Week 2 & 3

3rd Grade

Independent Study Packet

Education.com

5 MORE Days of Independent Activities in Reading, Writing, Math, Science and Social Studies

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. Make sure to plan your time so that you don't let things pile up at the end.
- Read the directions carefully before completing each activity.
- Check on each of the activities when you finish them on the activity menu.

Reading Log

1. Read a fiction or nonfiction book on your own or with a grown-up.

2. Put your name and the title of the book at the top of a new page.

3. Choose one of the prompts from the chart and write the letter at the top of the page in the title of the book.

4. Write 3–5 sentences about your book. Remember, not all of the questions make sense for every book!

a. What details in the text describe one of the characters? Draw a sketch of the character.	b. Which words in the book were tricky? What strategy did you use to help you understand them?	c. What lesson is the author trying to teach the reader? How do you know?
d. What is your favorite part of the text? Why?	e. What is the most important part of the story? Why?	f. What did the author want you to learn? How do you know?
g. How does the main character feel in this book? How do they change?	h. What is the most interesting part of the text? Why?	i. What are three facts you learned from reading this book?
j. How do the pictures in the text help you understand what you are reading? Give an example.	k. Where does the story take place (the setting)? How does the author describe it?	l. What information was surprising in the text? Why?
m. What is the character's main problem, and how did they solve it? How would you have solved it?	n. How is this book like another you have read? How is it different?	o. What was a major event in the story? Why was it important to the story?

Name _____ Date _____

Introducing Mae Jemison, the Star

"It's part of the imagination. All of science, all of space exploration - everything we do in the world is about imagination and using your creativity to expand beyond your normal boundaries."
- Mae Jemison

Introduction

Have you ever used your imagination to make something happen? Like, y down the stairs to the dinner table, or wave a magic wand to clean your room? Well, you're not alone in using your imagination. Doctor Mae Jemison imagined herself in space as a child, and she is now famous for making that dream come true.

As an astronaut for NASA, Mae became the first African American female to fly into space. She was a mission specialist on the space shuttle *Endeavour* in 1992. Mae studied how living things act in space. She is also a doctor, researcher, teacher, and a businessperson.

Early Life and Education

Mae was born in Decatur, Alabama on October 17, 1956. She lived there until she was three years old, when her family moved to Chicago, Illinois. Her mother was an elementary school teacher, and her father was a carpenter. She has two older siblings, a sister and a brother.

When Mae was younger, she liked dance and science. She liked astronomy. She loved science so much she would help her brother and sister with their science projects. She also read books at the public library, especially about stars. Mae wanted to go to space. She never had any doubt that she would get there.

Mae won a scholarship to Stanford University in California. She was only 16 years old, but she learned a lot in her studies in science and in the arts. She double majored in chemical engineering and Afro-American studies. While on campus, she planned and performed in dance performances. After graduating from Stanford in 1977, she went to Cornell University Medical College in New York. In 1981, Mae became a doctor.

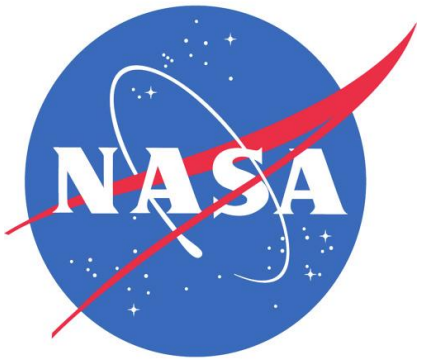
Name _____ Date _____

Introducing Mae Jemison, the Star

During summer breaks from school, Mae went to Cuba and Kenya to learn about medical care in other countries. Mae wanted to use her medical degree to help others. After her experiences abroad, she decided to join the Peace Corps in 1983. She served in the Peace Corps for two and a half years. During her time as a medical officer in the Peace Corps, she was able to use her knowledge of Swahili while working in West Africa. Not only does Mae speak English and Swahili, but she speaks Russian and Japanese as well.

Launching Her Way into the History Books

Over the years, Mae continued to think about her dream to go to space, so she applied to be an astronaut for NASA. Even though Mae's first application was denied because NASA stopped taking on astronauts at the time, she didn't give up! She applied a second time. In 1987, Mae was one of fifteen people chosen to become an astronaut out of 2,000 applicants.



NASA is an acronym for National Aeronautics and Space Administration.

Five years later, Mae worked on the STS-47 mission to study life in space. NASA had a joint mission with Japan for this flight. On the same mission was the first Japanese national to fly in space, Mamoru Mahri. Mae studied in space for eight days. Her experience in space was so important that she wanted to encourage more space travel.

Continuing Her Scientific Work

After leaving NASA, Mae started her own businesses. One business was a camp called "The Earth We Share." It started through the Dorothy Jemison Foundation for Excellence, named after Mae's mother in honor of her work as an educator. The camp helps kids learn more about science. Kids go to the camp from around the world. At the camp, young scientists get to use their imagination and share their ideas about future missions.

Mae currently lives in Houston, Texas. There she is leading the 100 Year Starship (100YSS) initiative through the United States Defense Advanced Research Projects Agency (DARPA). The goal of this DARPA program is to make sure human space travel to another solar system is possible within the next 100 years. In 2012, Mae's team won a grant to research how to travel to other stars.

Name _____ Date _____

Introducing Mae Jemison, the Star

Combining Arts and Science

All throughout her life, Mae had an artistic side. She is trained as a dancer, choreographer, and actor. Using her training, she has appeared on television over the years. When she was younger, she looked up to Uhura, a female officer in the television show Star Trek. Her real life blurred with her childhood imagination as she guest starred in the television show Star Trek: The Next Generation. Mae jumped at the chance to play Lt. Palmer in one episode. This was another example of her childhood dream coming true. It was also another experience that showed Mae the importance of the arts in expanding her imagination.

In her TED talk in 2002, Mae said, "We need to revitalize the arts and sciences right now in 2002." She says that understanding the arts can help young learners understand science better. Mae ended her TED talk by saying, "I like to think of ideas as potential energy. They're really wonderful, but nothing will happen until we risk putting them into action." She thinks it's time to act; it's time to teach the arts and science together.

There is no doubt that Mae used her imagination and worked hard to go beyond her normal boundaries. She is still trying to go beyond her earthly boundaries. The world, and maybe even a new star, is her oyster.

Directions: Answer the questions using evidence from the text.

1. What are some things Mae Jemison liked to do?

Mae Jemison liked dance, science, and astronomy. The text says that when she was younger, she liked to help her siblings with their science projects. She also liked to read books about stars. The text says that in college she planned and performed in dance performances. Later in her life, she even starred in a television show. Mae Jemison also liked to help others. As a doctor in the Peace Corps, she helped people in West Africa. She also helped children learn about science at the camp she started. She is also a part of the 100 Year Starship to help people travel to other parts of the solar system.

2. Why is Mae Jemison famous?

Mae Jemison is famous because she is the first African-American female to go into space. She is also famous because she was not only an astronaut, but a doctor, a teacher, a researcher, and a businessperson. She uses her knowledge about science and art to encourage children to learn more about science and follow their dreams. The text says, "Doctor Mae Jemison imagined herself in space as a child, and she is now famous for making that dream come true."

Name _____ Date _____

Introducing Mae Jemison, the Star

3. What is a challenge Mae Jemison had in her life?

A challenge Mae Jemison faced in her life was being denied the first time she applied to be a NASA astronaut. She didn't give up and applied again later, where she was finally chosen to be an astronaut.

4. What does Mae Jemison mean when she says, "I like to think of ideas as potential energy. They're really wonderful, but nothing will happen until we risk putting them into action." Use information from the text to support your answer.

Mae Jemison means that people can have great ideas and dreams, but people have to do something about it or these ideas and dreams will never come true. She always dreamed of going to space, so she read about it, went to college and studied hard, and applied to be an astronaut. Even though she got denied the first time, she didn't give up and applied again. Mae Jemison loved the arts and was able to be in her favorite TV show. The text says, "This was another example of her childhood dream coming true." Mae Jemison says that "it is time to act" that means people have to do something to make their dreams come true.

5. Reread the last section of the biography. Do you think teachers should teach arts and science together? Why or why not? Do outside research to support your answer.

This is an opinion, so you can write what you think. As long as you explain the reasons for your answer, your answer will be correct.

6. In all of the journeys in her life, whether they were on earth or outer space, Mae Jemison used her scientific knowledge to help others. Write about a career you would like to try that can help people,too.

This is a personal answer, so you can choose a career you want. As long as you explain how it will help people, your answer will be correct.

Name _____ Date _____

Two Truths and One Lie: Mae Jemison

Read the three statements about Mae Jemison. Can you figure out which two statements are true and which one is false? Research using books, articles, or websites to confirm your answer. Circle the lie.

1 Doctor Mae Jemison joined the Peace Corps after earning her medical degree from Cornell Medical School.

2 When travelling on the space shuttle *Challenger*, Mae Jemison became the first African American female astronaut to enter space.

3 Jemison grew up in Chicago, and that is where she continued her love of dance and studies in science.

Answer these questions after doing some research.

1. Fix the false statement so that it is now true.

When travelling on the space shuttle, Endeavour, Mae Jemison became the first African American female astronaut to enter space.

2. Choose a fact about Mae Jemison you think is important.

This is an opinion so you can write what you think.

3. Explain why you chose that fact to share.

As long as you write the reason why you chose the fact about Mae Jemison in #2 above, your answer will be correct.

4. On a separate sheet of paper, write a paragraph about Mae Jemison using more than two sources for information (like a website and an article).

Its or It’s?

Circle the correct word in each sentence.

Its is a possessive pronoun.
It’s is a contraction that means it is.

The tiger licked its it’s paw.

I wonder if its it’s going to rain tomorrow.

Its It’s time to go to school.

My cat and its it’s kittens are taking a nap.

Its It’s going to be a long walk to the train.

That dress is beautiful! Its It’s color is perfect for you.

I’m glad its it’s sunny outside today.

Your puppy is so cute, what’s its it’s name.

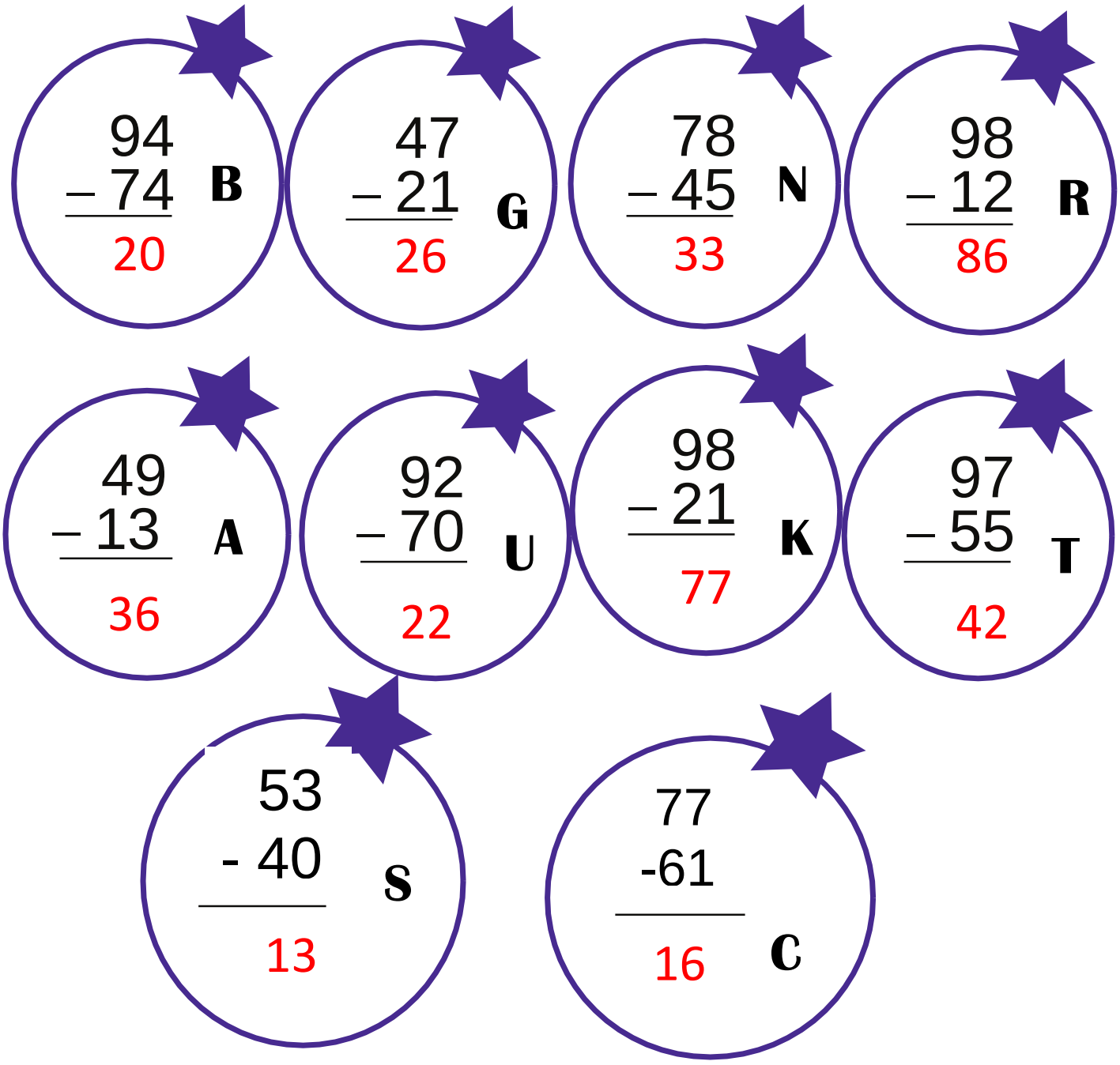
Hurry up and catch the train! Its It’s coming!

Have you seen my toy? Its It’s not in its it’s box.

Grade 2

Solar System Subtraction: The 6th Planet

What's the 6th planet from the sun? Find out by finding the difference, then using the letters to spell out the name.



S A T U R N

13 36 42 22 86 33

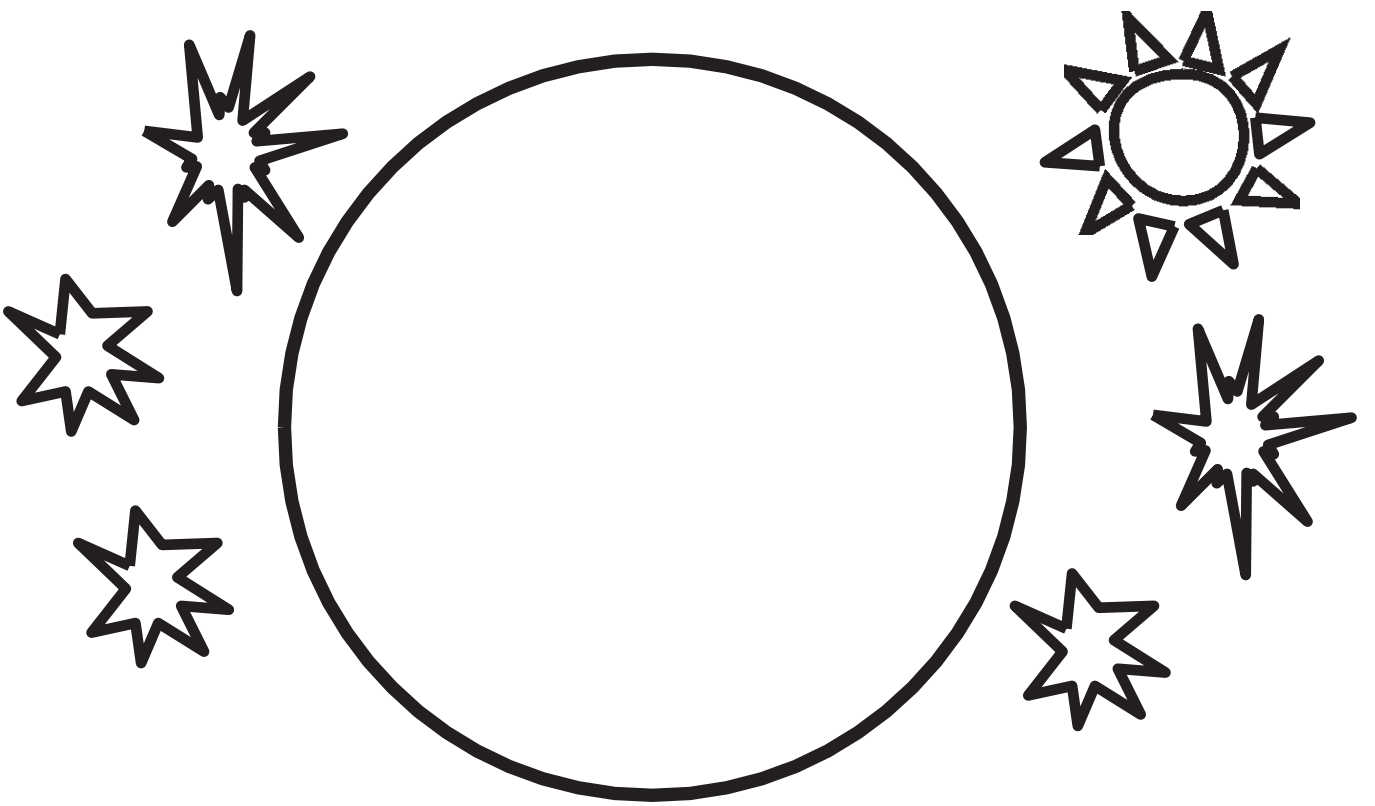
It has sixty one known moons. It is best known for its rings.

Name _____ Date _____

MAKE A PLANET

Billions and billions of stars thrive in our universe, and many more planets orbit around those very stars. Astronomers and space enthusiasts hope that one day we will find a planet like Earth and work towards inhabiting it. ANSWERS WILL VARY.

Scientists have just discovered a new planet. Draw a picture of it and come up with ways that humans can live on this planet in harmony with its environment.



What is the name of your planet? _____

How will people be able to live there? _____

_____

What steps will you take to protect the planet's environment?

_____

_____

Compound Sentences

A **compound sentence** is made up of two or more complete sentences connected by a conjunction (a joining word) such as **and, but,** or **so.**

Tom walked through the haunted house,	but	he wasn't scared at all.

Create your own compound sentences on the lines below by combining a sentence from column A with one from column B and connecting them with a conjunction. You can use sentences more than once.

A	B
Jan went to the carnival.	She had a great time.
Jan wanted to ride the roller coaster.	She rode on all the rides.
Jan played arcade games.	She didn't have enough money.
Jan tried to win a stuffed bear.	She didn't stay for long.
Jan started to get hungry.	She stood in a long line.
	It started to rain.
	She won a kewpie doll.
	She bought a hot dog.

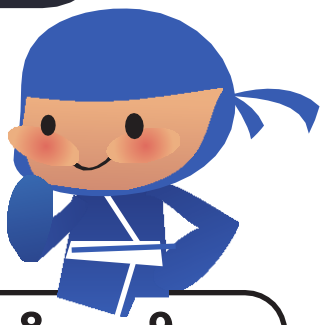
ANSWERS WILL VARY:

Example: Jan went to the carnival, but she didn't stay for long.

1. Jan went to the carnival and she had a great time.
2. Jan wanted to ride the roller coaster, so she stood in a long line.
3. Jan played arcade games and she rode on all the rides.
4. Jan tried to win a stuffed bear, but she won a kewpie doll.
5. Jan started to get hungry, so she bought a hot dog.
6. Jan went to the carnival, but she didn't stay for long.

SECRET CODE MATH

Hello! I'm Ninja Aki. I've coded these addition problems. Decode the numbers using the chart below and solve, regroup if needed.



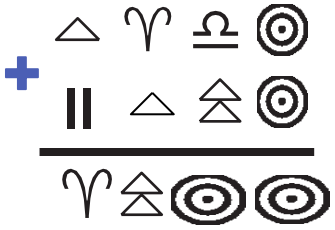
0	1	2	3	4	5	6	7	8	9
◎	△	♒	♎	♊	♈	♐	♢	✔	♌

CODE NUMBERS

REGULAR NUMBERS

$$\begin{array}{r} {}^{1}{}^{1} \\ 2073 \\ +\ 5447 \\ \hline 7520 \end{array}$$

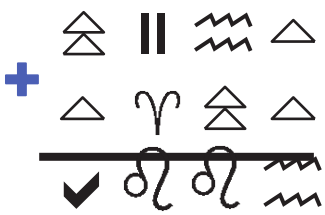
CODE NUMBERS



REGULAR NUMBERS

$$\begin{array}{r} 1530 \\ +4170 \\ \hline 5700 \end{array}$$

CODE NUMBERS



REGULAR NUMBERS

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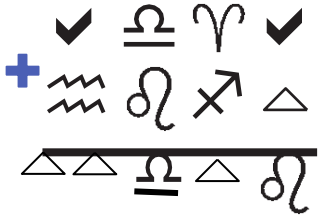
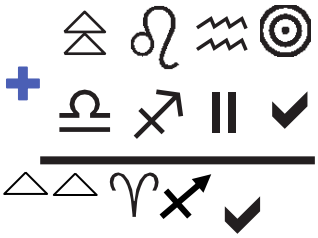
CODE NUMBERS



REGULAR NUMBERS

$$\begin{array}{r} 8358 \\ +\ 2961 \\ \hline 11319 \end{array}$$

CODE NUMBERS



REGULAR NUMBERS

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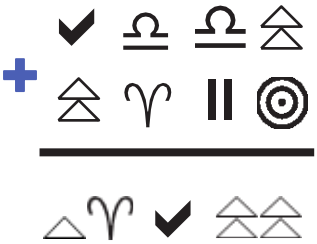
CODE NUMBERS



REGULAR NUMBERS

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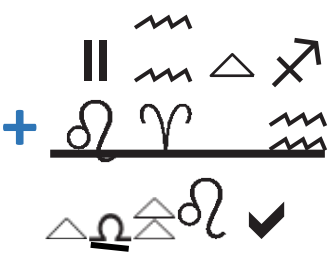
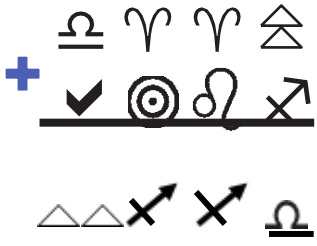
CODE NUMBERS



REGULAR NUMBERS

$$\begin{array}{r} 4216 \\ +\ 9582 \\ \hline 13798 \end{array}$$

CODE NUMBERS



REGULAR NUMBERS

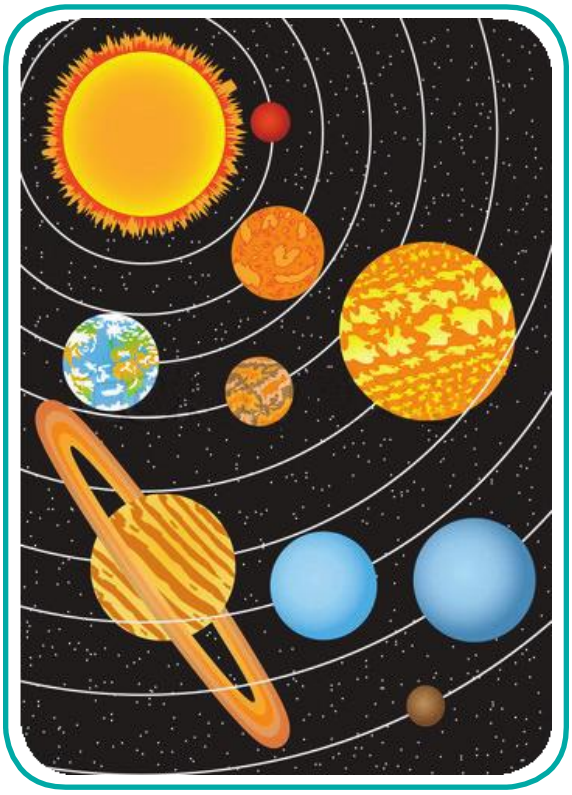
$$\begin{array}{r} 3557 \\ +\ 8096 \\ \hline 11663 \end{array}$$

Why does the Earth spin?

The Earth spins because there is nothing in its way to stop it!

Long before our planet was a solid sphere, there was just a mass of dust and gas. Earth was formed when all this matter began to spin. That's how most planets and stars are formed!

Thousands of years later, the spinning cloud of dust and gas became our planet, and thanks to our position in the Solar System, neither the sun nor the moon had the power to slow Earth's rotation enough to halt it completely.



QUESTION & ANSWER:

What was Earth before it became a solid sphere?

The Earth was just a mass of dust and gas.

How was Earth formed?

The Earth was formed when the mass of dust and gas started spinning.

Can the sun and the moon stop Earth from spinning?

The sun and moon does not have the power to stop the Earth from spinning because of the Earth's position in the solar system.

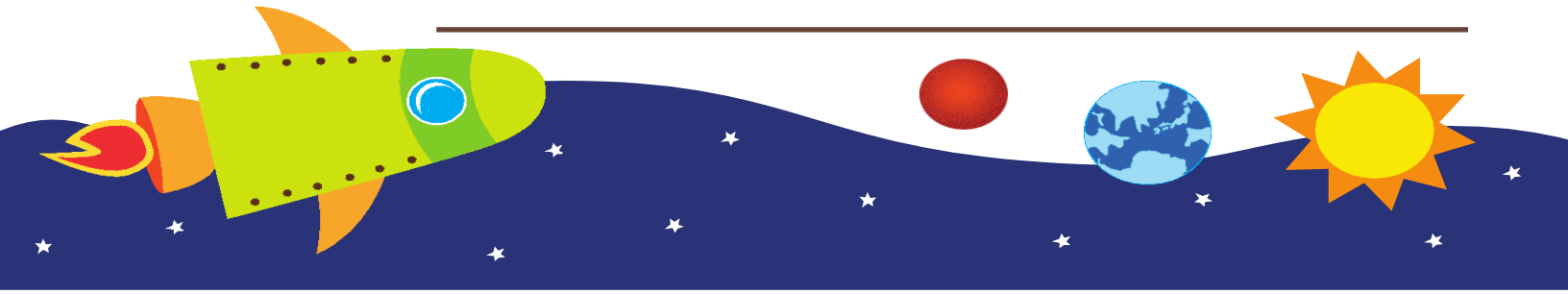
Imagine the Earth did not spin. How would this affect your life?

★ **Remember that the Earth's rotation is responsible for the sun rising and setting. If the Earth did not spin, parts of our planet would spend half a year in darkness and another half a year in full sunlight.**

CREATIVE WRITING

Write your response.

Would you rather...
Travel through time, or travel through outer space?



Possessive Pronouns

Pronouns take the place of nouns in a sentence. A **possessive pronoun** shows ownership.

Whose face is on the quarter?

Circle the **possessive pronouns**.

my your you its our her him

his your their there whose you

Rewrite each sentence to include a **possessive pronoun** with the noun.

1. I saw the dog that belongs to you. **I saw your dog.**
2. The coat that belongs to me is warm. My coat is warm.
3. This is the house that belongs to Sue. This is her house.
4. Tim's brother is five years old. His brother is five years old.
5. The horse's leg is sore. Its leg is sore.
6. Dad is driving the car that belong to us. Dad is driving our car.

Some **possessive pronouns** can stand alone. These pronouns include **yours, mine, ours, hers, his and theirs**.

Complete each sentence with a possessive pronoun that stands alone.

1. This room belongs to my sisters. This room is **theirs**.
2. Those glasses belongs to you. Those glasses are yours.
3. These books belong to Bruce. These books are his.
4. Two of these dollars belong to me. Two of these dollars are mine.

Collecting Data Sets

Collecting data is an important part of math and science. For practice, let's use the home or classroom as an investigative environment. Fill in the chart below by counting up the items that you see in your home or classroom. ANSWERS WILL VARY.

desks									
books									
windows									
chairs									
lamps									
pictures on walls									
shelves									
	1	2	3	4	5	6	7	8	9

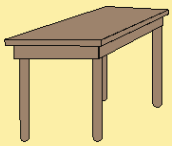
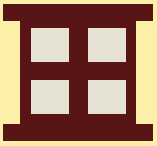
The data collection process is more than just counting. For example, the set of desks in a classroom will likely include a large number of student desks, but it will also include the teacher's desk and maybe other desks or tables.

How do you record the teacher's desk? It's not a "student" desk, but it still belongs in the set of desks. How do you record the difference?

In the set of shelves, other choices will have to be made. What if some of your shelves are attached to the walls, and some are not? They all belong in the set of shelves, but how will you record the difference?

Collecting Data Sets

Think of different ways to organize each set into categories. Some sets may have only two categories, but others may have a lot. Record the number of items in each category using tally marks. ANSWERS WILL VARY.

U.S. SPACE MISSIONS
GEMINI 4

Part of Project Gemini, Gemini 4 launched on June 3, 1965. Project Gemini was part of the U.S. space program to explore space. The project followed Project Mercury, which introduced manned space flight. The Gemini missions were important, as they had two astronauts on board each flight.

Astronauts Edward White and James McDivitt

The astronauts on Gemini 4 were Edward White and James McDivitt. The Gemini 4 mission performed many things for the first time:

Launch of Gemini

- The first flight to go over one day. It was important for scientists to know if humans could stay in space long enough to travel to the moon.
- The first flight to be managed from the new Mission Control Center in Houston, Texas.
- The first flight to try and meet up with another spacecraft. While this was not successful, it gave scientists valuable information.
- Most importantly, Gemini 4 was the first flight where an astronaut would leave the capsule and go into space. Called a space walk, this was a dangerous, but important, objective of the mission. On June 3, for 20 minutes, Edward White left the capsule and floated in space. He was attached to the capsule by a cord. White took photographs of Earth during his space walk.

Gemini 4 splashed down safely on June 7, 1965 after four days in space. It had orbited the earth 66 times.

Q & A

How many astronauts were on board Gemini 4?
There were 2 astronauts on board Gemini 4.

What is it called when an astronaut leaves the command module and floats in space?
It is called a spacewalk.

What year was Gemini 4 launched?
It was launched on June 3, 1965.

How many days was the Gemini 4 in space?
Gemini 4 was in space for 4 days.

Astronaut Edward White during his space walk.

Name Date

WHAT IS A PLANET?

There wasn't a definition written for planet until 2006! According to the official definition, a planet is a celestial body moving in an orbit around a star that has no other bodies of similar size near it. When telescopes were invented and people began to look at the sky, they noticed some things they could see in the sky looked like stars, but acted differently. They appeared to be in different places at different times of the year. We later came to realize that these were the planets in our solar system.

We currently have eight planets and five dwarf planets in our solar system. A dwarf planet is an object that orbits around a star but is not powerful enough to have moved other objects away from it. Before 2006, there was another planet called Pluto. When scientists wrote out the definition of a planet, they realized Pluto did not fit. Pluto was renamed a dwarf planet in 2006.

Look at the astronomy words below. Use books or the internet to write a definition for each word.

Star - *a ball-shaped gaseous celestial body (as the sun) of great mass that shines by its own light*

Orbit - *to move in an orbit around: CIRCLE*

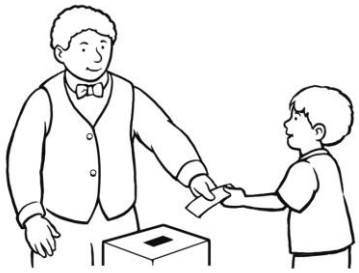
Mass - *a quantity of matter or the form of matter that holds or clings together in one body*

Satellite - *a heavenly body orbiting another of larger size; a man-made object or vehicle intended to orbit the earth, the moon, or another heavenly body*

Moon - *the natural satellite of the earth, visible (chiefly at night) by reflected light from the sun.*

Dwarf planet - *a celestial body that orbits the sun, has enough mass to assume a nearly round shape, has not cleared the neighborhood around its orbit and is not a moon.*

Singular Possessive Nouns



A possessive noun shows ownership. Most singular possessive nouns are made by adding 's to them.

Rewrite each sentence to include a singular possessive noun.

1. She dropped the toy of the baby. She dropped the baby's toy.

2. He painted the house of my dog. He painted the dog's house.

3. I wore the cap of my friend. I wore my friend's cap.

4. The class of Mr. Gee is in the hall. Mr. Gee's class is in the hall.

5. The singing of Mom woke me up. Mom's singing woke me up.

6. I washed the windows of the car.
I washed the car's window.

Complete each sentence by adding a **singular possessive noun**
Add articles as needed.

1. Mrs. Brooks shook the president's hand.

2. I went with my friend's sister to the zoo.

3. She threw my brother's ball over the fence.

4. He searched through the library's rooms for the book.

5. Carlos rode his uncle's bicycle around the block.

How well can you follow directions?

Start with the string of numbers labeled "A". Follow the first set of directions and put the answer in the first box provided. Then cross out the numbers in string "A" that are used in the first set of directions. Write the unused numbers in string "A", in the same order, in the boxes provided. Continue with the next string of numbers (B, C, D, etc.) and set of directions (2, 3, 4, etc.).

A	9	~~4~~	2	9	~~8~~	5	4	1	0	3	6

EX. 1. Add the second number and fifth number. (4 + 8)

B	12	9	~~2~~	9	5	~~4~~	1	0	3	6

2. Multiply the third number and sixth number. (2 X 4)

C	8	12	9	~~9~~	5	1	0	~~3~~	6

3. Multiply the fourth number and eighth number. (9 X 3)

D	27	8	12	9	5	~~1~~	~~0~~	~~6~~

4. Add the last three numbers. (1+0+6)

E	7	~~27~~	8	~~12~~	9	5

5. Subtract the fourth number from the second number. (27 -12)

F	~~15~~	7	~~8~~	9	5

6. Subtract the third number from the first number. (15-8)

G	~~7~~	~~7~~	9	~~5~~

7. Add the first number, second number and fourth number. (7+7+5)

H	~~19~~	~~9~~

8. Subtract the last number from the first number.(19 – 9)

answer

10

Name _____ Date _____

Write your response.

Fill-in-the-Blank :

If I had a million...

What would you like a million of?
Fill in the blanks below to show what you would do with it!

Example: If I had a million cats, I would teach them how to fetch and dance. And then, I would open a cat circus, the first in the world, for all my friends to see. I would give Sasha 15 cats, and she would open a cat cafe so people who didn't have cats could come and play.

If I had a million _____ I would _____
plural noun

_____

_____

_____

And then, I would _____

_____

_____

_____

I would give _____ _____ _____
name of person a number same plural noun as previous

and they would _____

_____

_____

_____

There, Their, or They’re?

Complete each sentence with there, their, or they’re.

The words there, their, and they’re are often confused.

There is used to refer to a place. Example: Fred is over there.
Their means belonging to them. Example: This is their cat.
They’re is a contraction meaning they are. Example: I hope they’re coming.

They went to visit their aunt.

Please put your coats there .

Kim likes eggs only when they’re hard-boiled.

Their house is almost one hundred years old!

Have you been there yet?

They’re looking for their lost cat.

Tomorrow, they’re throwing a graduation party.

They’re going to Hawaii for summer vacation.

There is no more milk left.

What did you see over there?

On Sunday, their family plays tennis.

Eva played with their new puppy.

Runaway Signs

The plus and minus signs have run away! Now these equations are missing the plus and minus sign. Write the correct sign in each box.

8 + 12 = 20

11 - 6 = 5

7 + 9 = 16

100 - 75 = 25

67 - 22 = 45

34 - 13 = 21

150 - 50 + 20 = 120

12 + 12 - 20 = 4

20 + 32 + 4 = 56

42 - 10 = 32

12 + 12 = 24

55 + 20 = 75

87 - 2 = 85

20 + 22 = 42

56 - 16 = 40