6th Grade Teacher Email Addresses are below for any questions or concerns about the assignments.

Math -- frankie.kay@rcisd.net

English -- kelly.ferguson@rcisd.net

Literature – jodie.darr@rcisd.net

Science – nancy.escobar@rcisd.net

Social Studies – santa.ortiz@rcisd.net

Technology – albert.perez@rcisd.net

Band – joshua.rumbaugh@rcisd.net

tiffany.pullig@rcisd.net

brandie.parkhurst@rcisd.net

Dear Band Members

For this week your assignment is to do these three worksheets. IF you have any Questions you are more than welcome to email me at Joshua.rumbaugh@rcisd.net.

The worksheets are to help you relate musical dynamics with their symbols to what they mean. For example a ***P*** means soft or a ***sFz*** means strong sudden accent.

Please stay safe in this time and I look forward to getting to see all of you again once this passes.

Sincerely
Joshua Rumbaugh
Joshua.rumbaugh@rcisd.net

Only for Band Students

6th, 7th, and 8th

Name_____ Date_____

Matching - Dynamic Markings I

Draw a line connecting the dynamic marking or symbol with its definition.

Dynamic Marking	Definition
crescendo	soft
mf	medium loud
p	very very loud
ppp	loud then immediately soft
f	very loud
ff	medium soft
fp	getting louder
mp	very soft
decrescendo	getting softer
pp	loud, strong
fff	very very soft

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Name_____ Date_____

Matching - Dynamic Markings II

Draw a line connecting the dynamic marking or symbol with its definition.

Dynamic Marking	Definition
diminuendo	as loud as possible
ff	quick increase in loudnesss
ppp	suddenly soft
cresc.	as soft as possible
pp	very loud
subito p	very very soft
ffff	strong sudden accent
sfz	very very loud
cresc. poco a poco	increasing loudness
fff	very soft
fp	decrease in loudness
pppp	increase loudness little by little
molto cresc.	loud then immediately soft

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Name_____ Date_____

Matching - Tempo Markings

Draw a line connecting the tempo marking or symbol with its definition.

Tempo Marking	Definition
Adagio	fast
Lento	walking tempo
Allegro	return to original tempo
Andante	gradually slower
Vivace	a silent break in the music
//	very fast
Moderato	slow, at ease
Presto	slow
	medium tempo
Largo	gradually faster
ritardando	slow and broad
accelerando	to hold a note
a tempo	fast, lively

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6th Grade ELA
Mrs. Ferguson

- Do Bell Ringers per day as we do in class. Classroom Cereal is your Friday activity.
- We are practicing using transition words only for the appropriate situation. (Not all transition words and phrases make sense in any given situation)
- Do a page a day starting Monday the 23rd through Thursday the 26th. Fill in the blanks with any word or phrase (from the correct section) that makes sense to you.
- Remember to read the instructions! :)

If there are any questions, message me on "remind" or email me at Kelly.ferguson@rcisd.net.

K. Ferguson

Name:_____ Date:_____

Book 4

5-A-Day Language Review: Week 24

Wednesday

(1) Circle the **definition** that matches the word used in the sentence below.

rec•og•nize

1. v. To know and remember upon seeing
2. v. To admit the truth or accept the existence of
3. v. To accept and approve of

Mia was recognized at school for outstanding behavior.

(2) Circle the **prepositions** and cross out the **prepositional phrases**.

Uncle Aaron lives in Denver near the botanical gardens.

(3) First identify if the following sentence is a **simile** or a **metaphor**: S M
Then underline the two objects that are being compared to each other.

He erupted in a volcano of anger.

(4) Add at least two **adjectives** in the **correct order**.

I did not enjoy the _____ food.

(5) Which of the following would you not want to **crumple**?

a) dirty laundry b) a photograph c) your homework

Thursday

(1) Use a **coordinating conjunction** to combine and create a **compound sentence**.

for • and • nor • but • or • yet • so

I held the ladder. Deon climbed to the top.

_____

_____

(2) Rewrite with the **correct capitalization.**

the first battles of the american revolutionary war took place in lexington and concord.

_____

(3) **distasteful** ⟶ prefix:_____ base or root:_____ suffix:_____

(4) Rewrite using a **possessive noun**.

education of the children _____

(5) Use the meaning of the **roots/affixes** to define the word. Provide a **dictionary** definition.

graduate "grad" - to move forward, step "ate" - to make

My Definition:_____

Dictionary Definition:_____

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Name: _____

Date: _____

Classroom Cereal

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Story: 5 **Part:** 1 of 5

"The Spice Cabinet"

Part 1 of 5: Fold News

"I'm sick of paper airplanes," Cooper complained, crumpling a piece of lined paper into a ball. He raised it over his head like a basketball and scanned the room for Ms. Martinez, and preparing to shoot.

"I've basically perfected the paper football," added Rodgers. "I don't even see the point in making another one." He crumpled his paper too

"I'm glad to here that, Mr. Rodgers," said Ms. Martinez, appearing behind the boys. "I think I've picked up about two hundred of your paper airplanes and footballs so far this year." The teacher promptly plucked Cooper's paper ball from his hand and placed it in the recyclin bin.

"Come on, Ms. Martinez," Cooper whined. "It's fun to fold paper. Plus, *creativity*," he added with a smile. "But we've run out of cool things to make."

Ms. martinez folded her arms and fought back a smile. Funny, friendly, and fair, she was one of Cooper's and Rodgers's favorite teachers.

"You boys would have loved The Spice Cabinet," she said, walking back to her desk.

"The *what?*" Rodgers called after her.

Challenge yourself!
Help on back...

Directions

1. Read the story
2. Find the 5 errors
3. Mark the errors using the key

Key

- Spelling error
- Add punctuation
- Capitalize letter
- Remove word
- Wrong word
- Move word
- Make letter lower case

Checklist

1. ☐
2. ☐
3. ☐
4. ☐
5. ☐

Questions

Make a prediction: What is The Spice Cabinet?

What clues from the story helped you make your prediction?

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Date: _____

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Name:_____ Date:_____

Book 4

5-A-Day Language Review: Week 25

Monday

(1) Complete the sentence with the correct **relative pronoun** and/or **relative adverb.**

who • whom • whose • that • which **where • when • why**

The tallest student_____goes to our school is Cece.

(2) Select the correct **verb tense.** Then identify if the correct **verb tense** is **past progressive, present progressive,** or **future progressive.**

If he forgets to bring his sunscreen, he_____under the umbrella all day.

was sitting is sitting will be sitting

(3) Juan was having fun fishing, until his line became **snarled.** He thought he had caught a fish, but then he soon realized that his line was just tangled in some seaweed. After about twenty minutes, he was able to get his line free and start fishing again.

snarled means:_____

_____

(4) **Frequently confused words:** Complete the sentence with the correct word.

Our teacher will not_____late homework. (accept/except)

(5) Choose the **synonym** for: excess extra splendid forgiving few

Tuesday

(1) Rewrite to form a **complete sentence** (or sentences) without **fragments** or **run-ons.**

The longest heat wave of the summer. Lasted two weeks and I was miserable.

_____

_____

(2) Choose a matching **analogy.** **asparagus : vegetable**

a) face : nose b) walk : run c) radio : music d) wrench : tool

(3) Rewrite adding **commas** and **quotation marks** for **direct speech.**

Stop! shouted Sophia as she chased the school bus. I need to get on!

_____

_____

(4) Circle the **misspelled** word and write it correctly in the space below.

makeing wash over

(5) Choose the **antonym** for: agony misery pleasure surprised anger

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Name:_____ Date:_____

Book 4

5-A-Day Language Review: Week 25

Wednesday

(1) Circle the **definition** that matches the word used in the sentence below.

cap•i•tal

1. n. Wealth that can be used to produce more wealth
2. n. The city where the government of a state or country is located
3. adj. Punishable by death

You need a lot of capital to open a restaurant.

(2) Circle the **prepositions** and cross out the **prepositional phrases.**

During the field trip, Jane observed the apes in their new enclosure.

(3) First identify if the following sentence is a **simile** or a **metaphor**: S M
Then underline the two objects that are being compared to each other.

Your speech was crystal clear

(4) Add at least two **adjectives** in the **correct order.**

The _____ giraffe was eating leaves from the tree.

(5) Which of the following should be **transparent**?

a) a windshield b) eye glasses c) an aquarium

Thursday

(1) Use a **coordinating conjunction** to combine and create a **compound sentence.**

for • and • nor • but • or • yet • so

He can't speak French. He can't speak English.

_____

_____

(2) Rewrite with the **correct capitalization.**

on our way to las vegas, we stopped to visit family in salt lake city, utah.

_____

(3) **presorted** ⟶ prefix:_____ base or root:_____ suffix:_____

(4) Rewrite using a **possessive noun.**

the car keys of Jenny _____

(5) Use the meaning of the **roots/affixes** to define the word. Provide a **dictionary** definition.

inspect "in" - in, on "spec" - see, look

My Definition:_____

Dictionary Definition:_____

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Name: _____

Date: _____

Classroom Cereal

@classroomcereal classroomcereal.com

Story: 5 **Part:** 2 of 5

"The Spice Cabinet"

Part 2 of 5: Mrs. Rose's Memory

Directions

1. Read the story
2. Find the 5 errors
3. Mark the errors using the key

Cooper and Rodgers were dying to find out about The Spice Cabinet. Since Ms. Martinez refused to tell them anything, they went to the person who knew just about everything about Fairview Middle School - Mrs. Rose.

After school, Cooper and Rodgers found Mrs. Rose at her desk in the front office. They told the beloved secretary what was on they're minds.

"The Spice Cabinet?" Mrs. Rose said, sounding surprised and delighted. "I haven't thought about The Spice Cabinet in years." Mrs. Rose gazed up at the ceiling, as if looking back in time. Cooper and Rodgers huddled around her.

"Years and years ago, Fairview Middle had a cooking class," she began. "It took place in a kitchen classroom on the third floor. Students loved it. But a class accidentally one day, made a bad batch of corn muffins. Teachers and students got sick. After that, the school put a end to the cooking class. As far as I know, no one has been back to the old kitchen classroom since."

Cooper and Rodgers stared at Mrs. Rose, transfixed. "But wat was The Spice Cabinet?" Cooper asked.

"The Spice Cabinet was in the classroom," Mrs Rose said. "And it was the most popular place in the entire school."

Challenge Yourself!
Help on back...

Key

- Spelling error
- Add punctuation
- Capitalize letter
- Remove word
- Wrong word
- Move word
- Make letter lower case

Checklist

1. ☐
2. ☐
3. ☐
4. ☐
5. ☐

Question

Based on how it is used in paragraph 5, what does the word **transfixed** mean?

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Date: _____

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4. ☐
5. ☐

Question

Based on how it is used in paragraph 5, what does the word **transfixed** mean?

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Transitional Words

Transitions That I Have Used:

Story Words

All at once

Suddenly

Here

Later that day

Beyond

Although

In time

Soon

Even when

Next

Meanwhile

First

As days turned into nights

Then

In spite of

Rather than

As a result

Happily

In the distance

While

Eventually

Finally

Nevertheless

Just like that

Just like that

All of a sudden

Thinking about what was to come

Instead

the end

Sadly

Best of all

Unfortunately

Over time

Agreement / Addition / Similarity Words

Next

Finally

Also

In addition

Likewise

In the same way as

By the same token

Of course

Secondly

Like

Additionally

As well as

Again

Similarly

Furthermore

Equally important

Moreover

Not only

In the same fashion

TOGETHER WITH

First, second, third

It's easy to understand why

Besides

Another

Contrast Words

but

yet

In spite of

Despite

Nevertheless

Unlike

Different from

At the same time

On the contrary

and still

Even so

While

On the other hand

ALTHOUGH

Although this may be true

Be that as it may

Besides

However

And yet

On the contrary

Unlike

Regardless

Instead

Conversely

Above all

though

nonetheless

Specifically In addition to this Another The first example

For Example and In Support Words

For one thing It's important to realize

IN FACT For instance Another key point

Surely In other words Surprisingly

also furthermore For this reason

For example with this in mind Above all

More importantly Even more important

Another key point

Given these points In particular

Not only

Monday

Name _____

Directions: Use the words from the "Story Words" page to fill in the missing transition words.

1. _____ Mary could see that the clouds were darkening.

2. _____ Jake found himself lost in the woods with no map to help him find his way home.

3. _____ William worked on his homework, his mother continued to ask him questions about his school day.

4. _____ the lost cat wandered the alleys looking for the smallest scrap of food to eat.

5. _____ the rain turned into snow and started laying on the streets and sidewalks.

6. _____ the weeds in the vegetable garden started to overrun the garden.

7. _____ John enjoyed playing lacrosse, he decided to join the swim team instead.

Tuesday

Name _____

Directions: Use the words from the "Contrast" page to fill in the blank with the missing transition words.

1. _____ his love for apples, my grandfather did not enjoy eating apple pie.
2. Glory's mother did not approve of her going to the movies with her friends but _____ _____ she did not mind if her friends came to her house.
3. _____ Stephanie studied for her Science test, she received the lowest score in the class.
4. _____ her brother, Jasmine loved to go to the library and select books to read at home.
5. A president can serve two four year terms. _____ _____, some people believe that a president should be able to serve more than eight years.
6. Amphibians live part of their life in water and part of their life on land. _____ _____, mammals live their entire life on land.
7. _____ some people love the warm summer months, others would prefer the cold wintry months nestled by the fire.

Wednesday

Name _____

Directions: Use the words on the "For Example and In Support" page to fill in the missing transition words.

1. _____that many Americans who come to this country have difficulty learning the English language.
2. _____, I think people will see that pets are a very important part of people's lives.
3. Many people believe that pets enrich their lives immensely. _____ _____ many people are willing to spend the necessary time and money to ensure their pets are happy and healthy.
4. Green Valley's school policies are very strict. _____, they do not allow students to wear flip flops during the warm spring months.
5. Gretchen's brother was considered a hero in his community. _____, he helped his elderly neighbor when she had fallen down her steps. He also started a program at the local animal shelter to help stray cats and dogs.
6. Earth is an amazing planet. It is the only planet that has water. _____, it is the only planet that has sustainable life on it.
7. _____you will see that students need time after school to relax and unwind after a long day at school.

Thursday

Name _____

Directions: Use the transition words on the "Agreement, Addition, Similarity" page to fill in the blank with the missing transition words.

1. _____ to eating healthy, people should exercise at least three times a week.
2. Cheating on a test is not acceptable. _____, students who are caught cheating on a test should be given a failing grade.
3. With food prices as high as they are, _____ _____ people are starting to clip coupons.
4. The sun provides warmth for the Earth. _____ the sun's rays help in the process of photosynthesis.
5. _____ you will see why it is important for students to have vacation time during the summer. It's a time for them to refresh and prepare themselves for another hard year of hard work.
6. _____ should you eat right, you should exercise as well.
7. To do well in school, students should study for tests and quizzes. _____, students should involve themselves in activities outside of school.

The World
News Explained in 10 minutes

CNN 10 Weekly Report

Date: ____/____/2020 to ____/____/2020 Period #: _____

Name: _____

Social Studies 6th
World Geo.

CNN.COM/CNN10 In CNN10

Date: Write down the date ↓	Headline Story: *Write down the story that starts the newscast*	:10 Second Trivia - *Please write down the correct answer (NOT just the letter)*	1 Facts from the other stories presented,	*write a brief description*
Monday				
Tuesday				

Date: Headline Story: Trivia question: *CNN 10 Weekly Report* 1 other story Description of 10

Wednesday				
Thursday				

6th grade Science -- Coach Escobar

The following assignments will be graded:

1. Reading Science: McDonald Observatory
2. CLOZE-ing in on Science
3. Concept Attainment Quiz
4. Post-Assessment

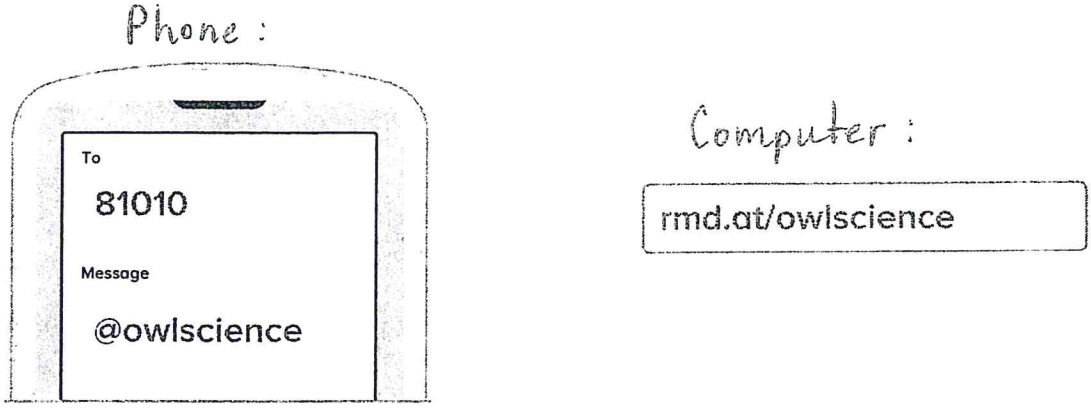
The following are included to be used as notes and help with assignments:

1. Key concepts sheet
2. STEMscopedia pages (torn from classroom books)
3. If you have internet access, you can also use the internet as needed.

If you have internet access, I have also given you some videos to watch on the celestial objects. You will see them in your assignments list on STEMscopes. As you know, these are short little videos--usually 2-3 minutes each. You should not need them for your assignments, but they do a good job of explaining things we would normally discuss in class.

If you have questions, you can contact me one of two ways:

1. Email: nancy.escobar@rcisd.net or
2. Remind app
   If you have not joined our class: (see graphic below)
   a. text @owlscience to 81010 on a cell phone or
   b. Type rmd.at/owlscience into your web browser address bar. You can sign up for email notifications here also.



Use this sheet + STEMscopedia sheets for notes.

6.11A Celestial Objects: Key Concepts

The Sun is at the center of our solar system, and its strong gravitational pull holds eight planets, multiple asteroids, and other celestial objects in orbital paths around it.

Our **Sun** is a medium-sized star, yet is the most massive object in our solar system. It is an extremely hot, dense mass of gases, and it radiates varying amounts of visible light and charged particles. Located at the center of our solar system, the Sun rotates (spins) on its axis and does not have a solid surface.

Planets in the solar system revolve around the Sun in an orbital path and can be either rocky and terrestrial or large and gaseous. Each planet rotates (spins) on an axis. The inner planets of Mercury, Venus, Earth, and Mars are mostly solid, with similar minerals. The outer planets of Jupiter, Saturn, Uranus, and Neptune are gaseous masses with rocky cores surrounded by liquids.

Moons are smaller celestial objects that orbit planets.

A **meteor** is the glowing visible path of a meteoroid that has entered Earth's atmosphere. Smaller than an asteroid, a meteoroid is a solid rocky object that moves in interplanetary space. Most meteoroids that enter Earth's atmosphere are about the size of a pebble. A meteorite is a portion of a meteoroid (or asteroid) that survives its passage through the atmosphere and strikes Earth's surface.

Asteroids are small rocks that revolve in an orbital path around the Sun. Although they are too small to be called planets, they can still crash into spaceships or Earth and cause significant damage. Most asteroids lie in a vast area between the orbits of Mars and Jupiter.

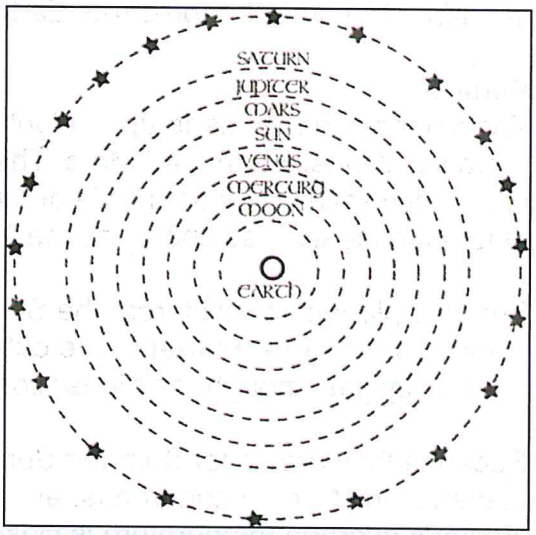
A **comet** is a small mass of dust and ice that travels in an orbit around the Sun. Most comets have elongated elliptical orbits that take them close to the Sun for a part of their orbit and then out into the further reaches of the solar system for the rest of the orbit. When close to the Sun and affected by solar radiation and solar wind, comets display a visible coma and tail.

Reflect

Have you ever looked up at the night sky and wondered what was out there? You may see stars, moons, or even planets. But can you define each of these objects? What is the difference between a moon and a planet? How are they different from asteroids, meteoroids, comets, and the other kinds of objects in the solar system?

Discover Science: Geocentric versus Heliocentric

For many centuries, most people assumed the Sun and other stars **orbited**—or moved around—our planet, Earth. This is called the **geocentric model** of the solar system. (**Geo-** means "Earth," so **geocentric** means "Earth-centered.") It is easy to see why so many people thought this. As we look at the sky during the day, the Sun appears to move in an arc over our heads. Throughout the year, the other stars also appear to change their positions in the night sky.

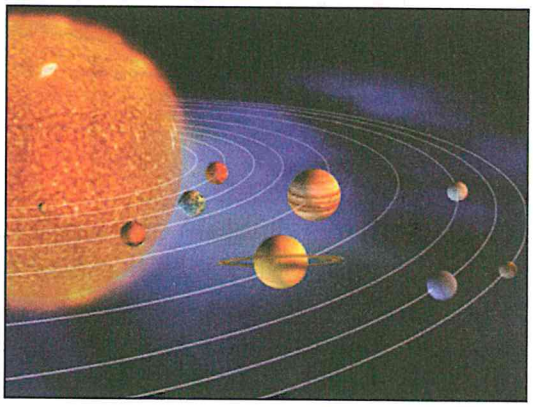


The geocentric model (above) places Earth at the center of the solar system. Today, all scientists accept the heliocentric model (below), which places the Sun at the center.

Today, however, scientists have rejected the geocentric model in favor of the **heliocentric model**. The **heliocentric** model places the Sun at the center of the solar system. (**Helio-** means "Sun," so **heliocentric** means "Sun-centered.") The invention of the telescope around the year 1600 gave scientists a much more accurate view of space from Earth. Using measurements made while looking through telescopes, scientists such as Galileo Galilei demonstrated the truth of the heliocentric model. The Sun is the center of the solar system.

What is the Sun?

Earth's Sun may seem different to us, but it is a star like all the other stars located outside the solar system. A **star** is an extremely hot, dense mass of gases. As these gases burn, the star gives off visible light, as well as other charged particles. Most of the energy that reaches our planet—including light and heat—comes from the Sun.



The Sun is actually medium-sized compared to other stars. Still, it is the most massive object in the solar system. The Sun has enough mass

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that its gravitational pull holds the planets and other objects in the solar system in orbit. As all of the other objects in the solar system orbit the Sun, the Sun **rotates**, or spins, about its **axis**.

axis: an imaginary line through the center of a sphere

What Do You Think?

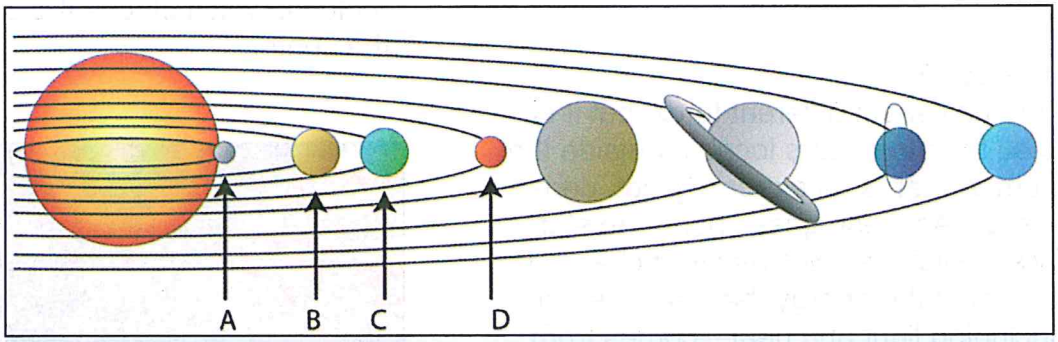
Take another look at the diagram of the heliocentric model. In this diagram, the Sun is larger than the planets that orbit it. But in real life, the Sun is even **larger** compared to the planets. In fact, the Sun's diameter is more than 100 times greater than Earth's. Find a spherical object such as an orange and measure its diameter. (You can do this by cutting it in half.) If the orange represents Earth, what size object could represent the Sun?

Planets

The solar system is made up of eight planets. The four planets closest to the Sun are Mercury, Venus, Earth, and Mars. They are known as the **inner planets**. The inner planets are mostly solid. They are made of minerals similar to those on Earth. For this reason, the inner planets are also known as the "rocky" or "terrestrial" planets.

The four planets farthest from the Sun are Jupiter, Saturn, Uranus, and Neptune. They are known as the **outer planets**. The outer planets are all larger than the inner planets. They are mostly gas, though their inner cores contain solid matter surrounded by liquids.

Because they are so far from the Sun, the outer planets are much colder than the inner planets. On Mercury and Venus, average temperatures are well over 100°C. In contrast, Jupiter's average temperature is closer to –15010°C and Neptune's average temperature is closer to –200°C!



In this diagram of the solar system, planets A, B, C, and D are the four inner planets. Notice how much smaller they are than the four other planets. Also notice the shapes of their orbits. Each planet follows an elliptical path around the Sun. (This diagram is not drawn to scale. In reality, the outer planets are even larger compared to the inner planets.)

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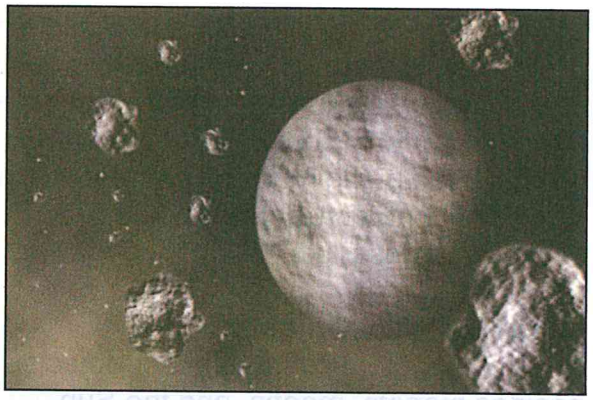
CELESTIAL OBJECTS

All of the planets both rotate and revolve. Like the Sun, each planet spins about an imaginary axis. However, planets complete their rotations in different amounts of time. Earth rotates once every 24 hours: one day. In contrast, Jupiter takes only 10 hours to complete one rotation. Mercury takes over 1,400 hours!

Each planet also **revolves** around, or orbits, the Sun. Planets that are farther from the Sun take longer to complete one revolution. Neptune takes more than 100 times longer than Earth to orbit the Sun!

The orbital paths of the planets are not perfect circles. The planets' orbits are **elliptical**, or oval-shaped. This means the planets are sometimes closer to and sometimes farther from the Sun during their orbits.



Pluto is a dwarf planet because it has not cleared its orbit of smaller objects.

Look Out!

Earth has only one moon (called the Moon). Some planets, including Jupiter and Saturn, have dozens of moons.

Astronomers once identified nine planets in the solar system. In addition to Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune, astronomers considered tiny Pluto to be a planet. However, in 2006 the International Astronomical Union (IAU) officially defined **planet** as follows: A planet is a celestial object that meets all three of these criteria:

1. The object is in orbit around the Sun.
2. The object has a nearly spherical shape.
3. The object has cleared the neighborhood around its orbit of smaller objects.

Pluto does not meet the third part of this definition. Because Pluto is so small, its gravity is not strong enough to clear smaller objects from its orbit. Since 2006, astronomers have considered Pluto a **dwarf planet**. Astronomers have located several other dwarf planets in the solar system, including Eris, which is nearly as large as Pluto. There may be dozens more dwarf planets awaiting discovery!

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CELESTIAL OBJECTS

Moons

The planets in the solar system orbit the Sun. At the same time, many planets are orbited by moons. Moons are smaller than planets. They are held in place by the gravitational pull of the planet they orbit.

Unlike Earth, many planets have multiple moons orbiting around them, with the exception of Mercury and Venus, which have no moon at all. Moons come in many sizes, shapes, and types. Jupiter, the largest planet in the solar system, also has some of the largest moons in the solar system. Some moons have large volcanoes, and others have major areas of frozen water. Some of the moons have layers similar to Earth's layers: an inner core, a thick mantle, and a thin, outer crust. Saturn has more than 50 moons within its rings. Neptune has a moon that is as big as Pluto!

Other Celestial Objects

The solar system contains other objects besides planets, moons, and the Sun. There are also asteroids, meteoroids, meteorites, meteors, and comets.

Most of the asteroids in the solar system are located in the asteroid belt.

Asteroids are rocky objects that orbit the Sun. However, asteroids are too small to be called planets, dwarf planets, or even moons. Even though they are small, they can still crash into other celestial objects and manmade objects such as space ships and satellites. If these objects crash into other objects, significant damage can be caused. Most asteroids are located in the **asteroid belt**, a wide area between the orbits of Mars and Jupiter. The asteroid belt separates the inner planets from the outer planets.

A **meteoroid** is another type of rocky object moving in space between the planets. Meteoroids are smaller than asteroids. Most meteoroids that enter Earth's atmosphere are about the size of a pebble. They produce tremendous friction and heat as they speed through the air toward the ground. When we can see this heat in the sky as a glowing path, it is called a **meteor**. Most meteors burn up in Earth's atmosphere before they reach the ground. A **meteorite** is a piece of a meteoroid (or an asteroid) that survives its passage through the atmosphere and strikes Earth's surface.

We sometimes see meteors streaking through the night sky.

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CELESTIAL OBJECTS

Many comets, including Hale Bopp, take thousands of years to orbit the Sun.

A **comet** is a small mass of dust and ice that orbits the Sun. Like the planets, comets have elliptical orbits. However, the orbits of most comets are longer than those of the planets. This means that comets can get quite close to the Sun in some parts of their orbits. When comets are close to the Sun, they are affected by solar radiation and solar wind. This gives comets a visible coma and tail. The **coma** is a cloud of dust and gas around the comet. The **tail** is a trail of dust and gas that stretches behind the comet as it travels through space. In other parts of their orbits, comets may travel into the deepest reaches of the solar system.

What do you know?

The solar system is made up of the Sun, planets, moons, and many smaller objects. Read the characteristics and names of celestial objects in the box below. Decide whether each characteristic or name describes an outer planet, an inner planet, a moon, or an asteroid, meteor, or comet. Write each characteristic or name in the correct section of the Venn diagram on the next page.

Characteristics and Names of Celestial Objects		
• Orbits the Sun	• Neptune	• Venus
• Mars	• Mercury	• Callisto
• Orbits a planet	• Ganymede	• Earth
• Io	• Smaller than planets	• Saturn
• Uranus	• Europa	• Jupiter

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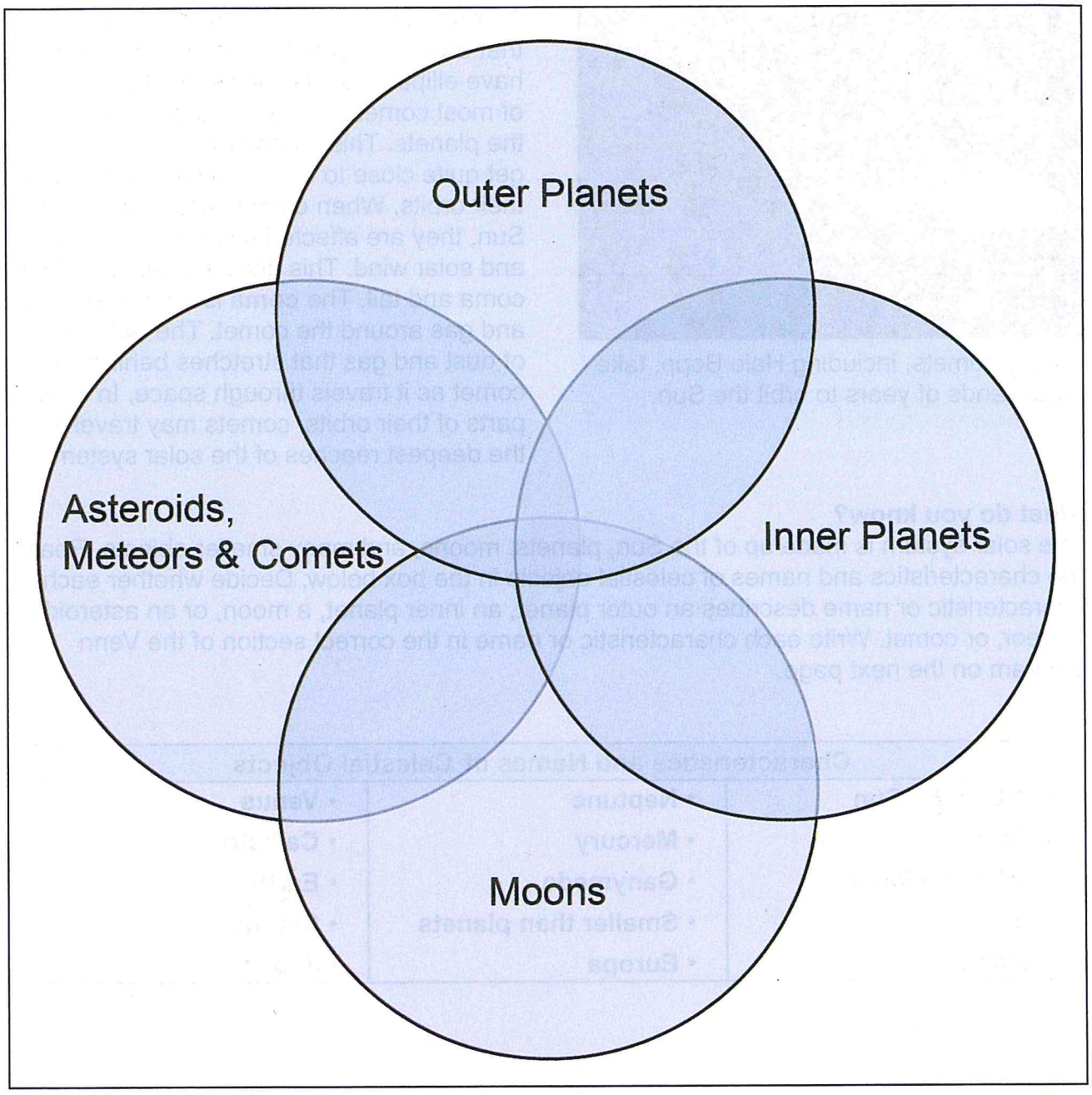
CELESTIAL OBJECTS



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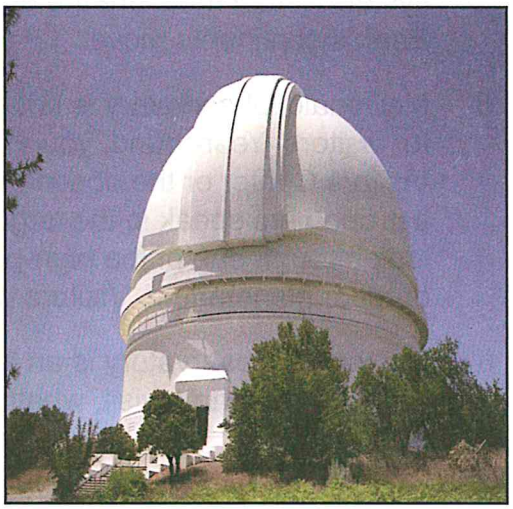
Reading Science

Name: _____ Date: _____

McDonald Observatory



1 The Davis Mountains of west Texas offer something to scientists that few places in the world can offer. As the Sun falls below the horizon, darkness settles in. The night sky comes alive with what seems like an endless number of stars. McDonald Observatory is located on top of Mount Locke and Mount Fowlkes. There is hardly any light pollution from city lights. It is one of the darkest places in the United States. Astronomers come to take advantage of the extra darkness.

2 McDonald Observatory is one of the world's leading centers in astronomy for research, teaching, and public education. It is operated by the University of Texas at Austin. Astronomers come to the observatory to study the many celestial objects in the sky with several different high-powered telescopes. McDonald Observatory has many types of telescopes for astronomers to use. A telescope works by taking in light from distant objects in the sky. This light is then focused on an instrument attached to the telescope. Objects appear bigger and brighter. This lets astronomers study them in great detail. Scientists can study asteroids, planets, star clusters, stars, black holes, nebulae, and comets. They can even study galaxies that are billions of light years away.

3 McDonald Observatory is home to one of the largest optical telescopes in the world. The 9.2 meter Hobby-Eberly telescope was built in 1996. It was built to study the properties of the light from stars and galaxies. This lets astronomers learn many details about these celestial objects. The 2.7 meter Harlan J. Smith telescope was built in 1969. It has 250,000 times the power of the human eye. NASA used this telescope to study the planets before sending space probes to explore them. This telescope is now used on just about every clear Texas night for research in astronomy.

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Reading Science

4 The 2.1 meter Otto Struve telescope is the oldest telescope at the observatory. Built in 1938, this telescope has 150,000 times the power of the human eye. Technology has improved since then, but this telescope is still used by astronomers. McDonald Observatory also has a smaller 0.8 meter telescope. This telescope has a built-in laser system. It can measure the distance between Earth and the Moon. It can also track how Earth's continents move.

5 McDonald Observatory is not only home to astronomers and their research. It is also open for visitors. Year-round, young and old visitors come to west Texas. They come to tour the Visitors Center or the observatory's largest telescope during the day. They can listen to astronomers speak in the large theater. There are also star parties at night. Visitors can look through one of the high-power telescopes. Then, astronomers give a star talk in an outdoor planetarium. Visitors will see constellations and other celestial objects in the sky.

6 McDonald Observatory is an amazing facility located in the Davis Mountains of west Texas. It is worth a visit, whether you want to study astronomy when you grow up, or just see it now.

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Reading Science

1 How does a telescope work?

A It works like a flashlight, shining a beam of light at the object you are looking at.

B It works by gathering and focusing light that is then directed into an instrument attached to the telescope.

C Astronomers look through an eyepiece that makes objects appear bigger.

D It has to be dark outside for a telescope to work.

2 What is the significance of the 2.7 meter Harlan J. Smith telescope?

A It is used to study the properties of light from stars and galaxies.

B It tracks the movement of Earth's continents.

C This telescope can measure the distance between Earth and the Moon.

D NASA used this telescope to study the planets before sending spacecraft into space to explore.

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Reading Science

3 One telescope at McDonald Observatory is used to study stars and galaxies by examining properties of the light they give off. Which telescope is this?

A 9.2 meter Hobby-Eberly Telescope

B 2.7 meter Harlan J. Smith Telescope

C 2.1 meter Otto Struve Telescope

D 0.8 meter telescope

4 Why do you think McDonald Observatory is located in the Davis Mountains of west Texas?

A Observatories must be built on mountains.

B It was placed there to attract visitors to the observatory.

C It is one of the darkest locations in the United States and that allows astronomers to have a clearer view of the sky.

D It is operated by the University of Texas at Austin.

5 When was the oldest of the telescopes built?

A 1956

B 2002

C 1938

D 1974

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CLOZE-ing in on Science

Name: _____ Date: _____

INSTRUCTIONS: Use the words in the box below to fill in the blanks based on what you have learned about celestial objects. Words may be used more than once or not used at all.

Word Bank

Telescopes	Circles	Orbits	Celestial	Sphere	Stars	Darkness
Microscopes	The Moon	Galaxy	Gravity	Gases	The Sun	

CLOZE 1

The movements and interactions of all objects in space are influenced by the force of _____. Due to this force, the Sun, planets, moons, and all other bodies in our solar system move in predictable patterns called _____. Our Sun is one of billions of _____. It is dense, incandescent, and made up of hot _____ at temperatures of millions of degrees.

Word Bank

Gaseous	The Moon	Orbits	Rocky	The Sun	Venus	
Predictable	Revolve	Satellites	Planets	Jupiter	Saturn	Rotate
Terrestrial						

CLOZE 2

The inner planets are rocky and are called _____; the outer planets are _____. All the planets spin, or _____, on an axis and move in predictable paths called _____ around _____. Moons are smaller objects that orbit around _____. Much information has been gathered about these moons by using telescopes and _____.

Word Bank

Meteorites	Elliptical	Asteroids	Stars	Gravitational Pull
Orbit	Belts	Meteors	Trajectory	Comets

CLOZE 3

A variety of celestial objects call our solar system home. The path, or _____, of a smaller object is often influenced by the _____ of larger objects. Examples of these smaller bodies are _____, _____, and _____, each of which has distinct properties which are used to classify them.

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Concept Attainment Quiz

Name: _____ Date: _____

I. Vocabulary Matching

Match each term on the right to the correct definition.

1. _____ Smaller celestial objects that revolve around planets
2. _____ A star that is dense and made up of hot gases
3. _____ Icy masses that have an elliptical orbit
4. _____ Large metallic objects that are clustered in bands called belts

A. Comets
B. Moons
C. Asteroids
D. The Sun

II. Identification

Use the clues provided to fill in the blanks.

Word Bank

Sun	Rocky	Revolution	Comets	Moons
Asteroids	Orbit	Gaseous	Meteorites	

1. _____are celestial objects that orbit planets.
2. Large, distant planets like Neptune can have an _____ that takes many Earth years to complete.
3. Space rocks that hit the surface of Earth are called _____.
4. The inner planets are small and _____, whereas the larger, outer planets are _____.

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Post-Assessment

Name: _____ Date: _____

1. A visible streak of light that shows the path of a rocky object which has entered Earth's atmosphere is–

A a meteor.

B an asteroid.

C a moon.

D a comet.

2. The composition of the Sun is best described as–

A liquid nitrogen and solid magnesium.

B molten rock, primarily iron.

C dense and composed of hot gases.

D lightweight particles of dust.

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3. Which set of characteristics listed below are unique to the inner planets?

A Gaseous, small

B Cratered, liquid

C Cool, humid

D Terrestrial, rocky

4. Most of the asteroids in our solar system are located between the orbits of what two objects?

A The Sun and Earth

B Venus and Earth

C Mars and Jupiter

D Uranus and Neptune

Post-Assessment

5. Europa, a moon that orbits Jupiter, is quite different from Earth's Moon. One characteristic it shares with Earth's Moon is that Europa–

A is covered in ice.

B orbits a planet.

C has an oxygen atmosphere.

D contains water.

6. All the planets in our solar system have more or less the same–

A diameter.

B composition.

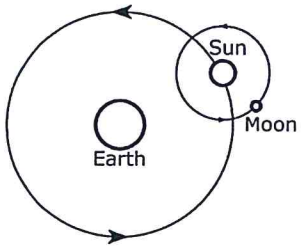
C shape.

D mass.

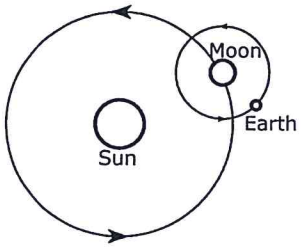
Post-Assessment

7. Which of the following diagrams is the most accurate representation of Earth's relationship with the Sun and the Moon?

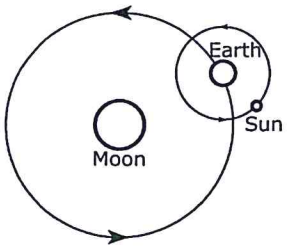
A



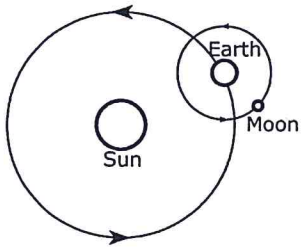
B



C



D



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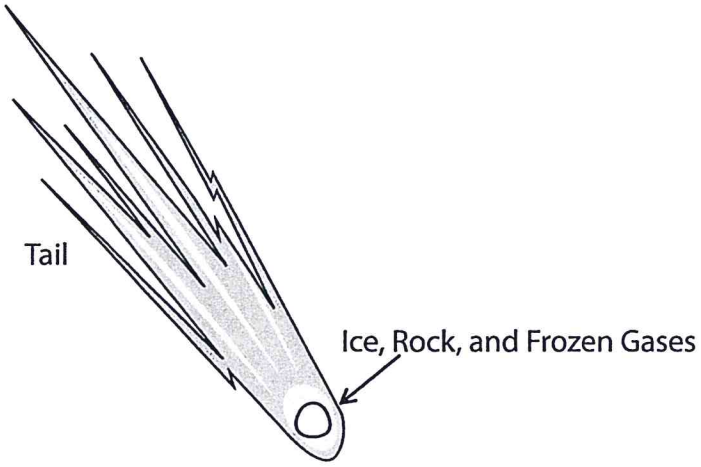
Post-Assessment

8. What celestial body does the picture represent?



A Comet

B Asteroid

C Moon

D Meteor

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6th Grade Math

1. Complete the Order of Operations page (2 sided). I did an example on each side. Remember, that multiplication and division goes in order from left to right, whichever operation comes first. Same thing with addition and subtraction.

2. Warm Up #4, and #6

3. Sirius Book- Lesson 5 page 47-54

4. Sirius Book- Lesson 9 STAAR practice Page 88-92

If you have any questions, you can have your parents e-mail me at frankie.kay@rcisd.net or text on our remind. Do your best, and when we come back we will grade and go over everything.

I have attached the remind information to the back of this page for those that are not signed up for it yet.

I miss you, and hope that you stay healthy! :)

-Coach Kay

MUST PICK UP WORKBOOK FROM SCHOOL.

remind

Sign up for important updates from Coach Kay.

Get information for **Reagan County Middle School** right on your phone—not on handouts.

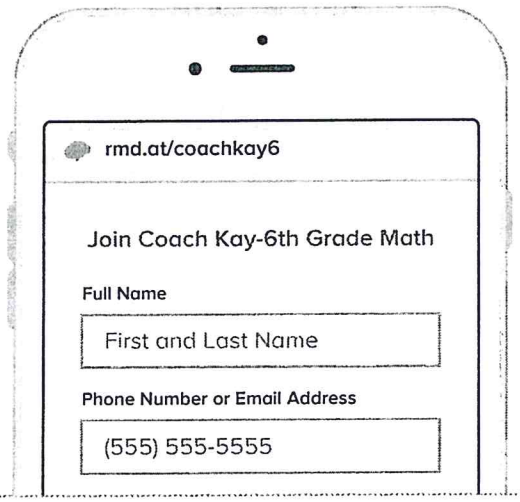
Pick a way to receive messages for **Coach Kay-6th Grade Math:**

A **If you have a smartphone, get push notifications.**

On your iPhone or Android phone, open your web browser and go to the following link:

rmd.at/coachkay6

Follow the instructions to sign up for Remind. You'll be prompted to download the mobile app.



B **If you don't have a smartphone, get text notifications.**

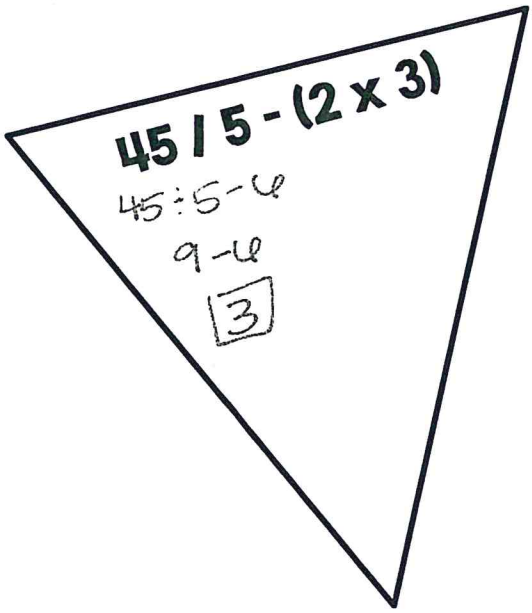
Text the message @coachkay6 to the number 81010.

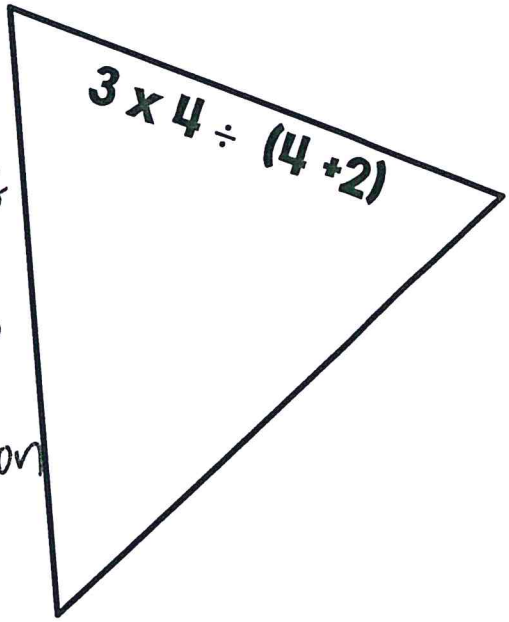
If you're having trouble with 81010, try texting @coachkay6 to (682) 325-3893.

** Standard text message rates apply.*

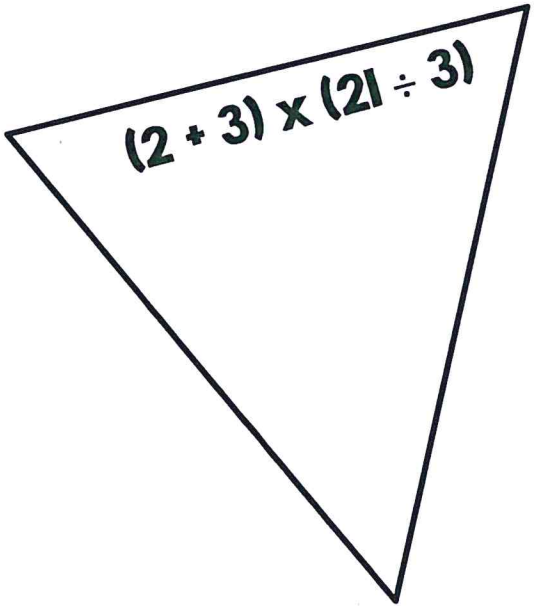
Don't have a mobile phone? Go to rmd.at/coachkay6 on a desktop computer to sign up for email notifications.

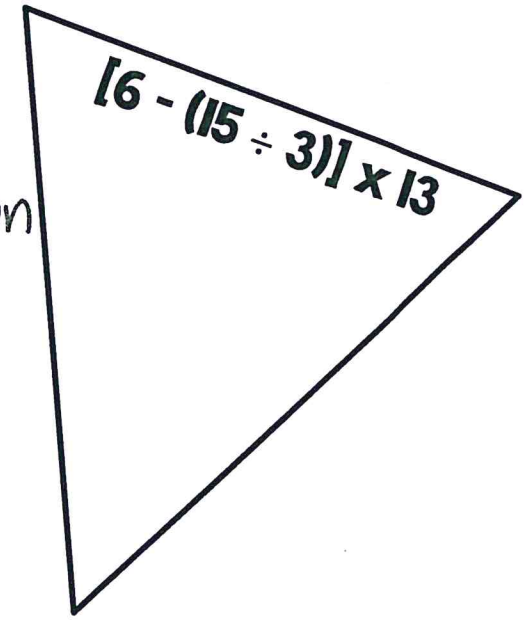
Order of Operations Pizza Slices

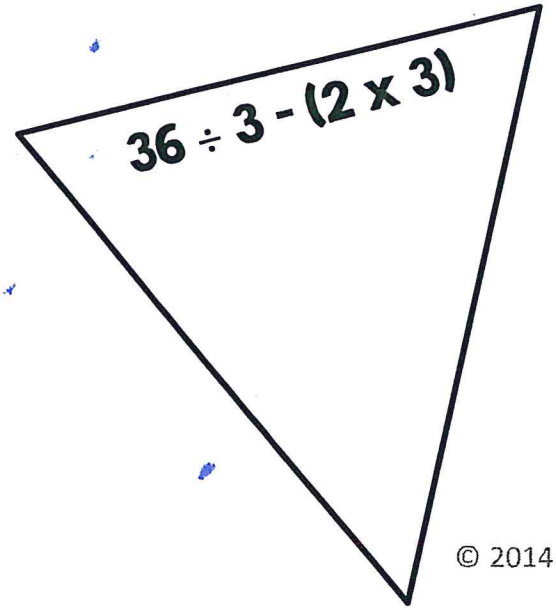


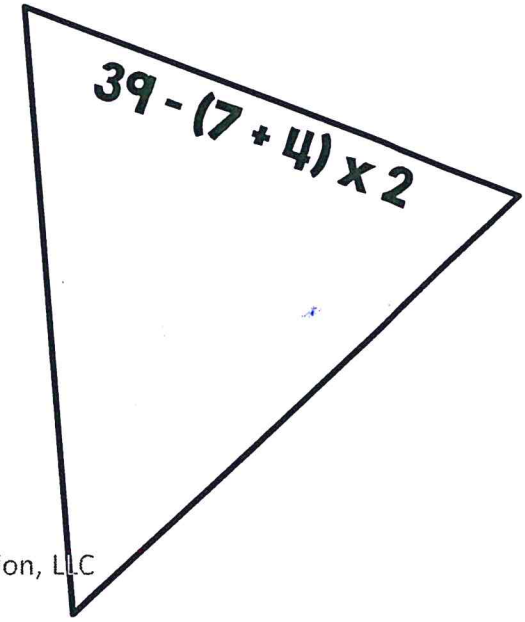


P Parenthesis
E Exponents
M Multiplication
D Division
A Addition
S Subtraction









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Order of Operations Pizza Slices

$5^2 \times 2^2 \div 10$

$25 \times 4 \div 10$

$100 \div 10$

$\boxed{10}$

$(2 + 1)^2 \times 4$

Parenthesis

Exponents

Multiplication

Division

Addition

Subtraction

$4^2 - 2 \times 8$

$[36 - (4 \times 5)] \times 2$

$[(16 + 6) \div 2] \times 5$

$4 \cdot (7 + 3^3)$

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Warm Up #4

Name_____ Date_____ Score_____

#1 Which numbers from this list are less than -0.45?

$$-\frac{8}{20},\ 0.3,\ -4,\ 22\%,\ -3\frac{4}{5},\ -0.46$$

a) -4, $-3\frac{4}{5}$, and -0.46

b) $-\frac{8}{20}$, -4, and $-3\frac{4}{5}$

c) $-\frac{8}{20}$, 0.3, and -0.46

d) $-\frac{8}{20}$, 0.3, and $-3\frac{4}{5}$

#2 What is the sum of the following numbers?

18, 0, -4, -12, 6, -15

a) -11 b) -7 c) 3 d) 9

#3 At his last baseball game George missed 35% of the pitches thrown to him. Based on this information, how many pitches will he miss if he has 40 pitches thrown to him?

a) 12
b) 14
c) 16
d) 18

©Amazing Mathematics

Warm Up #6

Name_____ Date_____ Score_____

#1 What value is equivalent to

$3+4^3 \cdot (3+4)-2^5$

a) 268 b) 347

c) 419 d) Not Here

#2 A person is carrying a dog that weighs 50 pounds.. The person weighs x pounds. Which equation can be used to find *w*, the total weight of the person and the dog in pounds?

a) $w=50x$

b) $w=x-50$

c) $w=50+x$

d) $w=50-x$

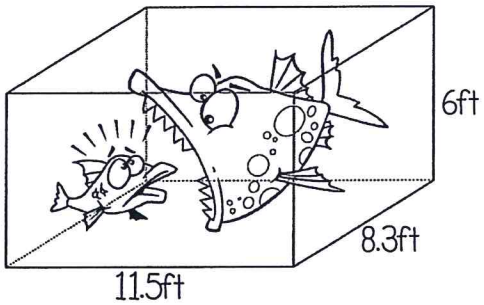
#3 Fred's fish tank is shown below. How many cubic feet of water will he need to fill his fish tank?

a) 514.6 ft^3

b) 572.7 ft^3

c) 612.5 ft^3

d) 664.3 ft^3



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