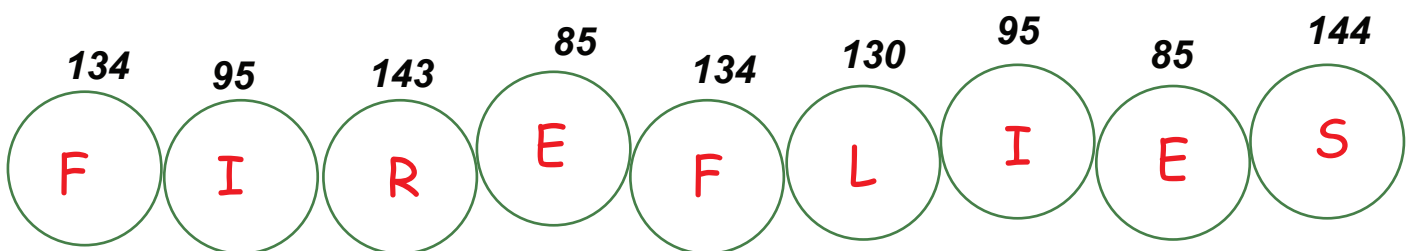
106

$$\begin{array}{r} \text{S} \ 79 \\ + 65 \\ \hline \end{array}$$

144

$$\begin{array}{r} \text{E} \ 19 \\ + 66 \\ \hline \end{array}$$

85



Outer Space Word Search

Answers

BLAST OFF!

Find and circle
all of the words
in the list
below.

P	A	S	T	R	O	N	A	U	T
M	E	T	E	O	R	B	H	I	R
I	W	P	Z	C	O	M	E	T	E
S	G	L	A	K	C	S	M	A	B
S	S	A	T	E	L	L	I	T	E
I	U	N	F	T	M	O	O	N	P
O	N	E	D	J	L	E	X	Q	K
N	I	T	G	A	L	A	X	Y	L

~~ROCKET~~
~~MISSION~~
~~PLANET~~
~~COMET~~
~~METEOR~~

~~SUN~~
~~GALAXY~~
~~MOON~~
~~ASTRONAUT~~
~~SATELLITE~~