DISTRICT OF COLUMBIA
PUBLIC SCHOOLS

Distance Learning Plan

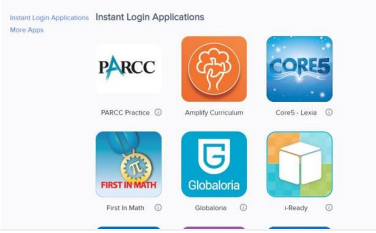
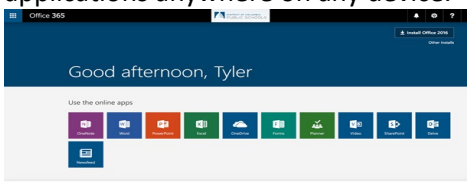
Dual Language
5th Grade
Weeks 2 and 3

DISTRICT OF COLUMBIA PUBLIC SCHOOLS
Office of Teaching and Learning

EDucational TECHnology
DISTRICT OF COLUMBIA PUBLIC SCHOOLS
"POWERED BY POSSIBILITIES"

Student Log in for Digital Platforms and Content

Every student in the District of Columbia Public Schools has access to digital platforms, content, and tools. Below are the resources available and how to log in. Contact your teacher or designated technology representative at your school if you do not know your student log in credentials.

Digital Platform	Description	How do I log in?
Clever	Clever is the platform that puts blended learning digital content on one dashboard and one login. 	*Go to*: https://clever.com/in/dcpsk12 *Username/password*: your student credentials *Select*: your digital content
Microsoft Office 365	Microsoft Office 365 includes online versions of Word, Excel, PowerPoint and other applications for preparing future ready learners. Students can access applications anywhere on any device. 	*Go to*: portal.office.com *Username/password*: your student credentials
	Download the Office 365 Apps on your smartphone! Access your documents and assigments on the go! (Word, Powepoint, Teams, Forms, Excel, OneNote, OneDrive)	*Go to*: your app store *Search:* for the Office 365 app Install the app *Sign in:* with your student credentials
Canvas	Download the Canvas Student App on your smartphone! Canvas is the learning management system for accessing DCPS online courses.	*Go to*: dcps.instructure.com *Username/password*: your student credentials *Select*: your course

Inmersión Doble/Dual Language

Plan de estudios a distancia para quinto grado – Semana 2

Fifth Grade Distance Learning Plan – Week 2

Dear Families,

DCPS is committed to providing materials to encourage students to continue learning during this time of school closure. For students in Dual Language programs, we are providing resources for Spanish Language Arts and literacy to be completed in addition to the materials for Math, English Language Arts, Social Studies, Science, and other areas of study.

The English Language Arts (ELA) team has developed student projects around different themes, and the Spanish resources are aligned to the same themes. Our expectation for dual language students is that they complete one project for English Language Arts one week, and one project for Spanish Language Arts the following week. They do not need to do two language arts projects in one week!

Students should bring their packets and projects and give them to their teacher on the day they return to school.

The DCPS Dual Language Team

Estimadas familias,

DCPS se compromete a proporcionar materiales para animar a nuestros estudiantes a seguir aprendiendo durante este tiempo del cierre de las escuelas. Para los estudiantes en programas de inmersión doble, estamos proporcionando recursos en español para artes de lenguaje, además de los materiales para matemáticas, inglés, estudios sociales, ciencias y otras áreas de estudio.

El equipo de English Language Arts (ELA) ha desarrollado proyectos de temas diferentes, y los recursos de artes de lenguaje en español tocan los mismos temas. Nuestra expectativa para los estudiantes de inmersión doble es que completen un proyecto para artes del lenguaje en inglés una semana, y un proyecto para artes del lenguaje en español la semana siguiente. ¡No necesitan hacer dos proyectos de artes del lenguaje en una semana!

Los estudiantes deben traer sus paquetes y proyectos y entregárselos a su maestro el día que regresen a la escuela.

El equipo de programas de inmersión doble de EPDC

DCPS DUAL LANGUAGE PROGRAMS

Lectura para apoyar los estudios temáticos / *Resources to Support the English Unit*
Libro: El sol, la tierra, y la luna

Estudiantes: Esta semana vas a estar trabajando con el tema El universo. Incluido en tu paquete es un libro acerca del tema.

- Cada día debes leer independientemente por 20 minutos del libro incluido en el paquete.
- En tu paquete de lectura en inglés, tienes un proyecto temático que completar. Como estas aprendiendo en dos idiomas, debes completar el proyecto de una semana en inglés y el de la otra semana en español usando los recursos del paquete.

Padres: Si tienen acceso al internet, favor de registrarse para esto recursos bilingües adicionales -

- Getepic.com (30 días gratis con libros en inglés y español)
- ReadingA-Z.com (14 días gratis con libros en inglés y español)

Students: This week you will be learning about The Universe.

- *Each day you should read the Spanish book included in this packet for 20 minutes. Since you are bilingual, you should also read in 20 minutes from your English packet.*
- *In your English reading packet, there is a theme-related project to complete. Since you are learning in two languages, one week you should complete the project in English and one week in Spanish.*

If you have internet access, please register for additional free bilingual resources at the sites below.

- *Getepic.com (30-day free trial, books in Spanish and English)*
- *ReadingA-Z.com (14-day free trial, books in Spanish and English)*

El Sol, la Tierra y la Luna

Un libro de lectura de Reading A–Z, Nivel W
Número de palabras: 1,380

Conexiones

Escritura

Haz un póster en el que expliques en qué se parecen y en qué se diferencian los eclipses lunares y los eclipses solares. Presenta la información ante tu clase.

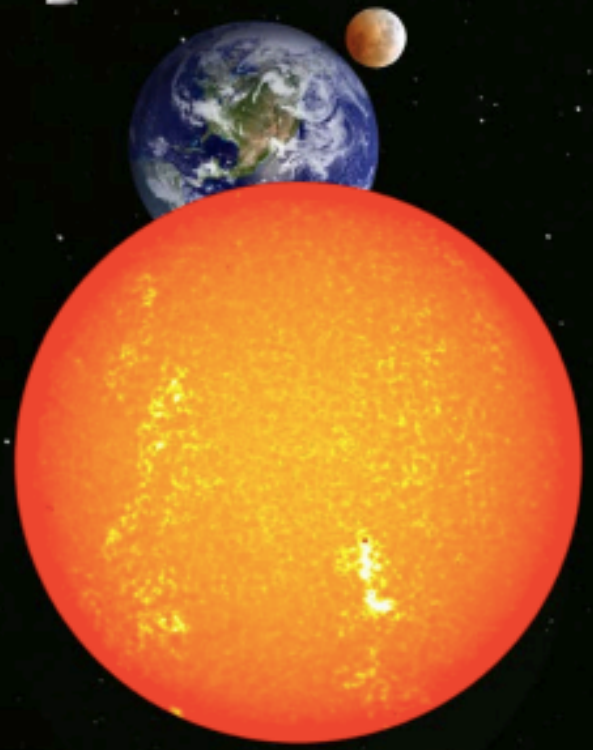
Ciencias

¿Por qué parece que la Luna cambia de forma a lo largo del mes? Investiga sobre las fases de la Luna. Haz un modelo o un diagrama en el que expliques cada una de las fases y por qué ocurren.

Libro original en inglés de nivel U

Libro de nivel • W

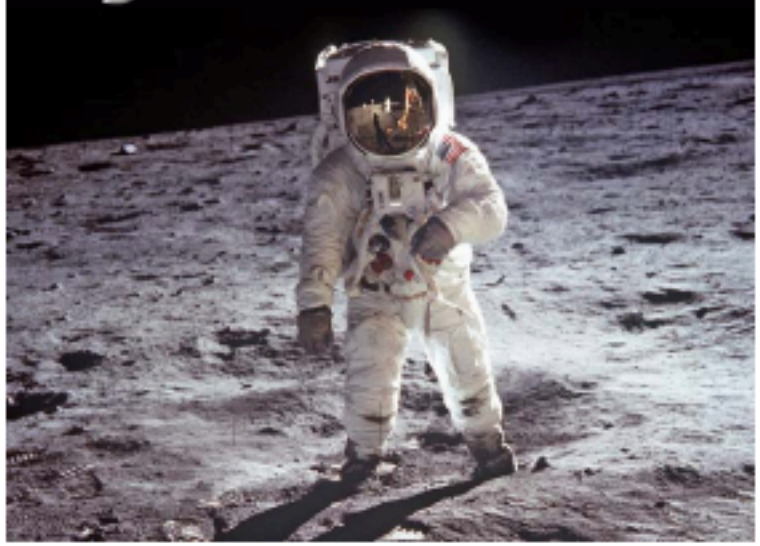
El Sol, la Tierra y la Luna



Escrito por David L. Dreier

www.readinga-z.com

El Sol, la Tierra y la Luna



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www.readinga-z.com

Pregunta principal

¿Qué relación existe entre los movimientos de la Tierra, la Luna y el Sol?

Palabras para aprender

eclipse	rotación
gravedad	traslación
mareas	

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El Sol, la Tierra y la Luna
Libro de lectura Nivel W
The Sun, Earth, and Moon
Libro original en inglés, Nivel U
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Traducido por Lorena F. Di Bello

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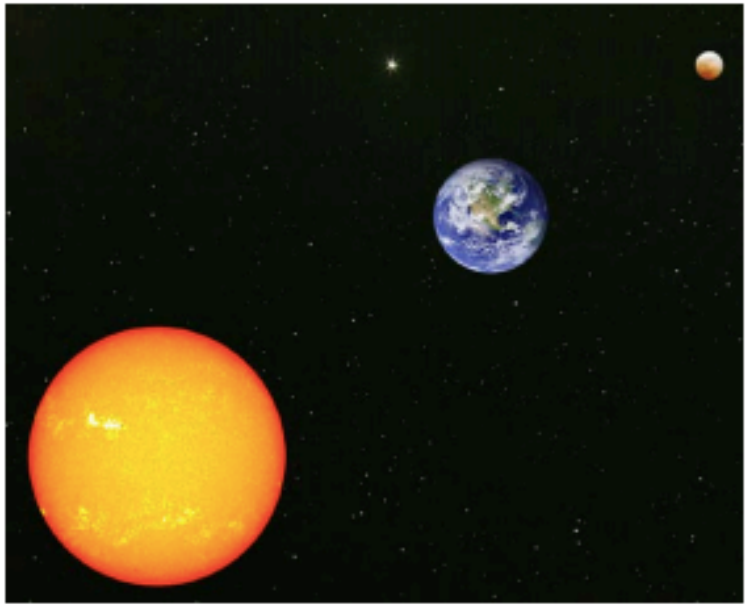
Cráteres en la Luna de la Tierra

Tabla de contenido



El Sol, la Tierra y la Luna

Tres cuerpos celestes importantes

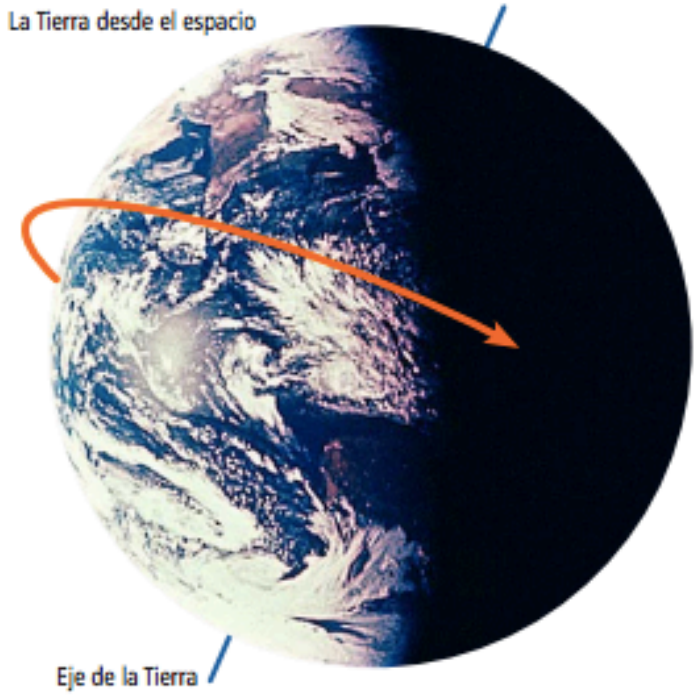
El sistema solar es nuestro hogar en la galaxia Vía Láctea, una espiral enorme de estrellas, gases y polvo. El sistema solar está formado por el Sol, los planetas, sus lunas y varias clases de desechos. Pero para nosotros, los tres objetos más importantes del sistema solar son el Sol, nuestro propio planeta Tierra y la Luna de la Tierra.

Los planetas y sus lunas están en movimiento constante: los planetas giran alrededor del Sol y las lunas giran alrededor de los planetas. Es una danza de movimientos que existe hace miles de millones de años. En este libro, examinaremos los movimientos de la Tierra y de la Luna entre sí y con respecto al Sol.

Los movimientos de la Tierra

La Tierra, como todos los planetas y las lunas del sistema solar, está sujeta a dos movimientos principales: el de **rotación** y el de **traslación**.

La rotación es el movimiento de la Tierra sobre su propio eje, una línea imaginaria que pasa en forma vertical por el centro del planeta. Una sola rotación de la Tierra tarda 24 horas. Es la rotación de la Tierra la que produce el ciclo interminable del día y la noche. Cuando un lado del planeta rota hacia el Sol, en esa mitad del planeta es de día. Al mismo tiempo, en la otra mitad del planeta es de noche.



La Tierra desde el espacio

La traslación de la Tierra es su larga órbita alrededor del Sol, que tarda alrededor de 365 días. Un año entero, entonces, corresponde a una órbita completa de la Tierra alrededor del Sol. En realidad, una sola traslación de nuestro planeta alrededor del Sol tarda 365 y ¼ días. Es por eso que cada cuatro años se agrega un año bisiesto en el calendario. Un año bisiesto tiene un día extra —el 29 de febrero—, que incluye esos cuatro cuartos de día extras y mantiene el calendario alineado con las estaciones.

Los años bisiestos datan del reinado de Julio César en la Roma antigua. En 1582, el papa Gregorio XIII perfeccionó el calendario aún más para compensar un error mínimo que se venía acumulando hacía siglos con los años bisiestos. Todavía usamos el sistema del papa Gregorio, que saltea tres años bisiestos cada cuatro siglos.

El papa Gregorio XIII, el hombre responsable de nuestro calendario actual

El casi círculo que traza la Tierra en el espacio al completar su órbita alrededor del Sol se llama plano orbital. El eje de la Tierra está inclinado unos 23 y ½ grados hacia afuera de su plano orbital. Esta inclinación es lo que causa las estaciones. Cuando el hemisferio norte —la mitad norte del planeta— está inclinado hacia el Sol, es verano en esa parte del mundo. Al mismo tiempo, es invierno en el hemisferio sur. Medio año después, es la mitad sur del planeta la que está inclinada hacia el Sol. Entonces, es verano allí y es invierno en el hemisferio norte.

La rotación y la traslación de la Luna

Al igual que la Tierra gira sobre su eje y viaja alrededor del Sol, la Luna gira sobre su eje y viaja alrededor de la Tierra. Pero existe una diferencia importante entre los movimientos de la Tierra y de la Luna. Los períodos de rotación y de traslación de la Tierra son muy diferentes: 24 horas y 365 días. Para la Luna, estos dos movimientos tardan la misma cantidad de tiempo: apenas más de 27 y ½ días. Cada 27 y ½ días, la Luna gira una vez alrededor de la Tierra y una vez sobre su eje. Por esta razón, la Luna tiene siempre la misma cara mirando hacia la Tierra.

La luna llena desde la Tierra

No hay nada misterioso en que estos dos movimientos ocurran en la misma cantidad de tiempo. Son el resultado de la fuerza de la **gravedad** entre la Tierra y la Luna. La coincidencia entre los períodos rotacional y orbital se denomina *rotación sincrónica* y es común en el universo.

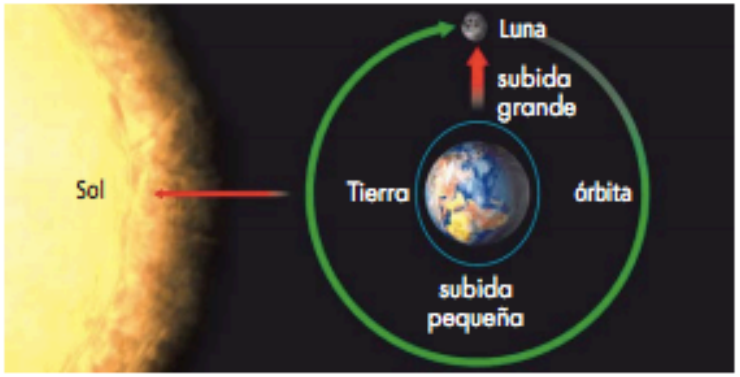
Muchas personas piensan que la Luna tiene un "lado oscuro" permanente, pero eso no es verdad. Lo correcto es hablar del "lado lejano" de la Luna, el lado que siempre mira en dirección opuesta a la Tierra. Ese lado recibe la misma cantidad de luz solar que el lado que mira hacia nosotros, solo que en momentos opuestos. Cuando vemos la luna llena, el lado lejano está en la oscuridad. Pero cuando hay luna nueva y vemos la Luna oscura, el lado lejano de la Luna está completamente alumbrado por luz solar.

Las mareas

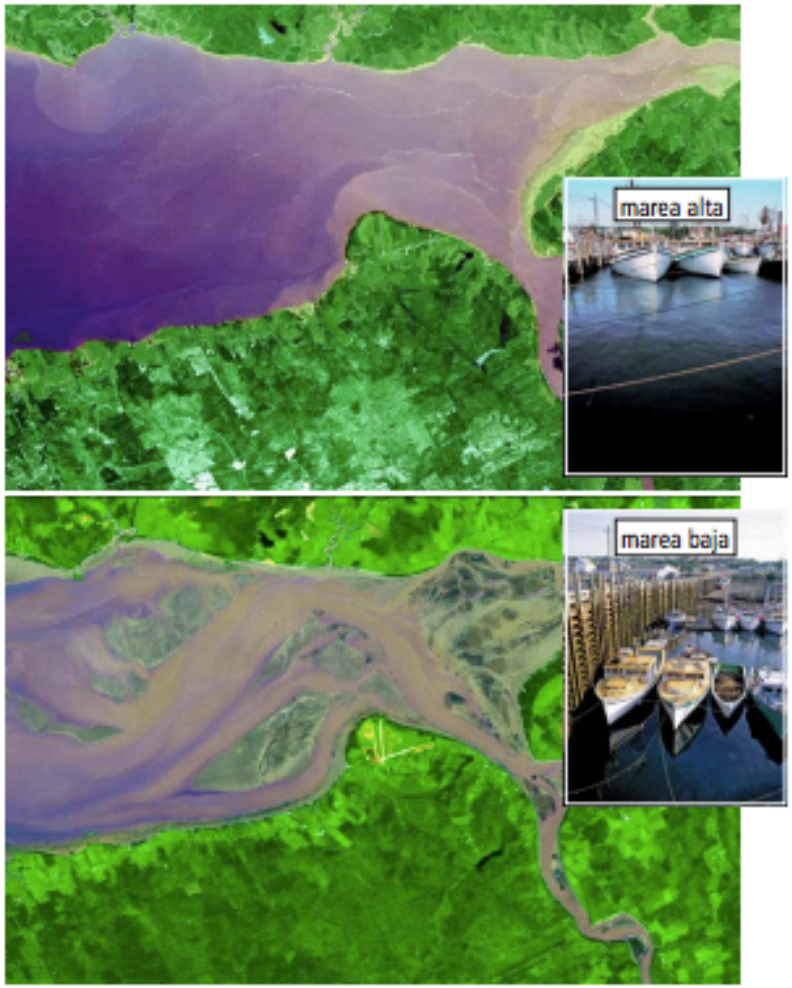
Tanto el Sol como la Luna afectan a la Tierra con su gravedad. Es la enorme gravedad del Sol la que mantiene a la Tierra en órbita alrededor del Sol. La gravedad de la Tierra mantiene a la Luna en una órbita interminable alrededor de nuestro planeta. Sin embargo, la Luna, aunque es pequeña comparada con la Tierra y con el Sol, también ejerce su propia fuerza de gravedad.

Las fuerzas de gravedad del Sol y de la Luna producen las **mareas** en los océanos de nuestro planeta. La Luna está mucho más cerca de nosotros que el Sol. Por esta razón, su efecto sobre las mareas es mayor que el del Sol.

La fuerza de gravedad de la Luna hace que los océanos se alcen hacia la Luna. Debido a la manera en que actúan las fuerzas de las mareas, la gravedad de la Luna también hace que se produzca una subida en el lado opuesto del planeta.



La Luna afecta a las mareas de la Tierra.



A medida que la Tierra rota, el punto más alto de una subida alcanza una costa en particular una vez cada 12 horas. A esta subida de las aguas se la llama marea alta. Cuando la subida pasa y el agua se vuelve a retirar, se llama marea baja. Hay dos mareas altas y dos mareas bajas cada 24 horas.

Eclipses lunares y solares

A medida que la Tierra y la Luna se mueven por el espacio, a veces se alinean con el Sol. Cuando esto sucede, se produce un efecto espectacular llamado **eclipse**. Hay dos clases de eclipses: eclipses lunares y eclipses solares. Un eclipse lunar ocurre cuando la Luna entra en la sombra que proyecta la Tierra a causa del Sol. Un eclipse solar ocurre cuando la Luna pasa entre la Tierra y el Sol.

Un eclipse lunar es un fenómeno de una belleza cautivante. Cuando una luna llena atraviesa la sombra de la Tierra, solo queda iluminada por rayos de sol que están desparramados por la atmósfera de nuestro planeta. Esta luz tiene un tinte rojizo, de manera que la Luna se torna de color rojo intenso. Un eclipse lunar puede verse desde toda la mitad de la Tierra en la que es de noche y puede durar más de 1 y ½ hora.

En estas fotografías se observa paso a paso cómo la Tierra proyecta su sombra sobre la Luna durante un eclipse lunar.

Un eclipse solar total

No existe imagen sobre la Tierra que sea más espectacular que la de un eclipse total del Sol. Por una coincidencia de la naturaleza, el Sol y la Luna, vistos desde la Tierra, tienen exactamente el mismo diámetro. Por esta razón, cuando la Luna pasa entre la Tierra y el Sol, bloquea el disco del Sol a la perfección. El disco permanece bloqueado varios minutos. Durante ese tiempo, la corona del Sol —los gases brillantes de la capa externa—, se torna claramente visible.

Durante un eclipse solar, solo las personas de un sector bastante estrecho de la Tierra pueden ver un eclipse total. La mayoría de las personas ven un eclipse parcial, en el cual una parte del disco del Sol todavía es visible. Pero incluso durante un eclipse total, se aconseja que las personas observen el fenómeno con anteojos de protección especiales.

Una luna llena se alza en lo alto del cielo de Vancouver, Columbia Británica, Canadá.

Conclusión

De alguna manera, los movimientos de la Tierra y de la Luna parecen perfectos. Un día dura lo justo para concretar nuestro trabajo, tener una tarde de relajación y, luego, dormir lo suficiente para comenzar un día nuevo. La duración de un año también parece ser la adecuada. ¿A quién le gustaría que durara la mitad o el doble? En cuanto a la Luna, su ciclo de fases de 27 y ½ días es casi igual a un mes. Contamos nuestros días, meses y años según los movimientos de nuestro planeta y de nuestra Luna. Y a veces, el Sol y la Luna nos brindan exhibiciones únicas y hermosas que recordamos el resto de nuestra vida.

Glosario

eclipse *(sust.)* ocultación u oscurecimiento parcial o total de un cuerpo celeste, como el Sol o la Luna, causado por otro cuerpo (pág. 12)

gravedad *(sust.)* fuerza natural que hace que los objetos se atraigan entre sí, como cuando los objetos son atraídos hacia el centro de la Tierra (pág. 9)

mareas *(sust.)* ascensos y descensos regulares de los océanos, producidos por la gravedad de la Luna y del Sol (pág. 10)

traslación *(sust.)* círculo completo que recorre un planeta y las lunas a lo largo de su órbita alrededor de otro cuerpo celeste (pág. 5)

rotación *(sust.)* vuelta de algo alrededor de un eje o punto fijo; giro (pág. 5)

Índice

PASSPORT TO LEARNING

DCPS ELEMENTARY ENGLISH LANGUAGE ARTS

Distance Learning
Student Work Packet
Grade 5 – The Universe
ELA: Week 2

Unit Overview: You have learned about the Solar System and all of its elements by analyzing the Sun's impact/influence the effect of the Big Bang, and how it created the galaxies and our Solar System.

Distance Learning Summary: In this distance learning unit, students will explore the Solar System and all of its elements by analyzing the Sun's impact and influence specific to the earth's rotation around the sun and the daylight experience on earth. In the next three weeks, you will engage with texts to investigate and write about the following line of inquiry:

How does the earth's rotation around the sun impact daylight hours on any given day of the year?

SY2019-2020

Grade 5
Distance Learning Week 2
The Universe

Day One

Accessing Prior Knowledge and Asking Big Questions

Objective: Read the text titled "The Seven Suns" to begin your research on your line of inquiry, *How does the earth's rotation around the sun impact daylight hours on any given day of the year?*

Focus Question: How does the sun impact the lives of people on Earth?

Directions:

- List what you already know about the solar system and the sun.
- Use the 5 W's to ask clarifying questions about the impact the sun has on people on earth.
- Read the text to get the gist.

Exploring My Prior Knowledge: What do I ***already know*** about this topic?	
Asking Questions: What do I ***want to know*** about this topic?	
Q1:	Q2
Q3	Q4

Question Stem Bank
5 W's and How Question Words
What, Where, When, Why, Who, How

The Seven Suns

Long ago, so long ago that most of us have forgotten this, there were seven suns in the sky. This made life really difficult. The suns would chase each other merrily across the sky. First one sun would rise, and before it had a chance to set, another would come chasing it; before the second sun could set, a third would pop up into the sky. In this way, there was always at least one sun in the sky so that it was never dark – and no one could ever sleep! What's more, with seven suns shining brightly in the sky, it became so hot that people could bake bread and fry eggs without a fire. This was convenient at times, but the heat was unbearable.

The people grumbled and groaned, and appealed to the suns, begging them to set once in a while so that they could sleep and the earth could cool down, but the suns only laughed and chased each other faster and faster across the sky. The people could do nothing about them.

Till one day there came a young man called Erlang. Erlang was tall and handsome, and as strong as three ordinary men. When he saw how miserable the people were, he decided to do something about it. 'Perhaps if I caught the suns and had a talk with them, they might agree to behave themselves,' thought Erlang to himself. So he set about catching the suns. But that was harder than he had thought it would be – for as soon as he would catch a sun and put it down, it would jump back into the sky. 'I must find a better way to trap them,' said Erlang to himself, and, sitting down in the shade of a tree, he began to think. At last he had it, the perfect plan.

Erlang cut himself a long, stout pole from a branch of the tree, and to each end of the pole he tied a small hill. Then he put the pole upon his shoulders and went once more to catch the suns. The suns, seeing Erlang coming towards them again, began to run wildly here and there. Erlang had to run twice as fast to catch the suns. Each time he caught a sun, he would quickly put a hill upon it; the sun, trapped, would not be able to jump back into the sky, and Erlang would have his hands free to catch the next sun. He rushed around, catching the suns and fetching more and more hills to trap them under. In this manner, he caught six of the seven suns. But by then he was so tired that he lost count of

how many suns he had caught, and he really couldn't be bothered to count them just then.

He sat down by a river to rest. After a short nap he felt much better. 'Ah well, back to work, Erlang!' he said to himself and putting his pole on his shoulders again, he went back to chasing the suns. He searched for a long time, but he could not see any suns in the sky.

The sun that remained had hidden himself behind some thick, black clouds. Anxious to know whether Erlang was still chasing him, the sun peeped out cautiously from behind the clouds.

Erlang saw the sun peeping at him. 'Hey! You there! Come down here at once!' he cried.

The sun, terrified, dived back behind the clouds.

'Very well then, I am coming after you!' cried Erlang and ran off after the sun. He searched everywhere for him, but could not find him. He was about to give up and go home, when he saw a crowd of people coming towards him, laughing and shouting. 'Erlang!' they called. 'There is only one sun left in the sky!'

'How do you know?' asked Erlang.

'Well,' said a farmer, 'I was planting paddy in my field when I heard someone crying. I saw a tiny little sun hiding among the plants and weeping. 'What's the matter?' I asked, and the sun replied that all his brothers had been caught by Erlang and trapped under hills, so now he was all alone in the world and very frightened.'

'Well, if there's only one sun left, then I'd better let him be,' said Erlang thoughtfully. 'But bring him to me. We need to talk, the tiny little sun and I.'

So the farmer ran back to his field, and came back with the little sun, who was still sobbing sadly.

Erlang look at him sternly. 'If only you and your brothers had behaved, none of this need have happened. Now, you must promise to do as I tell you, or I'll have to trap you under a hill as well,' he said.

The little sun looked even more frightened. 'I'll do what you say, Erlang,' he promised.

'Very well,' said Erlang. 'Every morning rise in the east, sail slowly across the sky to the west, and then hide yourself for the night. During the day, shine brightly so that the people can work by your light. At night, stay hidden, so that the people can rest and the earth can cool down. Do you understand?'

The little sun nodded. 'Yes, Erlang,' it said. Then, seeing that Erlang was not shouting anymore, the little sun plucked up his courage. 'Will I ever see my brothers again?' he asked, in a sad little voice.

Erlang looked even more sternly at the sun. 'If you do as I have asked you to, then you may see your brothers every night. You must stay hidden, ALL of you. Else you will have me to deal with again,' replied Erlang. 'Do you promise to do as you are told?'

'Yes, Erlang, I promise,' cried the little sun wiping his tears.

It zoomed up happily into the sky and from then on has behaved exactly as Erlang had asked him to. He rises in the east, sails slowly across the sky during the day to the west, and then stays hidden at night so that people can rest and sleep, and the earth can cool down. Erlang has kept his promise too; he has left the little sun alone, and every night he lets him meet his bigger brothers. The brothers greet each other with joy, and the big suns listen with wonder to all the stories that the little sun has to tell them of the sights that he sees every day in his wanderings across the sky.

PASSPORT TO LEARNING

DCPS ELEMENTARY ENGLISH LANGUAGE ARTS

Day Two

Reading Closely

Objective: I can annotate my texts using the annotation key below to help me understand the text.

Directions:

- Reread your text.
- Annotate your text using the annotation key below for major points, key words, and phrases to support you in answering the **focus question:** How does the sun impact the lives of people on Earth?

Annotation Key

Underline the major points.

Circle any keywords or phrases that are confusing or unknown.

? (Question Mark) shows questions that you have during the reading. Write the question in the margin.

Margin Notes show clarifying statements in the margins.

Day Three

Answering Questions

Objective: I can use my text annotations to help me answer my questions from Day 1.
Directions:

- Go back to Day 1 to find your questions about what you wanted to know about the impact the sun has on people's lives.
- Write your questions in the table below.
- Use our annotations to help you answer your questions and to complete your summary.

Questions		Evidence from "The Seven Suns"
Q1:		
Q2:		
Q3:		

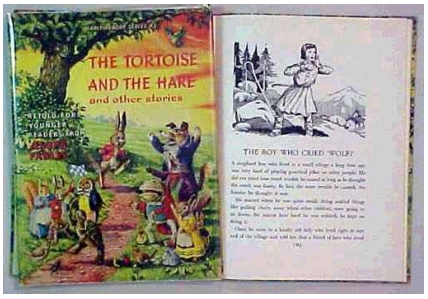
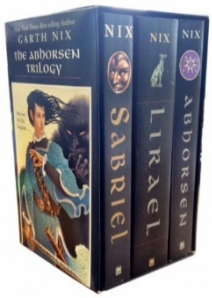
Q4:		
Other interesting facts		
Summary of What I've Learned *(Consider the 3W's of What, Where, When, and how when completing your summary)*		

Day Four

Planning for Your Project

Directions:

- ☐ Read each writing choice from the product menu below.
- ☐ Choose one writing product you wish to complete.
- ☐ Take a look at the product choice examples below the choice menu to help you visualize what your final project may look like.

Narrative Task Product Menu			
Product Choice	Create an ***observation journal*** that describes the amount of daylight hours in each day. Be sure to note the date and sunrise and sunset times to capture the total number of sunlight hours the earth receives during this time of the year.	Write a ***fable story*** taking on the perspective of the "Sun" from "The Steven Suns" fable. Be sure to include descriptive words to sequence the events in the story and capture the characters feelings using dialogue and sensory words to convey the relationship between the sun, earth's seasons, and the amount of daylight earth receives during different point in a year.	You have read the fable "The Seven Suns". Think about the conflict between the main characters Erlang and the Seven Sun. Write a ***sequel*** of the story describing the stories the little sun shares with the big suns. Be sure to describe the relationship the little sun has with people on earth, and his six brothers. Use details from the text to develop your beginning, middle, and end.
	Example of Observation Journal 	Example of Fable Story 	Example of a Sequel 

Go to the next page to continue planning and organizing your project

Grade 5
Distance Learning Week 2
The Universe

Day Four

Planning your Project

Directions:

- ☐ Complete the note-catcher below to support you with identifying the evidence you will use to complete your task.
- ☐ Using the evidence, you have gathered, choose **one** of the Multi-Paragraph Outlines provided on the next 2 pages.
- ☐ Be sure to:
  - ☐ Write your claim statement
  - ☐ Plan your introduction
  - ☐ Plan your main idea section
  - ☐ Plan your conclusion

Guiding Questions	Note-Catcher	
What is your product task asking you to do?		
Which text(s) are you going to use?		
Which evidence from the text will you use?		

(Option A) Multiple-Paragraph Outline (4 Paragraphs)

Name: Date:

Topic:

Claim Statement:

Main Idea	Details
¶1 Introduction *(Be sure to include your claim statement)*	
¶2	
¶3	

¶4 Conclusion	

PASSPORT TO LEARNING

DCPS ELEMENTARY ENGLISH LANGUAGE ARTS

(Option B) Multiple-Paragraph Outline (4 Paragraphs)

Introduction

Thesis/Claim - Write an opinion statement about an important idea.

Supporting Idea 1	Supporting Idea 2	Supporting Idea 3
Topic Sentence _____	**Topic Sentence** _____	**Topic Sentence** _____
_____	_____	_____
Evidence/Details	**Evidence/Details**	**Evidence/Details**
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Conclusion - Restate the thesis/claim.

Day 5

Drafting and Publishing Your Final Project

Objective: You will prepare and present your culminating project using your notes gathered over the course of the week.

Directions:

- ☐ Draft your final project, using the lined paper provided or your own materials found at home.
- ☐ Use the checklist found below to edit and revise your work.
- ☐ Publish your final project by presenting to a friend, or family member.

Fifth Grade Narrative Writing Rubric

Development

- ☐ I used descriptive details to develop the characters, setting, and plot.
- ☐ I used dialogue, descriptions, and pacing to develop my writing.
- ☐ I included concrete words or phrases.
- ☐ I used sensory details and figurative language so that readers could picture the setting, characters, and events.

Organization

- ☐ I used story elements, including a narrator and/or characters.
- ☐ I sequenced my story in logical order.
- ☐ I used transition words/phrases, such as *meanwhile*, *early that morning*, *3 hours later,* to help the reader understand the passage of time.
- ☐ I used paragraphs to separate different parts of the story.
- ☐ I provided a conclusion to my story that connected to the main part of the story.

Language/Conventions

- ☐ I used capitalization, punctuation, and correct spelling.
- ☐ I wrote sentences that vary in length and structure, using commas to make them clear and correct.

You have successfully completed your research project!

*For additional opportunities to extend you learning see the list of enrichment opportunities below.

*Enrichment Opportunities

Additional Reading & Writing Opportunities
• Select a different product from the product menu found on Day Four, to write about your topic. • Read Coyote and the Star – https://www.readinga-z.com/books/leveled-books/book/?id=224&lang=English • Read Go Away, Sun! – https://www.readinga-z.com/books/leveled-books/book/?id=674&lang=English • Get Epic Books – Unlimited Books for Kids - https://www.microsoft.com/en-us/p/epic-unlimited-books-for-kids/9mx9g6fnszrt?activetab=pivot:overviewtab • Read “A Super Sun (And Why it Doesn’t Mean Summer Weather)” - https://airandspace.si.edu/stories/editorial/supersun
Technology Enhanced Options (including Website Links) Visit and View…. • YouTube Video - Day and Night - https://www.youtube.com/watch?v=AGhfawHAMT4 • YouTube Video - Earth’s Orbit and Rotation for Kids - https://www.youtube.com/watch?v=KSS9SKqe3hw • BrainPop Videos via Clever (Sign up for a free trial)

DISTRICT OF COLUMBIA
PUBLIC SCHOOLS
Office of Teaching and Learning

Grade 5 Math Learning Packet

Week 2

Name _____

DISTRICT OF COLUMBIA
PUBLIC SCHOOLS
Office of Teaching and Learning

Dear Students and Families,

We hope you are safe and healthy while you are out of school and learning from home! In math, you will be reviewing, applying, and extending content from the school year.

This week you will be focused on the topic of the four function operations (add, subtract, multiply, and divide) with whole numbers as well as decimals. The table below outlines how you might organize completing your math work for the week.

Day	Activity	Time
1 - I can fluently multiply multi-digit whole numbers using the standard algorithm.	Elmer's Reasonableness Task: Pages 4-7	30 minutes
2 - I can determine whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors	January 1st 2011 Task: Pages 8-10	30 minutes
3 - I can determine whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors.	Making a Split: Pages 11-14	30 minutes
4 - I can add, subtract, multiply, and divide decimals to hundredths.	Education and Earnings Task: Pages 15-17	30 minutes
5 - I can add, subtract, multiply, and divide decimals to hundredths.	Product Estimation Task: Pages 18-20	30 minutes

If you need additional support with completing the activities, please use the following links:

Lesson 1 Help: http://bit.ly/3aF66P8

Lesson 2 Help: http://bit.ly/2TWItLh

Lesson 3 Help: http://bit.ly/38JCkr9

Lesson 4 Help: http://bit.ly/2TTBhPU

Lesson 5 Help: http://bit.ly/2w1A40S

One key question you might want to explore this week is: Why is it important to know how to solve addition, subtraction, multiplication, and division of decimal problems when we have calculators?

Week 2 Lesson 1

Objective: I can fluently multiply multi-digit whole numbers using the standard algorithm.

Daily Fluency: Use multiplication and division to find the secret path through each maze. The starting and ending points are marked for you. You can only move one space up, down, over, or diagonally each time. Write four equations to explain the path through the maze. (5 min)

ex

start

3	4	12
36	6	2
9	4	6

end

$3 \times 4 = 12$
$12 \div 2 = 6$
$6 \times 6 = 36$
$36 \div 9 = 4$

a

start

42	6	6
7	4	36
3	3	9

end

b

6	24	3
4	8	72
28	7	9

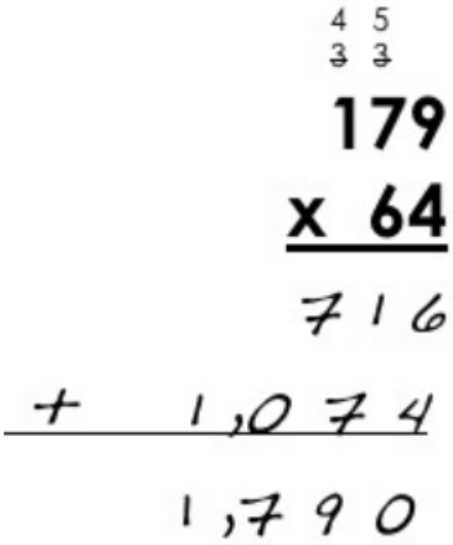
start

end

Sources: Great Minds Eureka Math,
Bridges in Mathematics,
and Illustrative Math

Daily Task: (20 min)

This is Elmer's work on a multiplication problem:



a. Use estimation to explain why Elmer's answer is not reasonable.

_____

_____

_____

b. What error do you think Elmer made? Why do you think he made that error?

_____

_____

_____

_____

c. Find 179×64 using a correct version of Elmer's method. Then show another way of doing it to help Elmer see why your answer is correct.

Exit Ticket: (5 min)

Draw an area model. Then, solve using the standard algorithm. Use **arrows** to **match** the partial products from your area model to the partial products in the algorithm.

814 × 39

$$\begin{array}{r} 814 \\ \times \quad \underline{39} \end{array}$$

624 × 82

$$\begin{array}{r} 624 \\ \times \quad \underline{82} \end{array}$$

Check: Is your answer reasonable and does it make sense?

Week 2 Lesson 2

Objective: I can determine whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors

Daily Fluency: Start with the basic facts below and complete the related fact family of larger numbers. Then make up your own fact family based on the related numbers. (5 min)

Basic Fact Family	Related Fact Family	Your Own Related Fact Family
example		
4 × 3 = 12	40 × 3 = 120	40 × 30 = 1,200
3 × 4 = 12	3 × 40 = 120	30 × 40 = 1,200
12 ÷ 4 = 3	120 ÷ 40 = 3	1,200 ÷ 40 = 30
12 ÷ 3 = 4	120 ÷ 3 = 40	1,200 ÷ 30 = 40
1		
____ × ____ = ____	80 × 6 = 480	____ × ____ = ____
6 × 8 = 48	____ × ____ = ____	____ × ____ = ____
____ ÷ ____ = ____	480 ÷ 80 = 6	____ ÷ ____ = ____
48 ÷ 6 = 8	____ ÷ ____ = ____	____ ÷ ____ = ____

Sources: Great Minds Eureka Math,
Bridges in Mathematics,
and Illustrative Math

2 ____ × ____ = ____ 9 × 4 = 36 ____ ÷ ____ = ____ 36 ÷ 9 = 4	40 × 9 = 360 ____ × ____ = ____ 360 ÷ 40 = 9 ____ ÷ ____ = ____	____ × ____ = ____ ____ × ____ = ____ ____ ÷ ____ = ____ ____ ÷ ____ = ____
3 ____ × ____ = ____ 7 × 3 = 21 ____ ÷ ____ = ____ 21 ÷ 7 = 3	30 × 7 = 210 ____ × ____ = ____ 210 ÷ 30 = 7 ____ ÷ ____ = ____	____ × ____ = ____ ____ × ____ = ____ ____ ÷ ____ = ____ ____ ÷ ____ = ____

Daily Task: (20 min)

What time was it 2011 minutes after the beginning of January 1, 2011? Explain your work below.

_____

_____

_____

Exit Ticket: (5 min)

What is 960 divided by 4? Solve by using the standard algorithm.

Answer: _____

Week 2 Lesson 3

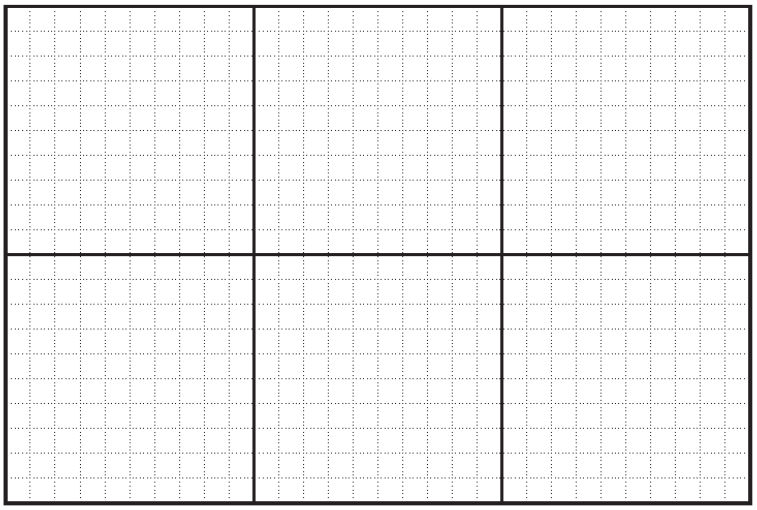
Objective: I can determine whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors.

Daily Fluency: Complete the following multiplication problems: (5 min)

14	14	14	14	14	14
× 2	× 3	× 10	× 5	× 20	× 30
____	____	____	____	____	____

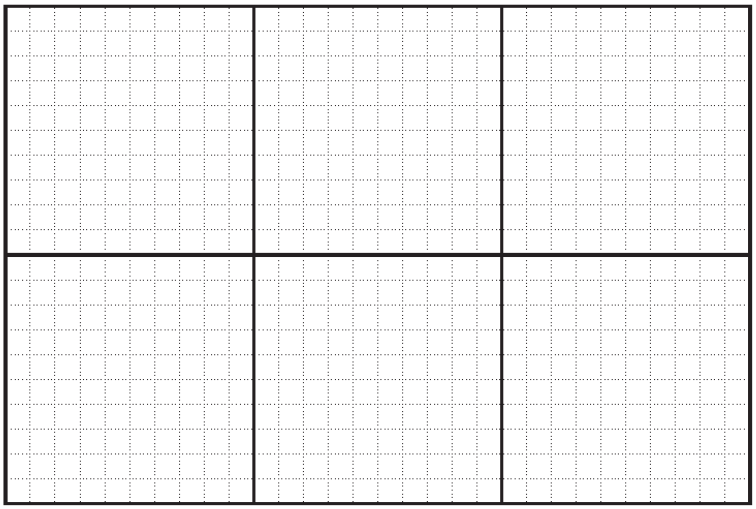
Solve the following division problems. Use the multiplication problems above and the grids to help.

a 322 ÷ 14 = _____



Sources: Great Minds Eureka Math,
Bridges in Mathematics,
and Illustrative Math

b 238 ÷ 14 = _____



Daily Task: (20 min)

Jessa has 23 one-dollar bills that she wants to divide equally between her 5 children.

i. How much money will each receive? How much money will Jessa have left over?

ii. Jessa exchanged the remaining one-dollar bills for dimes. If she divides the money equally between her 5 children, how much money will each child get?

A website has games available to purchase for $5 each. If Lita has $23, how many games can she purchase? Explain.

_____

_____

_____

A jug holds 5 gallons of water. How many jugs can Mark fill with 23 gallons of water? Explain.

_____

_____

_____

Exit Ticket: (5 min)

A class of 23 children will take a field trip. Each car can take 5 children. How many cars are needed to take all the children on the field trip? Explain.

_____

_____

_____

Write a division problem for 31 ÷ 4 where the answer is a mixed number. Show how to solve your problem.

Week 2 Lesson 4

Objective: I can add, subtract, multiply, and divide decimals to hundredths.

Daily Fluency: Complete the following division problems: (5 min)

12 ÷ 2 = _____	24 ÷ 6 = _____	18 ÷ 3 = _____	45 ÷ 5 = _____
120 ÷ 2 = _____	240 ÷ 6 = _____	180 ÷ 3 = _____	450 ÷ 5 = _____

Round to divide and estimate each quotient:

Problem	Rounded	Esimated Quotient
ex 123 ÷ 2	120 ÷ 2 = 60	123 ÷ 2 is about equal to 60.
a 177 ÷ 3		177 ÷ 3 is about equal to _____.
b 237 ÷ 6		237 ÷ 6 is about equal to _____.
c 452 ÷ 5		452 ÷ 5 is about equal to _____.

Daily Task: The table shows four people who earn the typical amount for their education level. (20 min)

Name	Level of Education	Weekly Income
Miley	High School Dropout	$440.50
Niko	High School Graduate	$650.35
Taylor	2-Year College Graduate	$771.25
Pinky	4-Year College Graduate	$1,099.20

1. How much more does Niko earn than Miley in one week?

Sources: Great Minds Eureka Math,
Bridges in Mathematics,
and Illustrative Math

2. If Taylor and Miley both work for 2 weeks, how much more will Taylor earn?

3. How much money will Pinky earn in a month? About how long will Miley have to work to earn the same amount?

Exit Ticket: (5 min)

To get full credit, you must show your work!

Add: 54.23 + 6.09	Add: 881.29 + .93
Subtract: 280.6 - 129.7 =	Subtract: 54.11 - 23.01 =

Week 2 Lesson 5

Objective: I can add, subtract, multiply, and divide decimals to hundredths.

Daily Fluency: Complete the following multiplication and division fact families. (5 min)

ex $40 \times 3 = 120$ $3 \times 40 = 120$ $120 \div 40 = 3$ $120 \div 3 = 40$	**a** $30 \times 5 = 150$	**b** $20 \times 6 = 120$	**c** $40 \times 7 = 280$

Use rounding and estimation to answer each question yes or no without doing all the calculations.

a Mrs. Jackson has 3 grandchildren who go to Park Heights Elementary School. At Back to School Night, she wanted to buy each of them 2 T-shirts with the school mascot on them. The T-shirts cost $18 each and she has $150 to spend. Can she buy 2 T-shirts for each grandchild?	◯ Yes ◯ No
b It costs $27 per person to go to an amusement park. Mr. Lee is taking his two children to the amusement park and he has $120 to spend. Can he afford for each of his children to bring a friend?	◯ Yes ◯ No
c Rachel is reading a book that is 293 pages long. If she reads 38 pages per night, will she be able to finish the book in a week?	◯ Yes ◯ No
d Dante's cousin Carl was bragging that he biked 82 miles last week. If Dante bikes 18 miles a day for 5 days, will he ride more miles than Carl did?	◯ Yes ◯ No

Sources: Great Minds Eureka Math,
Bridges in Mathematics,
and Illustrative Math

Daily Task: Estimate the product. Solve using an area model and the standard algorithm. Remember to express your products in standard form. (20 min)

a. 22 × 2.4 ≈ _____ × _____ = _____

2 4 (tenths)

× 2 2

b. 3.1 × 33 _____ × _____ = _____

3 1 (tenths)

× 3 3

The weight of 72 identical marbles is 183.6 grams. What is the weight of each marble? Explain how you know the decimal point of your quotient is placed reasonably.

_____

_____

_____

Exit Ticket: (5 min)

1. Michelle multiplied 3.4 × 52. She incorrectly wrote 1,768 as her product. Use words, numbers, and/or pictures to explain Michelle's mistake.

2. Divide and check your work using multiplication: 36.14 ÷ 13

DISTRICT OF COLUMBIA
PUBLIC SCHOOLS

Grade 5 Science: Week 2

Dear Students and Families,

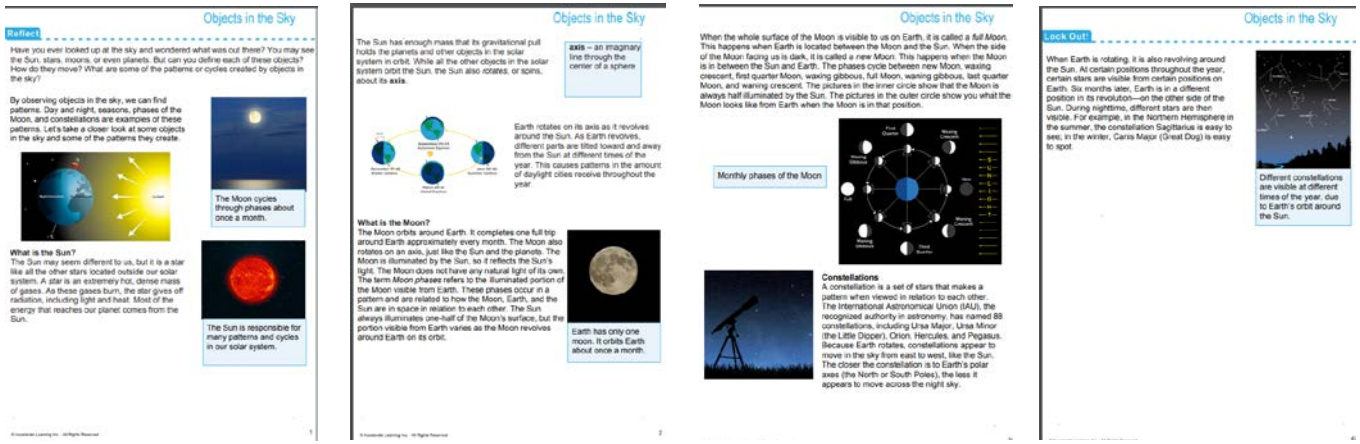
We hope you are safe and healthy while you are out of school and learning from home! In science, you will be reviewing, applying, and extending content from first semester. This week you will be focused on the topic ***Objects in the Sky*** from **Unit 1: Observing Our Sky**. The activities described below should be spread out throughout the week, but you can decide how best to organize your work. We recommend that you spend 20 minutes each day working on the Mission Log and Action Plan and 20 minutes per day working on activities that extend science learning and reinforces math/literacy skills and practices. Screenshots of handouts are included here, while full page versions of handouts are located at the end of the packet.

Part 1: Mission Briefing (Review)

During the first part of the week, you will review content from each of topic in the unit and apply it to a mission.

a. Read the **Mission Briefing** below:
   Your town wants to build a state-of-the-art planetarium combined with a thrill ride to attract tourists from all over the area. They want the planned "space experience" to be in 4-D with events seemingly happening right next to the visitors, making them not only see visual images but also feel as if they are flying into space, rotating like a planet, and revolving like Earth around the Sun. Viewers will feel a little of the heat of the scorching Sun and the coldness of space. The town wants people to have an incredible experience and, at the same time, learn something about the objects in our sky. Your mission is to help design an amazing space-experience show.

b. Review and complete the activities on the following student worksheets:



Objects in the Sky

Reflect

Have you ever looked up at the sky and wondered what was out there? You may see the Sun, stars, moons, or even planets. But can you define each of these objects? How do they move? What are some of the patterns or cycles created by objects in the sky?

By observing objects in the sky, we can find patterns. Day and night, seasons, phases of the Moon, and constellations are examples of these patterns. Let's take a closer look at some objects in the sky and some of the patterns they create.

The Moon cycles through phases about once a month.

What is the Sun?
The Sun may seem different to us, but it is a star like all the other stars located outside our solar system. A star is an extremely hot, dense mass of gases. As these gases burn, the star gives off radiation, including light and heat. Most of the energy that reaches our planet comes from the Sun.

The Sun is responsible for many patterns and cycles in our solar system.

Objects in the Sky

The Sun has enough mass that its gravitational pull holds the planets and other objects in the solar system in orbit. While all the other objects in the solar system orbit the Sun, the Sun also rotates, or spins, about its **axis**.

axis – an imaginary line through the center of a sphere

Earth rotates on its axis as it revolves around the Sun. As Earth revolves, different parts are tilted toward and away from the Sun at different times of the year. This causes patterns in the amount of daylight cities receive throughout the year.

What is the Moon?
The Moon orbits around Earth. It completes one full trip around Earth approximately every month. The Moon also rotates on an axis, just like the Sun and the planets. The Moon is illuminated by the Sun, so it reflects the Sun's light. The Moon does not have any natural light of its own. The term *Moon phases* refers to the illuminated portion of the Moon visible from Earth. These phases occur in a pattern and are related to how the Moon, Earth, and the Sun are in space in relation to each other. The Sun always illuminates one-half of the Moon's surface, but the portion visible from Earth varies as the Moon revolves around Earth on its orbit.

Earth has only one moon. It orbits Earth about once a month.

Objects in the Sky

When the whole surface of the Moon is visible to us on Earth, it is called a *full Moon*. This happens when Earth is located between the Moon and the Sun. When the side of the Moon facing us is dark, it is called a *new Moon*. This happens when the Moon is in between the Sun and Earth. The phases cycle between new Moon, waxing crescent, first quarter Moon, waxing gibbous, full Moon, waning gibbous, last quarter Moon, and waning crescent. The pictures in the inner circle show that the Moon is always half illuminated by the Sun. The pictures in the outer circle show you what the Moon looks like from Earth when the Moon is in that position.

Monthly phases of the Moon

Constellations
A constellation is a set of stars that makes a pattern when viewed in relation to each other. The International Astronomical Union (IAU), the recognized authority in astronomy, has named 88 constellations, including Ursa Major, Ursa Minor (the Little Dipper), Orion, Hercules, and Pegasus. Because Earth rotates, constellations appear to move in the sky from east to west, like the Sun. The closer the constellation is to Earth's polar axes (the North or South Poles), the less it appears to move across the night sky.

Objects in the Sky

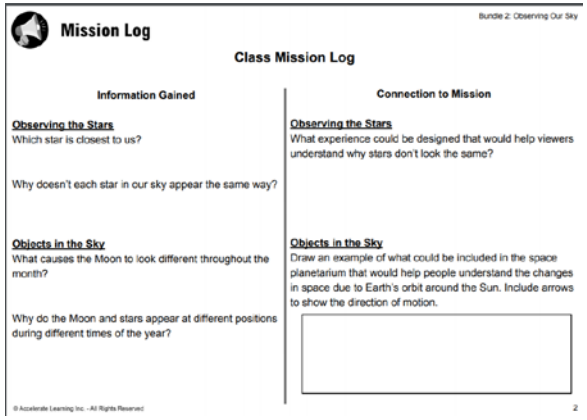
Look Out!

When Earth is rotating, it is also revolving around the Sun. At certain positions throughout the year, certain stars are visible from certain positions on Earth. Six months later, Earth is in a different position in its revolution—on the other side of the Sun. During nighttime, different stars are then visible. For example, in the Northern Hemisphere in the summer, the constellation Sagittarius is easy to see; in the winter, Canis Major (Great Dog) is easy to spot.

Different constellations are visible at different times of the year, due to Earth's orbit around the Sun.

Part 2: Mission Log (Explanation)

After you complete the Part 1, you should move on to the **Mission Log** (below). The Mission Log summarizes what you should know and invites you to record your science knowledge. Questions are included to guide your work.



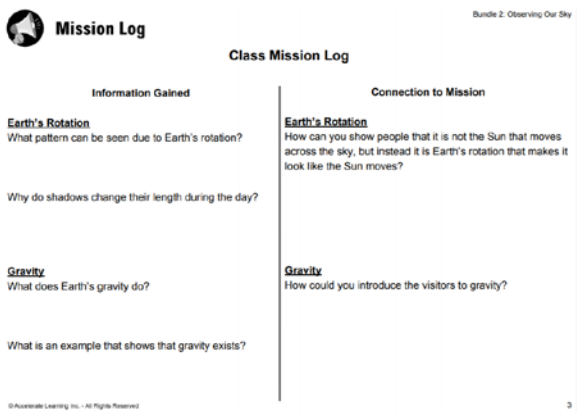
Mission Log

Bundle 2: Observing Our Sky

Class Mission Log

Information Gained	Connection to Mission
Observing the Stars Which star is closest to us? Why doesn't each star in our sky appear the same way?	**Observing the Stars** What experience could be designed that would help viewers understand why stars don't look the same?
Objects in the Sky What causes the Moon to look different throughout the month? Why do the Moon and stars appear at different positions during different times of the year?	**Objects in the Sky** Draw an example of what could be included in the space planetarium that would help people understand the changes in space due to Earth's orbit around the Sun. Include arrows to show the direction of motion.

2



Mission Log

Bundle 2: Observing Our Sky

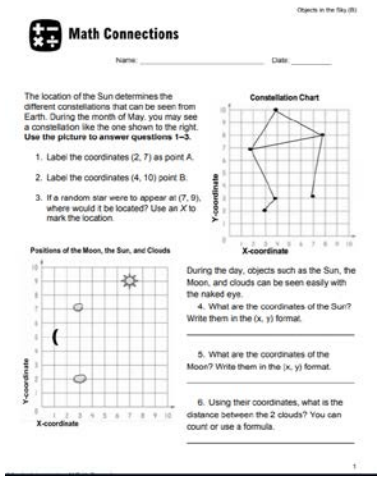
Class Mission Log

Information Gained	Connection to Mission
Earth's Rotation What pattern can be seen due to Earth's rotation? Why do shadows change their length during the day?	**Earth's Rotation** How can you show people that it is not the Sun that moves across the sky, but instead it is Earth's rotation that makes it look like the Sun moves?
Gravity What does Earth's gravity do? What is an example that shows that gravity exists?	**Gravity** How could you introduce the visitors to gravity?

3

Part 3: Math Connections (Extension)

In order to add some variety to your work, you will also complete the selected **Math Connections** activity below:



Objects in the Sky (B)

Math Connections

Name: _____ Date: _____

The location of the Sun determines the different constellations that can be seen from Earth. During the month of May, you may see a constellation like the one shown to the right. **Use the picture to answer questions 1–3.**

1. Label the coordinates (2, 7) as point A.
2. Label the coordinates (4, 10) point B.
3. If a random star were to appear at (7, 9), where would it be located? Use an *X* to mark the location.

Constellation Chart

Y-coordinate

X-coordinate

Positions of the Moon, the Sun, and Clouds

Y-coordinate

X-coordinate

During the day, objects such as the Sun, the Moon, and clouds can be seen easily with the naked eye.

4. What are the coordinates of the Sun? Write them in the (x, y) format.

_____

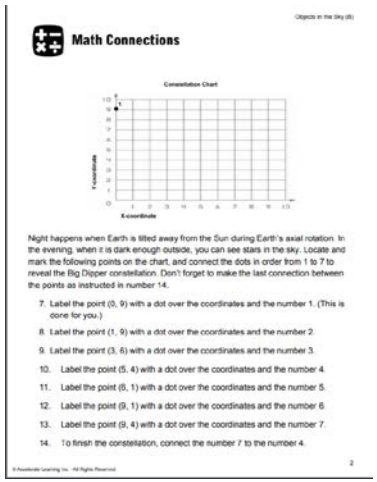
5. What are the coordinates of the Moon? Write them in the (x, y) format.

_____

6. Using their coordinates, what is the distance between the 2 clouds? You can count or use a formula.

_____

1



Objects in the Sky (B)

Math Connections

Constellation Chart

Y-coordinate

X-coordinate

Night happens when Earth is tilted away from the Sun during Earth's axial rotation. In the evening, when it is dark enough outside, you can see stars in the sky. Locate and mark the following points on the chart, and connect the dots in order from 1 to 7 to reveal the Big Dipper constellation. Don't forget to make the last connection between the points as instructed in number 14.

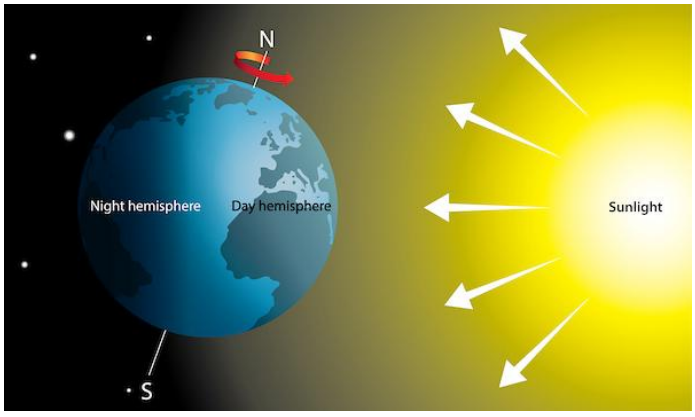
7. Label the point (0, 9) with a dot over the coordinates and the number 1. (This is done for you.)
8. Label the point (1, 9) with a dot over the coordinates and the number 2.
9. Label the point (3, 6) with a dot over the coordinates and the number 3.
10. Label the point (5, 4) with a dot over the coordinates and the number 4.
11. Label the point (6, 1) with a dot over the coordinates and the number 5.
12. Label the point (9, 1) with a dot over the coordinates and the number 6.
13. Label the point (9, 4) with a dot over the coordinates and the number 7.
14. To finish the constellation, connect the number 7 to the number 4.

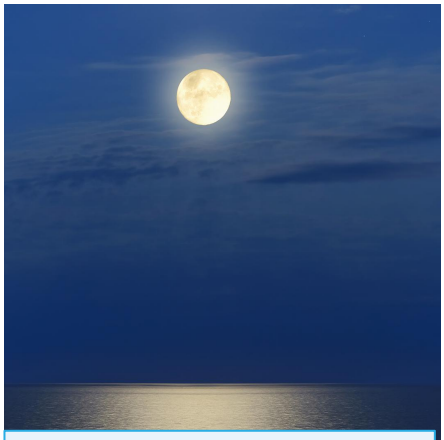
2

Reflect

Have you ever looked up at the sky and wondered what was out there? You may see the Sun, stars, moons, or even planets. But can you define each of these objects? How do they move? What are some of the patterns or cycles created by objects in the sky?

By observing objects in the sky, we can find patterns. Day and night, seasons, phases of the Moon, and constellations are examples of these patterns. Let's take a closer look at some objects in the sky and some of the patterns they create.

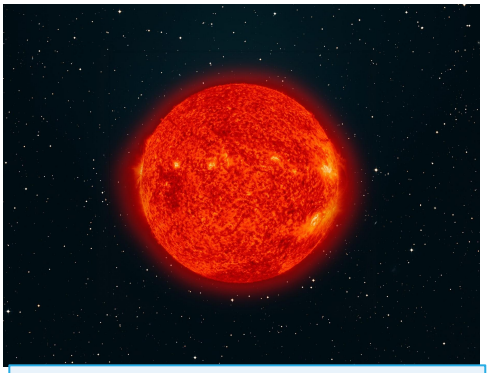




The Moon cycles through phases about once a month.

What is the Sun?

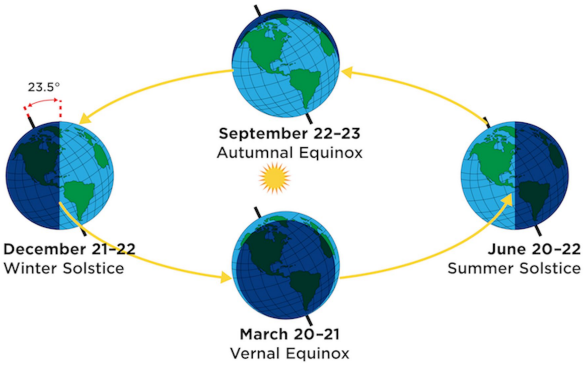
The Sun may seem different to us, but it is a star like all the other stars located outside our solar system. A *star* is an extremely hot, dense mass of gases. As these gases burn, the star gives off radiation, including light and heat. Most of the energy that reaches our planet comes from the Sun.



The Sun is responsible for many patterns and cycles in our solar system.

The Sun has enough mass that its gravitational pull holds the planets and other objects in the solar system in orbit. While all the other objects in the solar system orbit the Sun, the Sun also *rotates*, or spins, about its **axis**.

axis – an imaginary line through the center of a sphere



Earth rotates on its axis as it revolves around the Sun. As Earth revolves, different parts are tilted toward and away from the Sun at different times of the year. This causes patterns in the amount of daylight cities receive throughout the year.

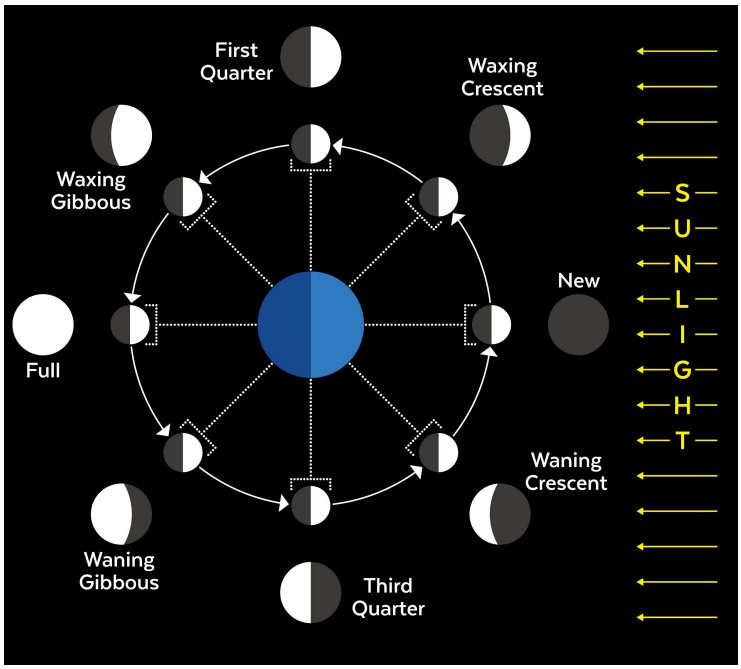
What is the Moon?

The Moon orbits around Earth. It completes one full trip around Earth approximately every month. The Moon also rotates on an axis, just like the Sun and the planets. The Moon is illuminated by the Sun, so it reflects the Sun's light. The Moon does not have any natural light of its own. The term *Moon phases* refers to the illuminated portion of the Moon visible from Earth. These phases occur in a pattern and are related to how the Moon, Earth, and the Sun are in space in relation to each other. The Sun always illuminates one-half of the Moon's surface, but the portion visible from Earth varies as the Moon revolves around Earth on its orbit.

Earth has only one moon. It orbits Earth about once a month.

When the whole surface of the Moon is visible to us on Earth, it is called a *full Moon*. This happens when Earth is located between the Moon and the Sun. When the side of the Moon facing us is dark, it is called a *new Moon*. This happens when the Moon is in between the Sun and Earth. The phases cycle between new Moon, waxing crescent, first quarter Moon, waxing gibbous, full Moon, waning gibbous, last quarter Moon, and waning crescent. The pictures in the inner circle show that the Moon is always half illuminated by the Sun. The pictures in the outer circle show you what the Moon looks like from Earth when the Moon is in that position.

Monthly phases of the Moon

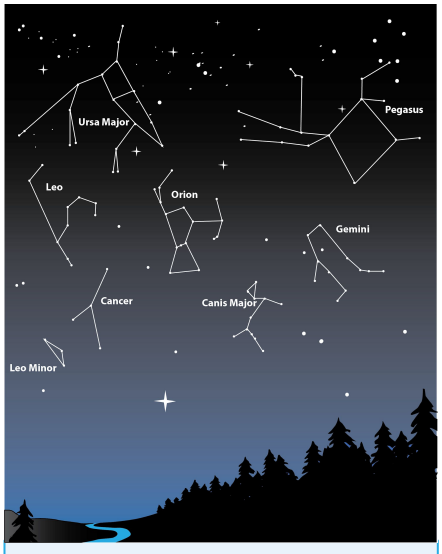


Constellations

A constellation is a set of stars that makes a pattern when viewed in relation to each other. The International Astronomical Union (IAU), the recognized authority in astronomy, has named 88 constellations, including Ursa Major, Ursa Minor (the Little Dipper), Orion, Hercules, and Pegasus. Because Earth rotates, constellations appear to move in the sky from east to west, like the Sun. The closer the constellation is to Earth's polar axes (the North or South Poles), the less it appears to move across the night sky.

Look Out!

When Earth is rotating, it is also revolving around the Sun. At certain positions throughout the year, certain stars are visible from certain positions on Earth. Six months later, Earth is in a different position in its revolution—on the other side of the Sun. During nighttime, different stars are then visible. For example, in the Northern Hemisphere in the summer, the constellation Sagittarius is easy to see; in the winter, Canis Major (Great Dog) is easy to spot.

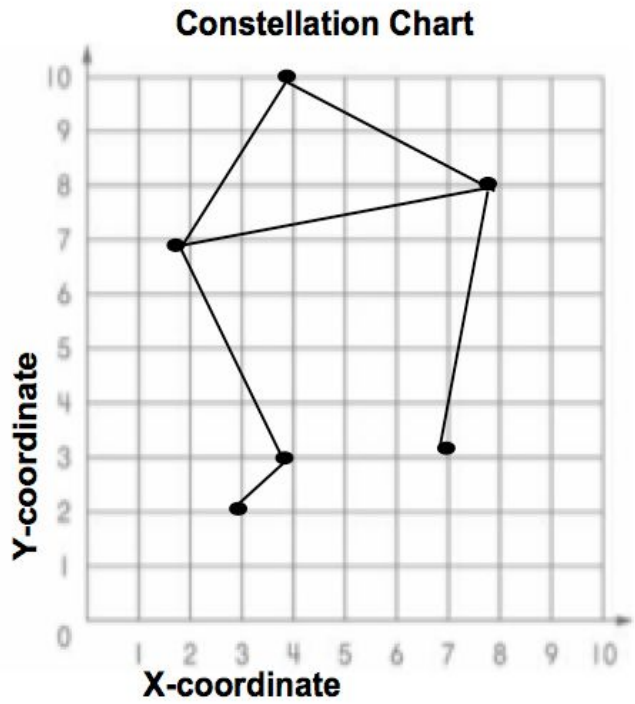


Different constellations are visible at different times of the year, due to Earth's orbit around the Sun.

Math Connections

Name: _____ Date: _____

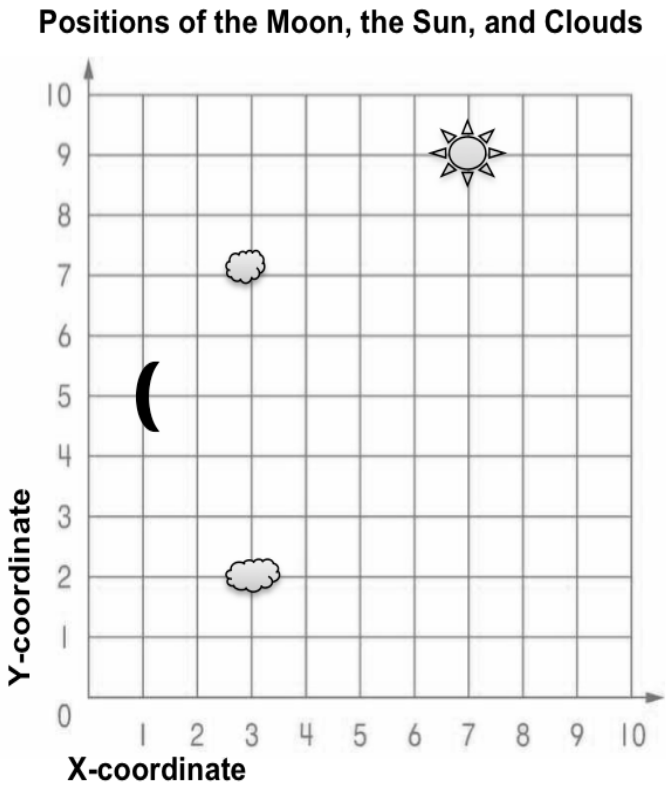
The location of the Sun determines the different constellations that can be seen from Earth. During the month of May, you may see a constellation like the one shown to the right. **Use the picture to answer questions 1–3.**



1. Label the coordinates (2, 7) as point A.

2. Label the coordinates (4, 10) point B.

3. If a random star were to appear at (7, 9), where would it be located? Use an *X* to mark the location.



During the day, objects such as the Sun, the Moon, and clouds can be seen easily with the naked eye.

4. What are the coordinates of the Sun? Write them in the (x, y) format.

_____

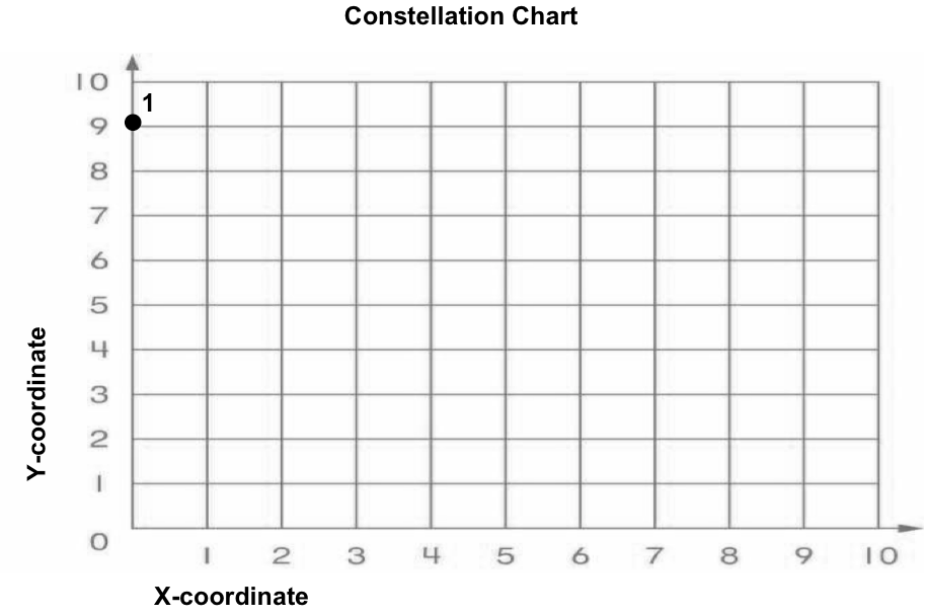
5. What are the coordinates of the Moon? Write them in the (x, y) format.

_____

6. Using their coordinates, what is the distance between the 2 clouds? You can count or use a formula.

_____

Math Connections



Night happens when Earth is tilted away from the Sun during Earth's axial rotation. In the evening, when it is dark enough outside, you can see stars in the sky. Locate and mark the following points on the chart, and connect the dots in order from 1 to 7 to reveal the Big Dipper constellation. Don't forget to make the last connection between the points as instructed in number 14.

7. Label the point (0, 9) with a dot over the coordinates and the number 1. (This is done for you.)
8. Label the point (1, 9) with a dot over the coordinates and the number 2.
9. Label the point (3, 6) with a dot over the coordinates and the number 3.
10. Label the point (5, 4) with a dot over the coordinates and the number 4.
11. Label the point (6, 1) with a dot over the coordinates and the number 5.
12. Label the point (9, 1) with a dot over the coordinates and the number 6.
13. Label the point (9, 4) with a dot over the coordinates and the number 7.
14. To finish the constellation, connect the number 7 to the number 4.

DISTRICT OF COLUMBIA
PUBLIC SCHOOLS

Distance Learning Plan

Dual Language
5th Grade
Week 3

Inmersión Doble/Dual Language

Plan de estudios a distancia para quinto grado – Semana 3

Fifth Grade Distance Learning Plan – Week 3

Dear Families,

DCPS is committed to providing materials to encourage students to continue learning during this time of school closure. For students in Dual Language programs, we are providing resources for Spanish Language Arts and literacy to be completed in addition to the materials for Math, English Language Arts, Social Studies, Science, and other areas of study.

The English Language Arts (ELA) team has developed student projects around different themes, and the Spanish resources are aligned to the same themes. Our expectation for dual language students is that they complete one project for English Language Arts one week, and one project for Spanish Language Arts the following week. They do not need to do two language arts projects in one week!

Students should bring their packets and projects and give them to their teacher on the day they return to school.

The DCPS Dual Language Team

Estimadas familias,

DCPS se compromete a proporcionar materiales para animar a nuestros estudiantes a seguir aprendiendo durante este tiempo del cierre de las escuelas. Para los estudiantes en programas de inmersión doble, estamos proporcionando recursos en español para artes de lenguaje, además de los materiales para matemáticas, inglés, estudios sociales, ciencias y otras áreas de estudio.

El equipo de English Language Arts (ELA) ha desarrollado proyectos de temas diferentes, y los recursos de artes de lenguaje en español tocan los mismos temas. Nuestra expectativa para los estudiantes de inmersión doble es que completen un proyecto para artes del lenguaje en inglés una semana, y un proyecto para artes del lenguaje en español la semana siguiente. ¡No necesitan hacer dos proyectos de artes del lenguaje en una semana!

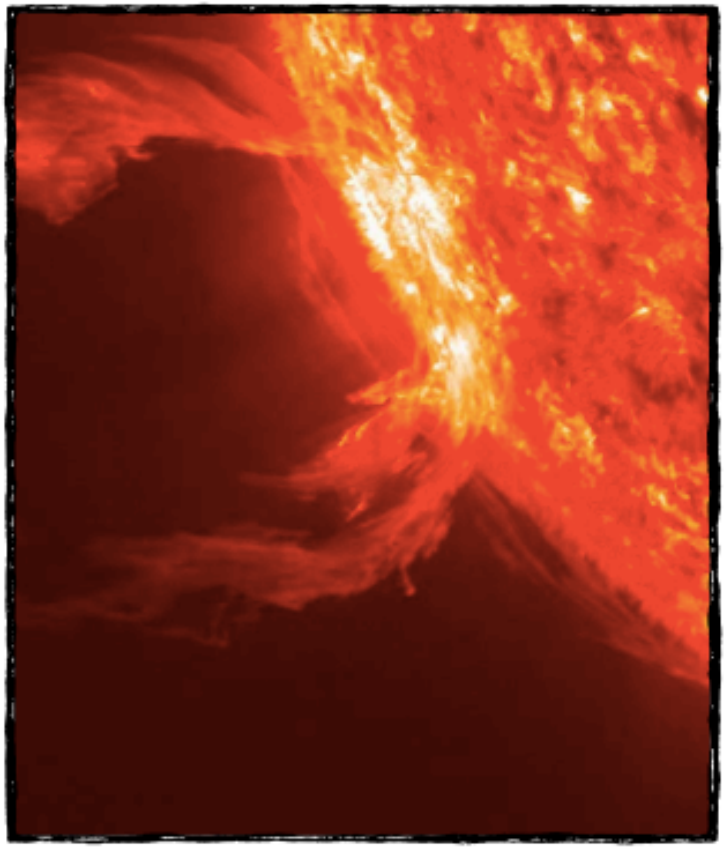
Los estudiantes deben traer sus paquetes y proyectos y entregárselos a su maestro el día que regresen a la escuela.

El equipo de programas de inmersión doble de EPDC

Lectura para apoyar los estudios temáticos / *Resources to Support the English Unit*
Libro: Nuestro sistema solar
Estudiantes: Esta semana vas a estar trabajando con el tema El universo. Incluido en tu paquete es un libro acerca del tema. • Cada día debes leer independientemente por 20 minutos del libro incluido en el paquete. • En tu paquete de lectura en inglés, tienes un proyecto temático que completar. Como estas aprendiendo en dos idiomas, debes completar el proyecto de una semana en inglés y el de la otra semana en español usando los recursos del paquete. Padres: Si tienen acceso al internet, favor de registrarse para esto recursos bilingües adicionales - • Getepic.com (30 días gratis con libros en inglés y español) • ReadingA-Z.com (14 días gratis con libros en inglés y español) *Students: This week you will be learning about The Universe.* • *Each day you should read the Spanish book included in this packet for 20 minutes. And since you are bilingual, you should also read in 20 minutes from your English packet.* • *In your English reading packet, there is a theme-related project to complete. Since you are learning in two languages, one week you should complete the project in English and one week in Spanish.* *Parents: If you have internet access, please register for additional free bilingual resources at the sites below.* • *Getepic.com (30-day free trial, books in Spanish and English)* • *ReadingA-Z.com (14-day free trial, books in Spanish and English)*

Nuestro sistema solar

Un libro de lectura de Reading A–Z, Nivel S
Número de palabras: 2,125



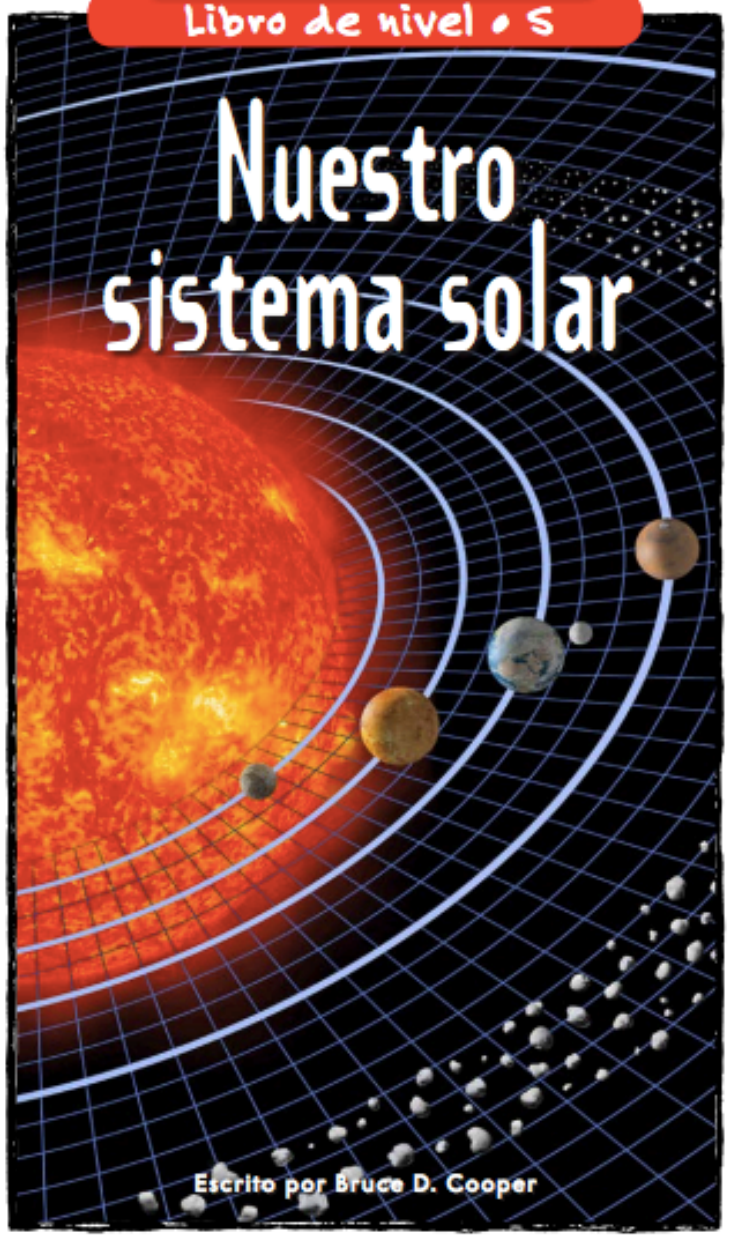
Reading A-Z

Visita **www.readinga-z.com**
para obtener miles de libros y materiales.

Libro original en inglés de nivel S

Libro de nivel • S

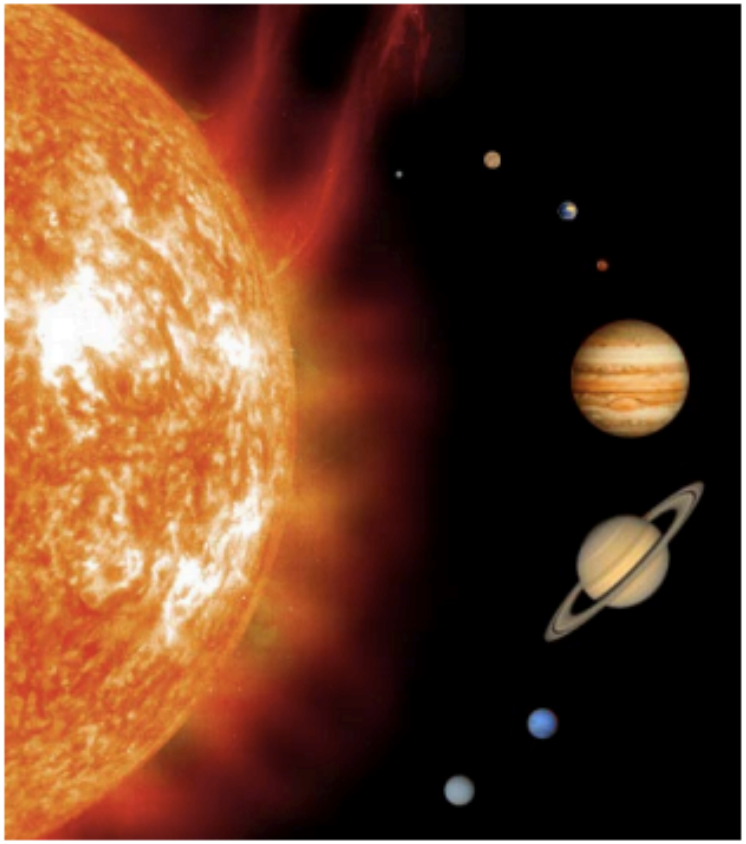
Nuestro sistema solar



Escrito por Bruce D. Cooper

www.readinga-z.com

Nuestro sistema solar



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Portada, página de título, páginas 4, 7, 10: cortesía de NASA/JPL; contraportada: cortesía de SDO/AIA; página 3: cortesía de NASA/ESA/ The Hubble Heritage Team (STScI/AURA); página 5: cortesía de Solar & Heliospheric Observatory/ Extreme Ultraviolet Imaging Telescope/NASA/ Goddard Space Flight Centro; página 6: cortesía de SOHO (ESA & NASA)/ EIT Consortium; página 8: cortesía de NASA/Johns Hopkins University Applied Physics Laboratory/Arizona State University/Carnegie Institution of Washington. Imagen cortesía de Science/AAAS; páginas 9, 13: cortesía de NASA/JPL/USGS; página 11: cortesía de NASA/GSFC/GOES/NOAA; páginas 12, 17, 21: cortesía de NASA; página 14: cortesía de NASA y The Hubble Heritage Team (STScI/AURA); página 15: cortesía de NASA/JPL-Caltech/Universidad de Arizona; página 16: cortesía de NASA, ESA, y E. Karkoschka (Universidad de Arizona); página 18: cortesía de NASA/JPL/Space Science Institute; página 19: cortesía de NASA, ESA, y the Hubble Heritage Team (STScI/AURA); página 20: cortesía de Erich Karkoschka (Universidad de Arizona) y NASA; página 22: cortesía de NASA, ESA, y M. Buie (Southwest Research Institute); página 23: cortesía de ESA - AOES Medialab; página 24: © WIYN/NOAO/AURA/NSF/epa/Corbis; página 25 (centro): cortesía de ESA/ LFI & HFI Consortia; página 25 (derecha): cortesía de ESA – D. Ducros

Nuestro sistema solar
Libro de lectura Nivel S
Our Solar System
Libro original en inglés, Nivel S

Escrito por Bruce D. Cooper
Manipulación de imagen digital por Randy Gates
Traducido por Lorena F. Di Bello

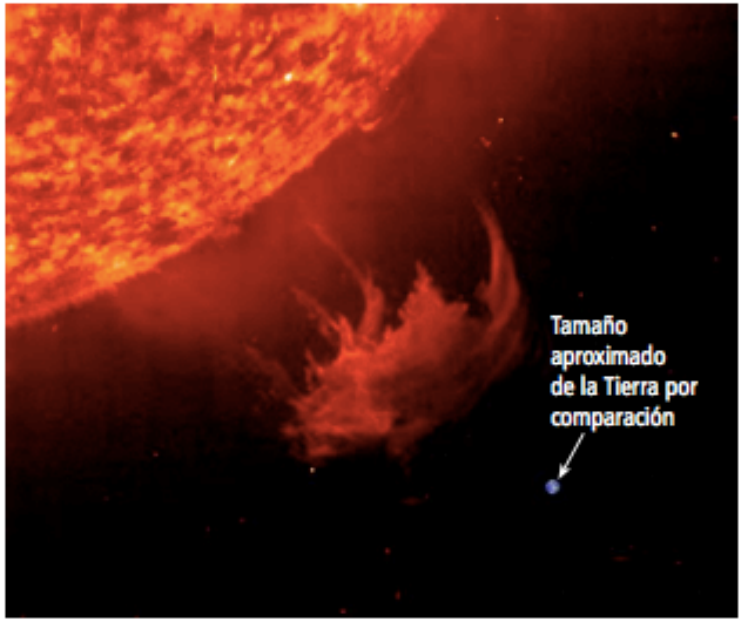
www.readinga-z.com

Tabla de contenido

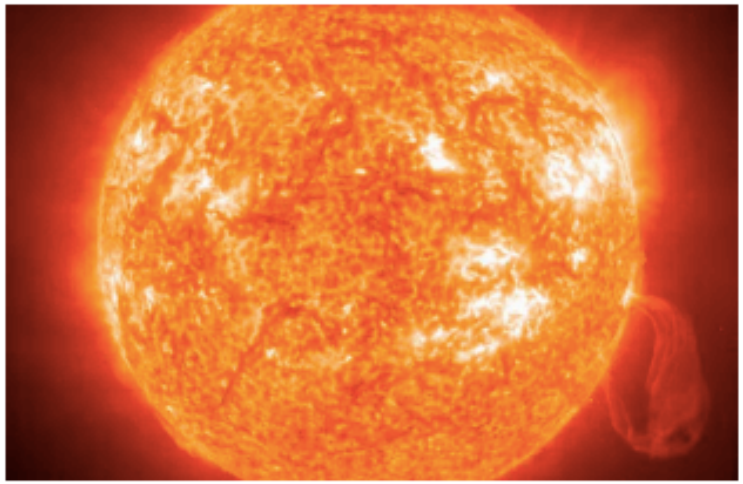
Introducción

Nuestro sistema solar está formado por el Sol, ocho planetas oficiales, varios planetas enanos y cientos de satélites planetarios o lunas. También contiene cometas, asteroides y nubes de gas. El Sol es el centro del sistema solar. Todo lo demás en el sistema solar se mueve, u **orbita**, alrededor del Sol. Mercurio, Venus, la Tierra y Marte son planetas internos y rocosos. Están formados por materiales duros. Los planetas externos son Júpiter, Saturno, Urano y Neptuno. Se les conoce como los gigantes de gas y están formados mayormente por gases. Los planetas externos son cientos de veces más grandes que la Tierra.

Para darte una idea del tamaño de las cosas en nuestro sistema solar, imagina que la Tierra es una uva. Si la Tierra fuera del tamaño de una uva, la Luna sería del tamaño de un guisante. El Sol sería grande como una bola donde un hombre adulto se podría meter parado adentro. Júpiter, el planeta más grande, sería del tamaño de una toronja, mientras que Saturno, el segundo planeta más grande, sería del tamaño de una naranja. Urano y Neptuno serían del tamaño de unos limones.



El diámetro de la Tierra es de unos 13,000 kilómetros (8,100 millas). El diámetro del Sol es de unos 1.4 millones de kilómetros (870,000 millas). ¿Cuántas veces más grande es el diámetro del Sol comparado con el de la Tierra?

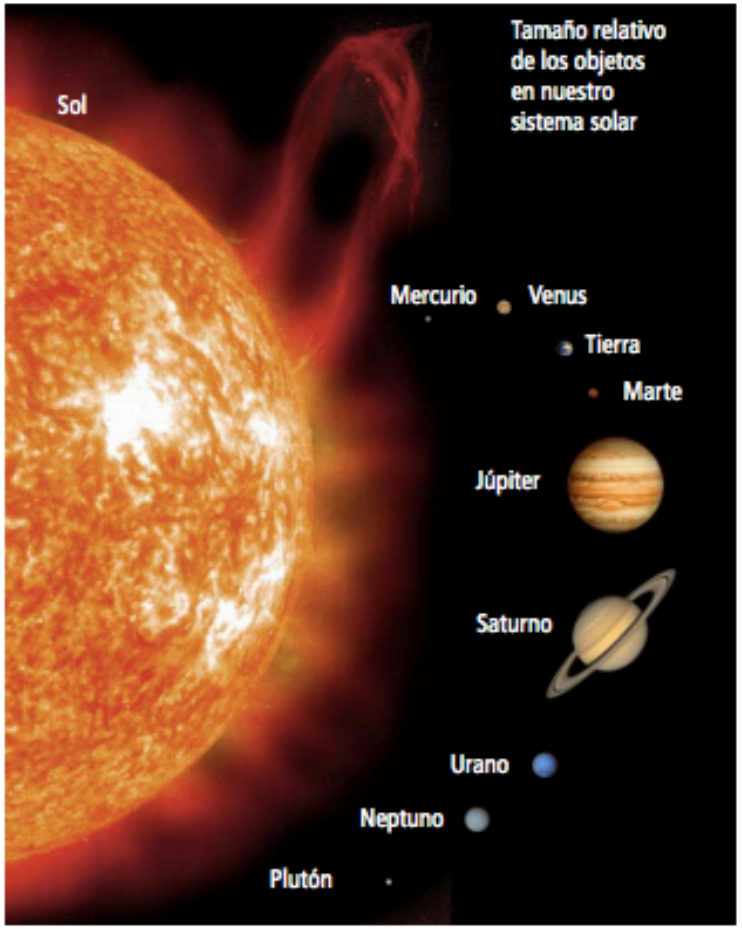


La temperatura de la superficie del Sol es de unos 6,000 grados Celsius (10,832 grados Fahrenheit). El núcleo del Sol tiene unos 15,000,000 de grados Celsius (27,000,032 grados Fahrenheit).

El Sol

El Sol es una inmensa bola de gas ardiente que despide energía hacia el sistema solar. El Sol juega un rol muy importante en nuestra vida diaria; proporciona la energía que sustenta toda la vida en la Tierra. El Sol es el causante de las estaciones, los climas, las corrientes oceánicas, la circulación de aire y el tiempo atmosférico. Sin la energía solar, las plantas no podrían crecer ni producir alimento. Tampoco habría gas, petróleo ni carbón, que son los **combustibles fósiles** de la Tierra. Los combustibles fósiles se forman a través de millones de años a partir de plantas y animales muertos.

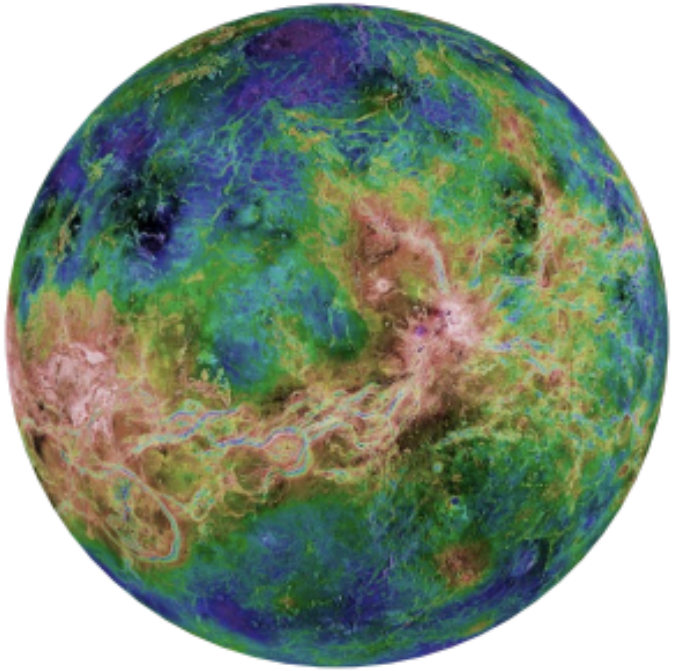
El Sol es solo una de las miles de millones de estrellas. Existe hace unos 4.6 mil millones de años. Continuará produciendo energía por otros 5 mil millones de años. Antes de morir, se expandirá y absorberá muchos de los planetas internos. Luego, se encogerá y se transformará en una bola mucho más pequeña.



Esta imagen de cerca tomada por la NASA en el vuelo del Discovery en 2008, muestra la enorme cuenca de impacto Caloris en Mercurio.

Mercurio

Mercurio es el planeta más cercano al Sol. Es el planeta más pequeño de nuestro sistema solar. Mercurio tarda solo 88 días terrestres en realizar una **órbita** completa alrededor del Sol. (Por comparación, la Tierra tarda 365 días, o un año, en orbitar alrededor del Sol). Como todos los demás planetas, Mercurio gira como un trompo mientras se mueve alrededor del Sol. Gira muy despacio. Cada giro de un planeta es un día en ese planeta. Un día en Mercurio es 59 veces más largo que un día terrestre. Como Mercurio gira, o rota, tan despacio, hace mucho calor durante el día y mucho frío durante la noche.

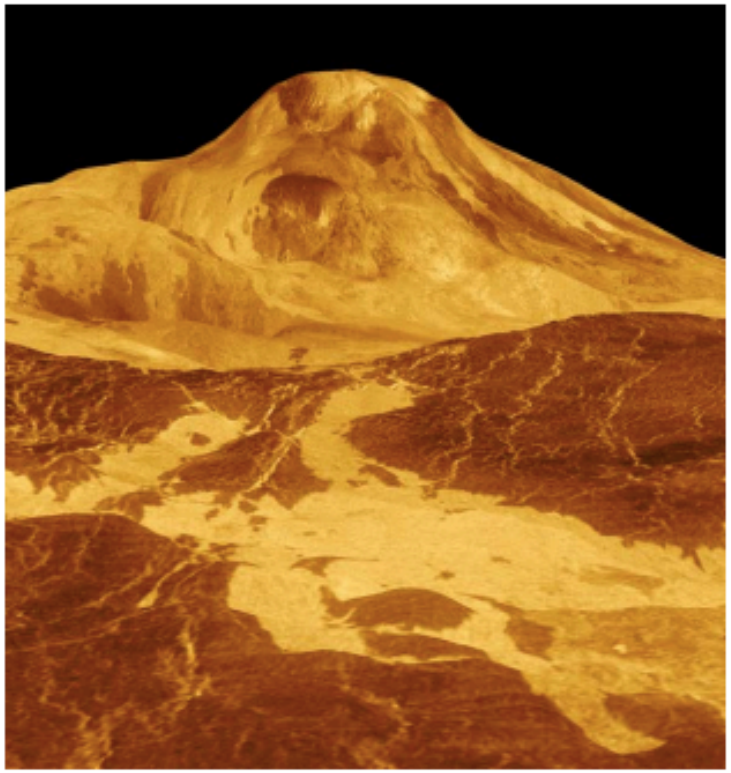


Además de tener un aire muy denso para respirar, los científicos descubrieron que Venus rota hacia atrás. Eso significa que en Venus, el Sol sale por el oeste y se pone por el este. Los colores usados en esta imagen de la misión del Magallanes representan las diferentes elevaciones de la superficie de Venus.

Venus

Venus y la Tierra tienen un tamaño similar. Pero la Tierra y Venus son muy diferentes. Venus está cubierto por unas capas de nubes que son más gruesas que las nubes de la Tierra. Estas nubes atrapan la mayor parte del calor del Sol. La temperatura en Venus es muy, muy caliente, más de cuatro veces más caliente que el agua hirviendo.

Además de atrapar el calor, las nubes de Venus reflejan la luz solar. Esto hace que Venus sea uno de los objetos más brillantes del cielo. La presión del aire en Venus es 90 veces mayor que en la Tierra. Por esta razón, las sondas espaciales que aterrizan en Venus dejan de funcionar en pocas horas. Venus rota todavía más despacio que Mercurio. Un día en Venus es igual a 243 días de la Tierra.



Maat Mons, un volcán de Venus, mide 8 km (5 millas) de alto. Es muy similar al tipo de volcanes que se encuentran en Hawaii.

La Tierra

La Tierra es un planeta muy especial porque es nuestro hogar y también porque es el único planeta de nuestro sistema solar que puede sustentar vida. La diferencia más importante entre la Tierra y los otros planetas es la abundancia de agua líquida. El agua cubre cerca del 70 por ciento de la Tierra. La Tierra da una vuelta aproximadamente una vez cada 24 horas (un día). Completa una órbita alrededor del Sol aproximadamente cada 365 días (un año).

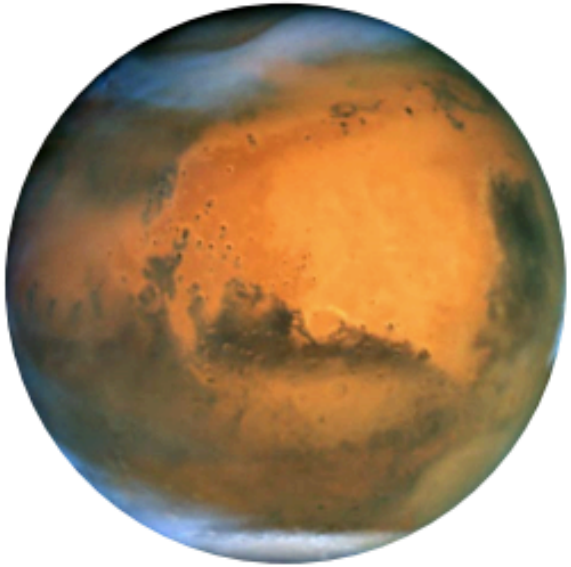
La **atmósfera** de la Tierra está formada por unos gases que los seres vivos necesitamos para mantenernos vivos. La atmósfera nos protege de la mayoría de los rayos nocivos del Sol. También nos ayuda a protegernos de los meteoros al hacer que se incendien antes de alcanzar la superficie terrestre. La Tierra tiene un satélite natural, la Luna.

¿Sabías que?

La atmósfera de la Tierra es muy delgada. Si la Tierra fuera una manzana, la atmósfera sería tan gruesa como la cáscara de la manzana.

La Luna

La Luna tiene aproximadamente un cuarto del tamaño de la Tierra. Nos refleja la luz del Sol a nosotros. Muchos científicos creen que la Luna era inicialmente parte de la Tierra y se desprendió por una enorme colisión del espacio. Algunas pruebas demuestran que hay agua hielo en la superficie de la Luna. Las mareas de los océanos de la Tierra son causadas por la **fuerza de gravedad** de la Luna.



Marte

Marte es el cuarto planeta después del Sol. Se lo conoce como el planeta rojo por la gran cantidad de polvo de color óxido que hay en su superficie. Marte es el más similar a la Tierra de todos los planetas de nuestro sistema solar. Marte tiene estaciones similares a las nuestras y el suelo allí es similar al suelo de la Tierra. Pero hay muy poco oxígeno o vapor de agua en la atmósfera de Marte. El clima de Marte cambia ampliamente entre las estaciones. Las temperaturas en su superficie pueden ir de los 30 °Celsius (86 °F) en el verano, a -130 °Celsius (-202 °F) en el invierno.

Marte a menudo tiene vientos que soplan hasta a 200 kilómetros por hora (120 millas por hora). Estos vientos causan grandes tormentas de polvo que le dan un color rosado a la atmósfera del planeta. Hay casquetes polares en ambos polos de Marte. El del norte está formado mayormente por hielo que nunca se derrite, mientras que el polo del sur está formado por dióxido de carbono, el cual se transforma de sólido a gas durante el verano marciano. Marte tiene dos lunas pequeñas, Fobos y Deimos. Un año de Marte es casi tan largo como dos años terrestres. Un día en Marte dura solo treinta minutos más que un día en la Tierra.

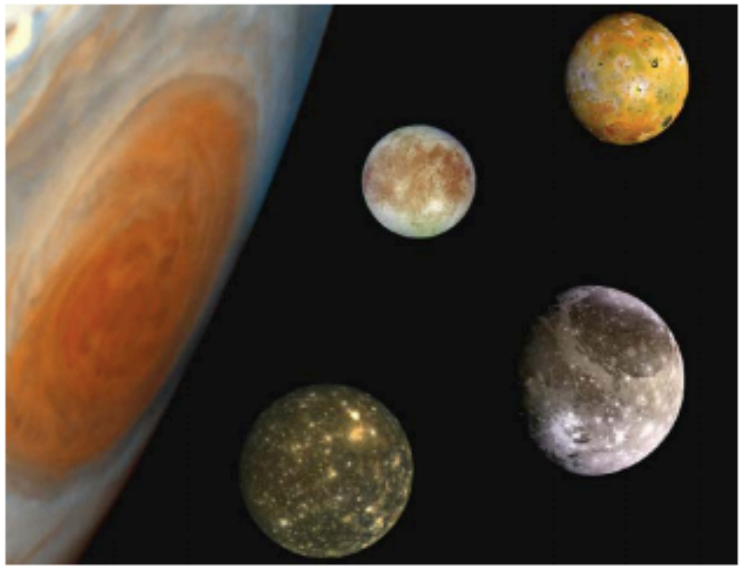
Los científicos están estudiando los barrancos del cráter Hale de Marte para descubrir si las cambiantes formas de su superficie son creadas por los movimientos de agua líquida.

Júpiter y su luna, Ganímedes, fotografiados el 9 de abril de 2007, por el telescopio espacial Hubble.

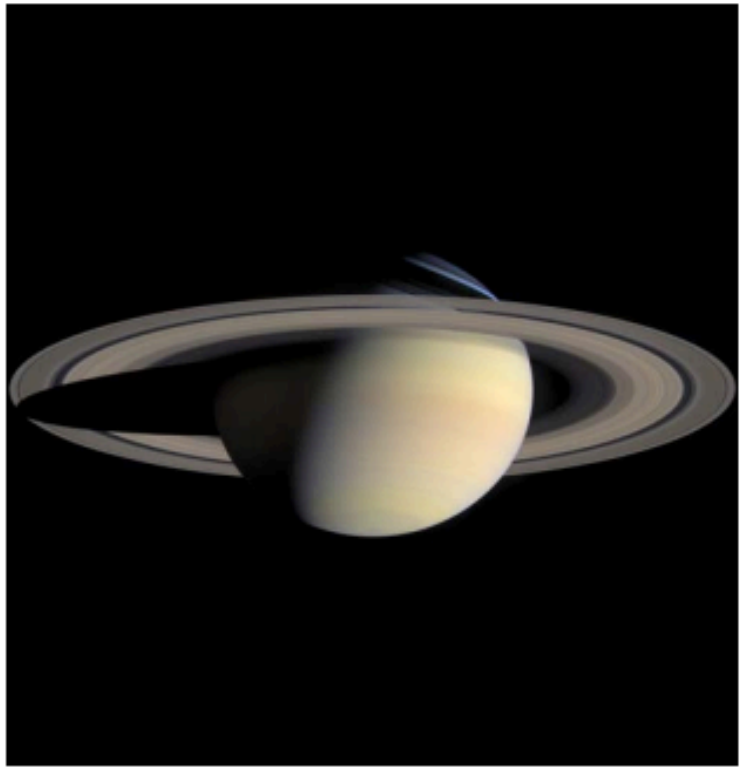
Júpiter

Júpiter es el planeta más grande de nuestro sistema solar. Es como una estrella en muchos sentidos porque está formado mayormente por nubes de gas. Las nubes de Júpiter forman unas bandas que tienen vientos muy fuertes y son siempre muy tormentosas. Una tormenta gigante rota en la dirección contraria a las agujas del reloj a una velocidad constante de 360 kilómetros por hora (225 millas por hora), y se comporta casi como un huracán. Se le denomina la Gran Mancha Roja. Es fácilmente visible y tiene aproximadamente tres veces el tamaño de la Tierra. La temperatura de Júpiter es muy fría en la parte superior de las nubes. En su núcleo, hace mucho más calor que en la superficie de la Tierra.

En cierta forma, Júpiter es como un mini sistema solar porque es muy grande y tiene cuatro lunas grandes y docenas de lunas más pequeñas orbitando a su alrededor. También tiene varios anillos delgados en su ecuador. Los científicos creen que si Júpiter hubiera crecido más durante su desarrollo, se podría haber convertido en una estrella en vez de en un planeta. Júpiter gira con bastante velocidad para ser un planeta tan grande. Un día en Júpiter es aproximadamente de 10 horas. Júpiter tarda casi doce años terrestres en completar su órbita alrededor del Sol.



La constante tormenta de polvo de Júpiter, la Gran Mancha Roja, es muy visible. Las cuatro lunas de Júpiter (la relación de sus tamaños es aproximada) se llaman: Io, Europa, Ganímedes y Calisto (de arriba abajo).

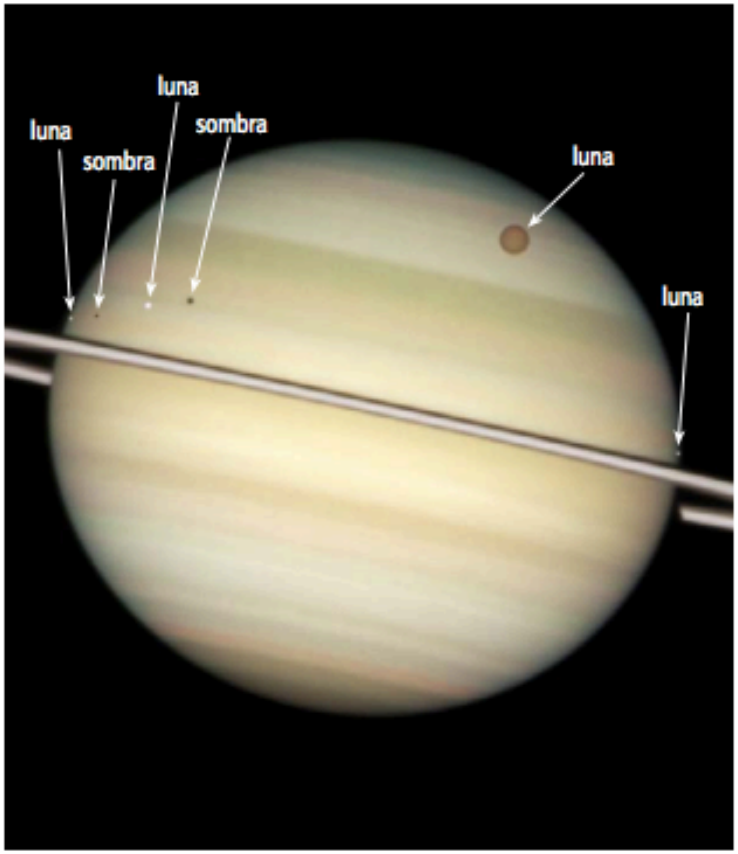


Los anillos espectaculares de Saturno están compuestos mayormente por agua helada. Cada anillo promedia unos 9 metros (30 pies) de profundidad pero algunas protuberancias y puntos tienen más de tres kilómetros (2 millas) de altura.

Saturno

Saturno es el sexto planeta del sistema solar. Es fácil de reconocer por su gran y visible sistema de anillos. Los anillos están formados por millones de pedazos de hielo y gases congelados. Saturno también tiene docenas de lunas pequeñas que orbitan a su alrededor.

Saturno también es único por otra razón. Pesa muy poco por lo grande que es. Saturno flotaría en una piscina, si existiera una tan grande como para contenerlo. Saturno gira muy rápidamente, haciendo que un día en Saturno sea de diez horas y media.

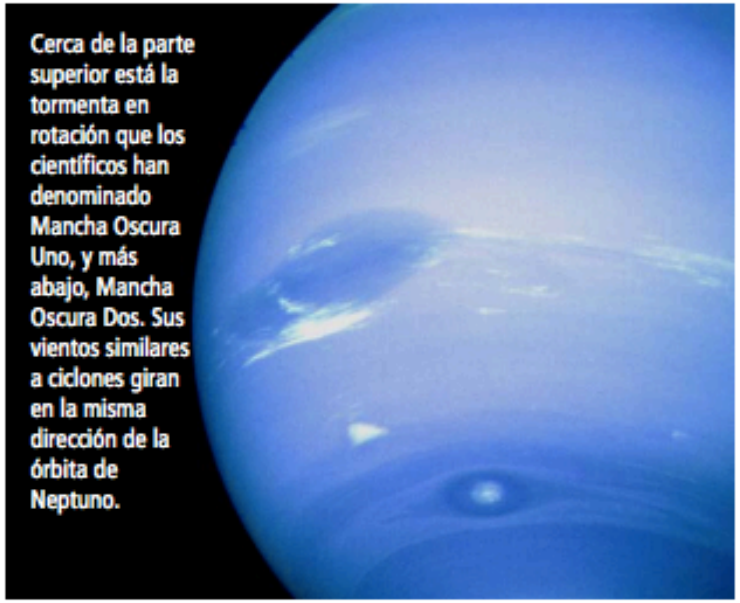


Frente al planeta Saturno pasan cuatro de sus lunas. Encélado y Dione, ubicadas en el extremo izquierdo, proyectan sombras, mientras que la gran Titán y la pequeña Mimas, que se encuentran en el extremo derecho, no lo hacen.

Algunos de los anillos y lunas de Urano se pueden ver con mucha claridad en esta imagen tomada por el telescopio Hubble. Las manchas brillantes en el extremo derecho del planeta son nubes altas.

Urano

Urano es el séptimo planeta del sistema solar y el tercero más grande. Parece de color verde azulado por el gas metano de su atmósfera. Urano parece rodar alrededor del Sol porque está muy inclinado. Los científicos piensan que esto podría deberse a que chocó contra otro objeto del tamaño de un planeta mucho tiempo atrás. Urano tiene por lo menos veintisiete lunas, de las cuales cinco son grandes. Los científicos han contado por lo menos trece anillos. Urano tarda 81 años terrestres en girar alrededor del Sol.

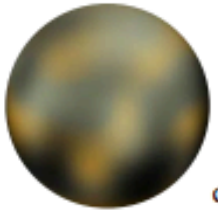


Cerca de la parte superior está la tormenta en rotación que los científicos han denominado Mancha Oscura Uno, y más abajo, Mancha Oscura Dos. Sus vientos similares a ciclones giran en la misma dirección de la órbita de Neptuno.

Neptuno

Neptuno es el octavo planeta después del Sol. Neptuno y Urano son a veces llamados los gigantes mellizos porque son muy parecidos. Son aproximadamente del mismo tamaño y color y ambos están cubiertos por nubes gruesas. Pero los vientos de Neptuno son los más rápidos del sistema solar, alcanzan los 2,000 kilómetros por hora (arriba de las 1,242 millas por hora). Neptuno tiene una luna grande y muchas lunas más pequeñas, más varios anillos de polvo visibles. Neptuno tarda aproximadamente 165 días terrestres para girar alrededor del Sol.

Plutón y otros planetas enanos



Antes de 2006, el objeto espacial llamado Plutón era el noveno planeta del sistema solar. Pero los científicos debatieron y decidieron crear una nueva categoría llamada planetas enanos para los objetos espaciales como Plutón. Los planetas enanos orbitan alrededor del Sol, tienen una forma casi redonda, producen un nivel de brillo mínimo y no son lunas. Tampoco tienen suficiente fuerza de gravedad para atraer otros objetos espaciales de su órbita. Los científicos comenzaron identificando seis planetas enanos oficiales, pero algunos científicos querían clasificar docenas de objetos espaciales similares como planetas enanos. Muchos más objetos espaciales podrían ser considerados entre los planetas enanos a medida que la tecnología facilita su identificación.

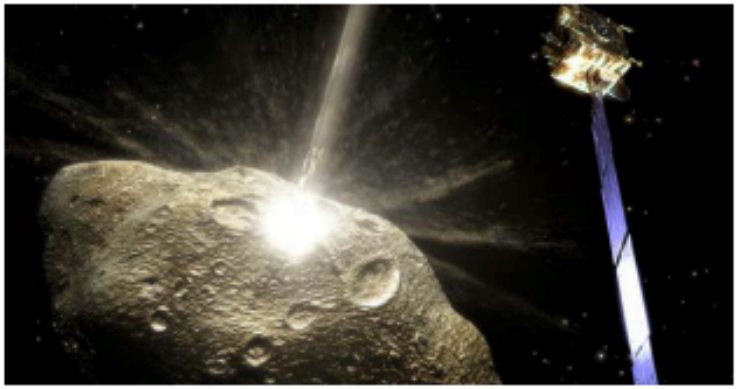
¿Cuánto pesarías?

La gravedad es diferente en cada planeta, y la gravedad determina tu peso.

Si pesas 31 kilos (70 libras) en la Tierra, entonces tu peso sería:

En Mercurio	12 kg (27 lb)
En Venus	28.5 kg (63 lb)
En la Luna	5.4 kg (12 lb)
En Marte	12 kg (27 lb)
En Júpiter	78.8 kg (165 lb)
En Saturno	29.4 kg (65 lb)
En Urano	28 kg (62 lb)
En Neptuno	53.8 kg (79 lb)
En Plutón	2.2 kg (5 lb)

¡En el espacio exterior no pesarías nada!



Los satélites monitorean las pruebas de los impactos durante las investigaciones de manera de prevenir que los asteroides choquen contra la Tierra.

Los asteroides

Los asteroides son objetos rocosos y metálicos que orbitan alrededor del Sol. Sus tamaños varían desde unos pocos metros de **diámetro** hasta cientos de miles de metros de diámetro. La mayoría de los asteroides se encuentra entre Marte y Júpiter. Algunos tienen órbitas que cruzan la trayectoria de la Tierra, y en el pasado, algunos incluso han chocado contra la Tierra. Los asteroides y otros objetos más pequeños que entran en la atmósfera de la Tierra son llamados **meteoroides**. Si sobreviven al viaje y aterrizan en el suelo, se les llama **meteoritos**. Si se queman antes de aterrizar, se les llama **meteoros**. Una de las mejores evidencias de un asteroide que llegó a la Tierra es el Cráter Barringer cerca de Winslow, Arizona.

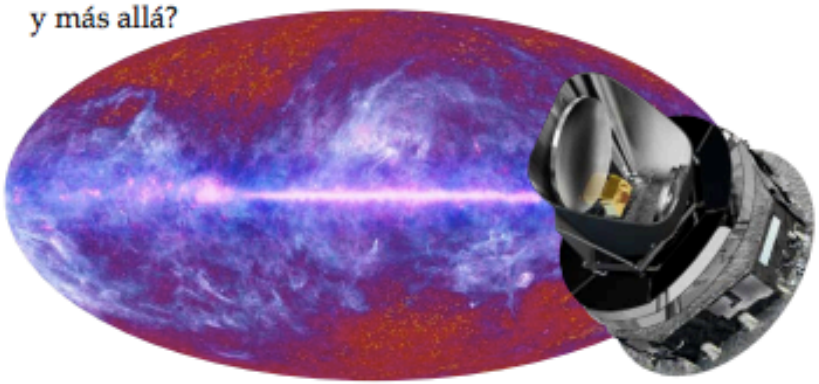
El cometa NEAT, fotografiado por el telescopio WIYN en el Observatorio Nacional de Kitt Peak en Arizona, fue descubierto en 2001 por el sistema NEAT de búsqueda de asteroides.

Los cometas

Los cometas están compuestos de hielo y polvo y son como grandes y sucias bolas de nieve en el espacio. Tienen órbitas de forma muy ovalada. En partes de esa órbita, se acercan al Sol y luego oscilan lejos en el espacio. Algunos cometas orbitan alrededor del Sol en menos de 200 años. El más famoso de estos es el cometa Halley. Regresa cada 76 años. Otros cometas tardan miles de años para completar una órbita. El cometa Hyakutake, que pasó cerca de la Tierra en 1996, regresará en aproximadamente 9,000 años.

Conclusión

Los seres humanos nos hemos preguntado siempre: "¿Qué está sucediendo allí afuera en el espacio?". Durante siglos, solo lo suponíamos. Los nuevos cohetes, las sondas espaciales, los satélites y los telescopios nos muestran qué está sucediendo en nuestro sistema solar cada día. Estas herramientas han ayudado a los científicos a descubrir nuevos planetas, volver a contar lunas y ver estrellas nacer y desaparecer. También nos han brindado el primer mapa topográfico de cielo completo de nuestro universo y una visión directa del Sol. ¿Qué será lo próximo que nos muestren de nuestro sistema solar y más allá?



En julio de 2010, luego de una misión de mapeo que duró un año, el telescopio Planck de la Agencia Espacial Europea (ESA) emitió su primer mapa de cielo completo de nuestro universo. La misión del Planck es medir la radiación sobrante del antiguo principio de nuestro universo de manera que los científicos puedan estudiar cómo se formó. A medida que el Planck recorre el cielo, también mide la temperatura, la densidad de la materia, la velocidad y los movimientos de las galaxias.

Glosario

atmósfera *(sust.)* capa de gases que rodea un planeta, estrella o luna (pág. 12)

combustibles fósiles *(sust.)* fuentes de energía tales como el carbón, el petróleo y el gas natural que se crearon por la descomposición de plantas y animales hace millones de años (pág. 6)

diámetro *(sust.)* largo de una línea recta a través del centro de un objeto (pág. 23)

fuerza de gravedad *(sust.)* fuerza de atracción que tiende a atraer los objetos entre sí (pág. 13)

meteoritos *(sust.)* meteoroides que realmente aterrizan en la Tierra (pág. 23)

meteoros *(sust.)* meteoroides que entran en la atmósfera terrestre (pág. 23)

meteoroides *(sust.)* cometas, asteroides o partículas de polvo que flotan en el espacio (pág. 23)

órbita *(sust.)* trayectoria de un objeto que gira alrededor de otro objeto (pág. 8)

orbitar *(verb.)* rotar alrededor de otro objeto (pág. 4)

Distance Learning
Student Work Packet
Grade 5 – The Universe
ELA: Week 3

Unit Overview: You have learned about the Solar System and all of its elements by analyzing the Sun's impact/influence the effect of the Big Bang, and how it created the galaxies and our Solar System.

Distance Learning Summary: In this distance learning unit, students will explore the Solar System and all of its elements by analyzing the Sun's impact and influence specific to the earth's rotation around the sun and the daylight experience on earth. In the next three weeks, you will engage with texts to investigate and write about the following line of inquiry:

How does the earth's rotation around the sun impact daylight hours on any given day of the year?

SY2019-2020

Grade 5
Distance Learning Week 3
The Universe

Day One

Accessing Prior Knowledge and Asking Big Questions

Objective: Read the texts titled "Everyday Mysteries: Why we have daylight saving time" and "Kids walking to school in the dark? Year-round daylight-saving time in California makes no sense" to begin your research on your line of inquiry, *How does the earth's rotation around the sun impact daylight hours on any given day of the year?*

Focus Question: As the earth rotates around the sun throughout different point of the year, is the use of daylight saving time a benefit or constraint for people on earth? Why or why not?

Directions:

- List what you already know about daylight saving time.
- Use the 5 W's to ask clarifying questions about daylight saving time and the earth's rotation around the sun.
- Read the text to get the gist.

Exploring My Prior Knowledge: What do I ***already know*** about this topic?	
Asking Questions: What do I ***want to know*** about this topic?	
Q1:	Q2
Q3	Q4

Question Stem Bank
5 W's and How Question Words
What, Where, When, Why, Who, How

newsela

Everyday Mysteries: Why we have daylight saving time

By Department of Energy, Department of Transportation and the U.S. Navy; adapted by Newsela staff on 03.10.17
Word Count **518**
Level **590L**

Technician Oleg Ryabtsev performs maintenance work on a clock in Minsk, Belarus, March 29, 2008. Clocks in Belarus will move one hour ahead at midnight March 11, 2017, ushering in seven months of daylight saving time. AP Photo/Sergei Grits

Question: Why do we have daylight saving time?

Answer: One answer you might hear is that we change the clocks to help farmers. They use daylight hours to work in their fields. The real reason is mostly to save energy and electricity. This helps to save money, too. Does it do that? We will explain later, but first, we will tell you what it is.

How It Works

By law, clocks in most parts of the United States move ahead one hour for the spring and summer. It is known as daylight time. Clocks are turned back an hour for fall and winter months. It is known as standard, or regular, time.

Daylight saving time happens at the same time each year in the United States. It begins on the second Sunday in March. On that day, clocks are turned ahead one hour. Daylight savings

time ends on the first Sunday in November.

Clocks are set back on the first Sunday in November. They are turned back one hour.

The idea is to have daylight hours when people want them. Some people like to have more light in the evening.

Does Everyone Change Their Clock?

Not all places in the United States follow daylight time. Hawaii and most of Arizona do not use it. Indiana started using daylight time in 2006.

Some other countries use daylight saving time. Parts of Iceland, Singapore and Belarus have tried it. Russia used it under one president. The president they have today is Vladimir Putin. He ended daylight saving time in 2014. People had gotten tired of late sunrises in winter.

Countries set their own rules for time changes.

History Of Daylight Time In U.S.

Benjamin Franklin gets credit for the idea of daylight saving. One morning in France he woke up extra early. He came up with the idea to make the best use of daylight hours.

The idea has stuck around because some people believe it saves energy and money. Franklin even wrote a letter to a French newspaper in 1784. He said that France could save money on candles if they changed when they slept and woke up. Then the light bulb was invented. People thought daylight saving would help save money on light bulbs.

Many countries used daylight time during World War I in the 1910s. They wanted to save coal during the war. Daylight time ended in the United States after the war ended. It was brought back in World War II in the 1940s.

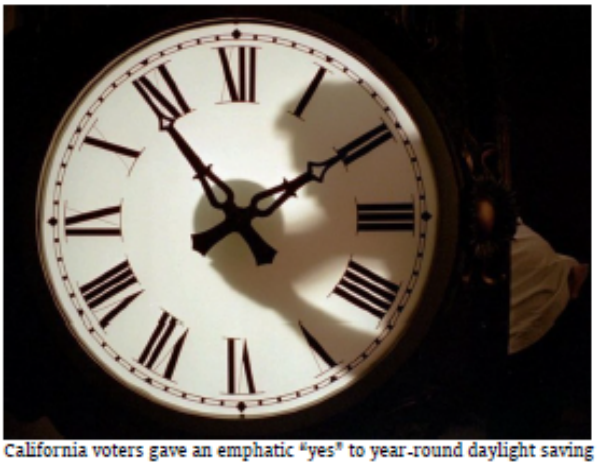
Does Daylight Saving Time Actually Work?

This is a big question. Some people say that it can cost more money. Matthew Kotchen is a professor. He did a study in 2006 in Indiana.

The study found that people used fewer lights during daylight saving time. But they used more heating and air conditioning.

Some people still want the time change. They say it makes money for their companies. This is because people spend more money during daylight. Other people say it helps safety. With more hours of sunlight, fewer bicyclists, runners and walkers are hit by cars.

Kids walking to school in the dark? Year-round daylight saving time in California makes no sense



California voters gave an emphatic "yes" to year-round daylight saving time last year.
(Matt York / Associated Press)

You still want daylight saving time year-round? California voters answered an emphatic "yes" last year. Well, look outside these chilly mornings about 7 o'clock.

It's practically still dark over much of California, especially in the north. But that's fine. It's winter solstice time. It's what we're used to.

But what if we did have our way and it really was daylight saving time? It would be 8 a.m. and barely light in Southern California and still gloomily dark in San Francisco and Sacramento.

That's uncivilized and dangerous.

Little kids would have waited for buses or walked to elementary school in the pitch black with flashlights, shivering. Many of their parents would be driving to work before sunup.

OK, everyone would get an extra hour of sunlight in the early evening. It wouldn't get dark until around 6.

So what? It's cold outside, maybe even rainy. This isn't a balmy summer evening. The pool doesn't beckon. There's little appetite for barbecuing. Maybe golf fanatics could get in an extra three holes — but morning tee times would be harder to get.

These days, with standard time, the sun is rising at 6:55 a.m. in Los Angeles and setting at 4:48 p.m. Add one hour to those times under daylight saving and the sun rises about 8 a.m.

In San Francisco, the sun isn't rising until 7:20 a.m. So under DST, it wouldn't be up until 8:20. Same with Sacramento.

And what's with this "saving" nonsense? No law can change Earth's rotation around the sun. We'll get the same amount of daylight no matter how we set our clocks. The only question is whether we want more at the start of the day or toward the end.

The way I see it, the sun is for warm months. It's fine to extend daylight into the gentle summer evenings. We can savor the outdoors. But when it's cold and drizzly, provide me more morning light to get the day started.

That's why they call it "summertime" and "wintertime" besides DST and PST.

But I was overwhelmingly outvoted last year.

Proposition 7, which paved the way for eventual year-round daylight saving time, passed by a landslide margin, roughly 60% to 40%. It carried 51 of 58 counties.

Six of the seven counties that voted against the measure were in the San Joaquin Valley farm belt. Farmers apparently don't like milking cows and gathering eggs in the dark. The seventh county was Del Norte in the far northwest, where there's lots of commercial fishing and logging.

The bill placing Proposition 7 on the ballot was passed lopsidedly by the Legislature and signed by Gov. Jerry Brown, who enjoyed his usual fun with Latin in a signing message. "Fiat lux," Brown wrote, meaning, "Let there be light."

But not until 8 a.m. in winter.

The measure's author, Assemblyman Kansen Chu (D-San Jose), said his main goal was to eliminate the nuisance of having to change clocks twice a year. He wanted to adopt either daylight saving or standard time permanently and didn't care which. But he also said people seemed to prefer daylight saving.

So the ballot measure encouraged the Legislature to adopt daylight saving all year. That would require a two-thirds majority vote. This doesn't seem to be a major problem. But there's trouble in Washington.

Congress and the president must approve a switch to permanent daylight saving time, although California could move to all-year standard time on its own. Arizona and Hawaii did that long ago.

Washington's principal problem is that politicians there have much more pressing things on their minds: impeachment and the 2020 elections. Anyway, it's not likely the Republican-controlled U.S. Senate and President Trump will be enthusiastic about anything California desires, even though Sen. Marco Rubio (R-Fla.) has introduced a bill to make daylight saving permanent nationally. The bill hasn't budged.

Four states have enacted laws to adopt daylight saving year-round pending federal approval: Oregon, Washington, Tennessee and Florida. So if California also went to all-year daylight saving, the entire West Coast would be in the same time zone. Thankfully.

But despite the overwhelming vote of Californians, things are moving rather lethargically in Sacramento. There are much higher priorities such as wildfires, power outages, homelessness and affordable housing.

Chu's implementation bill, AB 7, breezed through the Assembly with only one "no" vote in a committee. It passed the Assembly 72 to 0, then stalled in the Senate.

Sen. Ben Hueso (D-San Diego), chairman of the Senate energy committee, has concerns about whether the time change could complicate cross-border commuting between the U.S. and Mexico.

But Chu says he'll ask for a hearing in Hueso's committee soon after the Legislature reconvenes in January. And he's confident of passage.

Chu calls changing clocks twice a year "archaic" and "harmful." When we're on daylight saving time, he says, there are fewer evening robberies. There's also a "significant increase" in heart attacks on the day after clock-changing, he asserts. And more people die in car accidents.

But how about those children walking to school in the dark? Aren't they in danger?

"That's a concern," Chu acknowledges. "But we can make sure there's adequate lighting en route to school. And it'll only be dark for a few weeks."

It just seems illogical to put up with 60 mornings of stumbling around in the dark in order to avoid two days of taking five minutes to change some watches.

Day Two

Reading Closely

Objective: I can annotate my texts using the annotation key below to help me understand the text.

Directions:

- Reread your texts.
- Annotate your text using the annotation key below for major points, key words, and phrases to support you in answering the **focus question:** "As the earth rotates around the sun throughout different point of the year, is the use of daylight saving time a benefit or constraint for people on earth? Why or why noy?"

Annotation Key

Underline the major points.

Circle any keywords or phrases that are confusing or unknown.

? (Question Mark) shows questions that you have during the reading. Write the question in the margin.

Margin Notes show clarifying statements in the margins.

Day Three

Answering Questions

Objective: I can use my text annotations to help me answer my questions from Day 1.
Directions:

- Go back to Day 1 to find your questions about what you wanted to know about daylight saving time and the earth's rotation around the sun.
- Write your answers in the table below.
- Use our annotations to help you answer your questions and to complete your summary.

Questions	Evidence from "Everyday Mysteries: Why we have daylight saving time"	Evidence from "Kids walking to school in the dark? Year-round daylight saving time in California makes no sense"
Q1:		
Q2:		
Q3:		

Q4:		
Other interesting facts		
Summary of What I've Learned *(Consider the 3W's of What, Where, When, and how when completing your summary)*		

Day Four

Planning for Your Project

Directions:

- ☐ Read each writing choice from the product menu below.
- ☐ Choose one writing product you wish to complete.
- ☐ Take a look at the product choice examples below the choice menu to help you visualize what your final project may look like.

Literary Analysis Task Product Menu		
Product Choice	Write an ***editor's note*** to the Washington Post analyzing how the newspaper articles, "Kids walking to school in the dark? Year-round daylight-saving time in California makes no sense" and "Everyday Mysteries: Why we have daylight saving time" present key points about the benefits and constraints that come with daylight saving time.	You have read "Everyday Mysteries: Why we have daylight saving time" and "Kids walking to school in the dark? Year-round daylight-saving time in California makes no sense". Consider the pros and cons to daylights saving time and write an ***opinion letter*** to the DC Council stating your opinion on whether DC should continue or discontinue daylight saving time.
	Example of Editor's Note 	Example of Opinion Letter 

Go to the next page to continue planning and organizing your project

Grade 5
Distance Learning Week 3
The Universe

Day Four

Planning your Project

Directions:

- ☐ Complete the note-catcher below to support you with identifying the evidence you will use to complete your task.
- ☐ Using the evidence, you have gathered, choose **one** of the Multi-Paragraph Outlines provided on the next 2 pages.
- ☐ Be sure to:
  - ☐ Write your claim statement
  - ☐ Plan your introduction
  - ☐ Plan your main idea section
  - ☐ Plan your conclusion

Guiding Questions	Note-Catcher	
What is your product task asking you to do?		
Which text(s) are you going to use?		
Which evidence from the text will you use?		

(Option A) Multiple-Paragraph Outline (4 Paragraphs)

Name: Date:

Topic:

Claim Statement:

Main Idea	Details
¶1 Introduction *(Be sure to include your claim statement)*	
¶2	
¶3	

¶4 Conclusion	

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(Option B) Multiple-Paragraph Outline (4 Paragraphs)

Introduction

Thesis/Claim - Write an opinion statement about an important idea.

Supporting Idea 1	Supporting Idea 2	Supporting Idea 3
Topic Sentence _____	**Topic Sentence** _____	**Topic Sentence** _____
Evidence/Details	**Evidence/Details**	**Evidence/Details**

Conclusion - Restate the thesis/claim.

Day 5

Drafting and Publishing Your Final Project

Objective: You will prepare and present your culminating project using your notes gathered over the course of the week.

Directions:

- ☐ Draft your final project, using the lined paper provided or your own materials found at home.
- ☐ Use the checklist found below to edit and revise your work.
- ☐ Publish your final project by presenting to a friend, or family member.

Fifth Grade Informative Writing Checklist

Purpose: Reading Comprehension or Research

- ❑ I answered all parts of the prompt fully.
- ❑ I used information from credible print or digital resources.
- ❑ I took notes and categorized the information.
- ❑ I referenced my sources.

Organization (Written Expression)

- ❑ I wrote to the appropriate audience.
- ❑ I introduced my topic.
- ❑ I grouped similar information together.
- ❑ My writing is focused.
- ❑ I used descriptive details.
- ❑ My conclusion relates to the information I wrote.

Elaboration (Written Expression)

- ❑ I used descriptive details.
- ❑ I linked ideas with words, phrases, or clauses.
- ❑ I included concrete words or phrases.
- ❑ I used quotations to support my essay.

Language and Conventions (Writing)

- ❑ I used capitalization, punctuation, and correct spelling.
- ❑ I wrote sentences that vary in length and structure.

Fifth Grade Opinion Writing Checklist

Purpose: Opinion

- ❑ I stated my claim.
- ❑ I used evidence that supports my claim.

Organization (Written Expression)

- ❑ I introduced my topic clearly.
- ❑ I wrote my reasons, in order, so they make sense to my reader.

Elaboration (Written Expression)

- ❑ I chose specific words and details that would make the reader agree with the reasons that support my claim.
- ❑ I wrote specific facts and details for each reason to support my claim.
- ❑ I connected my reasons together with transitions and linking words such as ***also, another, because, specifically, and consequently***.
- ❑ I wrote several sentences or a part that concluded my writing.
- ❑ I wrote a concluding statement or section that restated my claim.
- ❑ I wrote an ending that makes the reader agree with my claim.

Language/Conventions

- ❑ I used capital letters correctly when writing sentences.
- ❑ I used punctuation to separate an introductory word or phrase from the rest of the sentence.
- ❑ I used commas to separate reasons and details in a series.
- ❑ I spelled grade level words correctly.
- ❑ I used resources to help me find words I cannot spell.

You have successfully completed your research project!

*For additional opportunities to extend you learning see the list of enrichment opportunities below.

*Enrichment Opportunities

Additional Reading & Writing Opportunities
• Select a different product from the product menu found on Day Four, to write about your topic. • Read Coyote and the Star – https://www.readinga-z.com/books/leveled-books/book/?id=224&lang=English • Read Go Away, Sun! – https://www.readinga-z.com/books/leveled-books/book/?id=674&lang=English • Get Epic Books – Unlimited Books for Kids - https://www.microsoft.com/en-us/p/epic-unlimited-books-for-kids/9mx9g6fnszrt?activetab=pivot:overviewtab • Read “A Super Sun (And Why it Doesn’t Mean Summer Weather)” - https://airandspace.si.edu/stories/editorial/supersun
Technology Enhanced Options (including Website Links)
Visit and View…. • YouTube Video - Day and Night - https://www.youtube.com/watch?v=AGhfawHAMT4 • YouTube Video - Earth’s Orbit and Rotation for Kids - https://www.youtube.com/watch?v=KSS9SKqe3hw • BrainPop Videos via Clever (Sign up for a free trial)

DISTRICT OF COLUMBIA
PUBLIC SCHOOLS
Office of Teaching and Learning

Grade 5 Math Learning Packet

Week 3

Name _____

DISTRICT OF COLUMBIA
PUBLIC SCHOOLS
Office of Teaching and Learning

Dear Students and Families,

We hope you are safe and healthy while you are out of school and learning from home! In math, you will be reviewing, applying, and extending content from the school year.

This week you will be focused on the topic of fluently add and subtract fractions. The table below outlines how you might organize completing your math work for the week.

Day	Activity	Time
1 - I can add and subtract fractions with unlike denominators (including mixed numbers).	Ancient Egyptian Fraction Task: Pages 4-6	30 minutes
2 - I can add and subtract fractions with unlike denominators (including mixed numbers).	Adding Fractions Two Ways Task: Pages 7-9	30 minutes
3 - I can add and subtract fractions with unlike denominators (including mixed numbers).	Common Denominator Task: Pages 10-12	30 minutes
4 - I can solve word problems involving addition and subtraction of fractions.	Does it Represent the Problem? Task: Pages 13-15	30 minutes
5 - I can solve word problems involving addition and subtraction of fractions.	Salad Dressing Recipe Task: Pages 16-18	30 minutes

If you need additional support with completing the activities, please use the following links:

Lesson 1 Help: http://bit.ly/39Kyuiz

Lesson 2 Help: http://bit.ly/39J65cT

Lesson 3 Help: http://bit.ly/39IZr6t

Lesson 4 Help: http://bit.ly/2xqfQhH

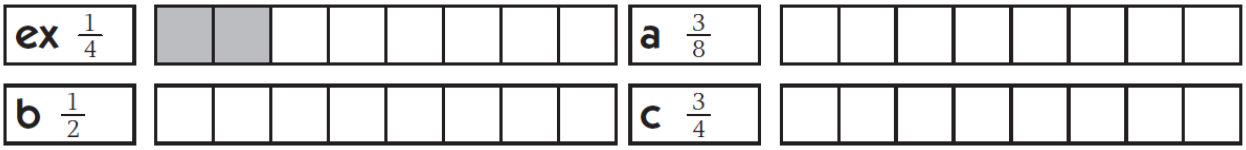
Lesson 5 Help: http://bit.ly/3cQ6YST

One key question you might want to explore this week is: How are fractions used in our everyday lives?

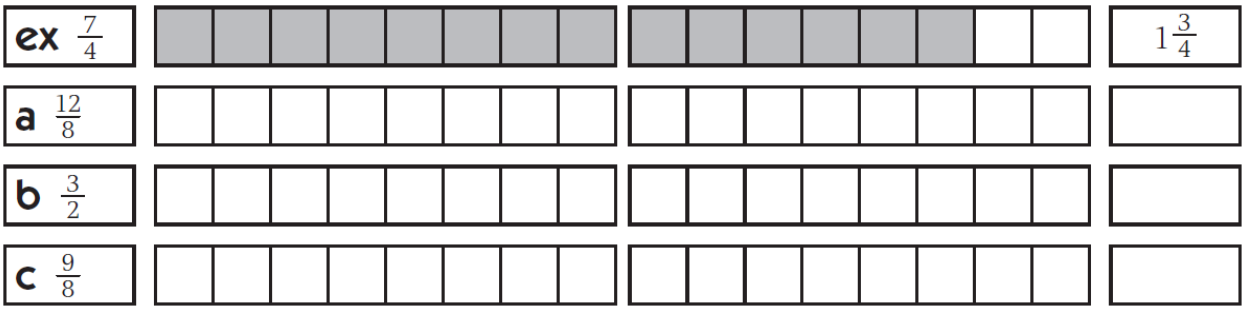
Week 3 Lesson 1

Objective: I can add and subtract fractions with unlike denominators (including mixed numbers).

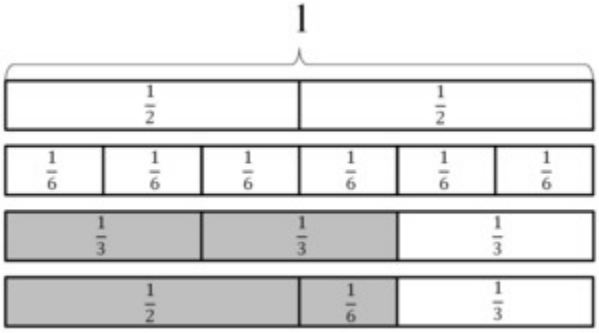
Daily Fluency: Color in the strip to show the fractions named below. Each fraction represents one whole. (5 min)



Color in the strips to show the improper fractions below. Then write the fraction as a mixed number. Each strip represents one whole.



Daily Task: Ancient Egyptians used unit fractions, such as 1/2 and 1/3, to represent all fractions. For example, you might write the number 2/3 as 1/2 + 1/6. (20 min)



Sources: Great Minds Eureka Math,
Bridges in Mathematics,
and Illustrative Math

We often think of 2/3 as 1/3 + 1/3, but the ancient Egyptians would not write it this way because they didn't use the same unit fraction twice.

a. Write each of the following Egyptian fractions as a single fraction:

   i. ½ + 1/3,

   ii. ½ + 1/3 + 1/5,

   iii. ¼ + 1/5 + 1/12.

b. How might the ancient Egyptians have written the fraction we write as 3/4?

Exit Ticket: (5 min)

Add or subtract. Create a visual to support your answer.

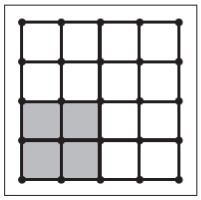
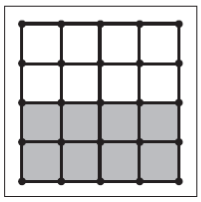
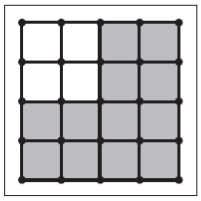
a. $2 + 1\frac{1}{5} =$

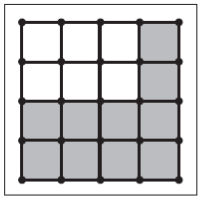
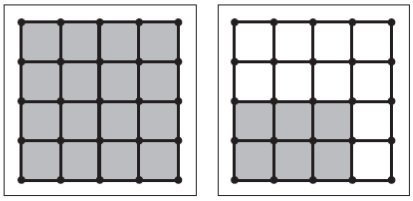
b. $2 - 1\frac{3}{8} =$

Week 3 Lesson 2

Objective: I can add and subtract fractions with unlike denominators (including mixed numbers).

Daily Fluency: Write as many names as you can for the fractions shown on the geoboard. Each geoboard represents one whole. Then use >, <, or = to compare the fraction shown to the other fraction named. (5 min)

Fraction	Fraction Names	Comparison
ex 	$\frac{1}{4}$ $\frac{2}{8}$ $\frac{4}{16}$	$\frac{4}{16} < \frac{1}{2}$
1 		$\frac{5}{8}$
2 		$\frac{1}{2}$

3 		$\frac{3}{4}$
4 		$1\frac{1}{2}$

Daily Task: (20 min)

Find two different ways to add these numbers

$$1\frac{1}{3} + 2\frac{3}{5}$$

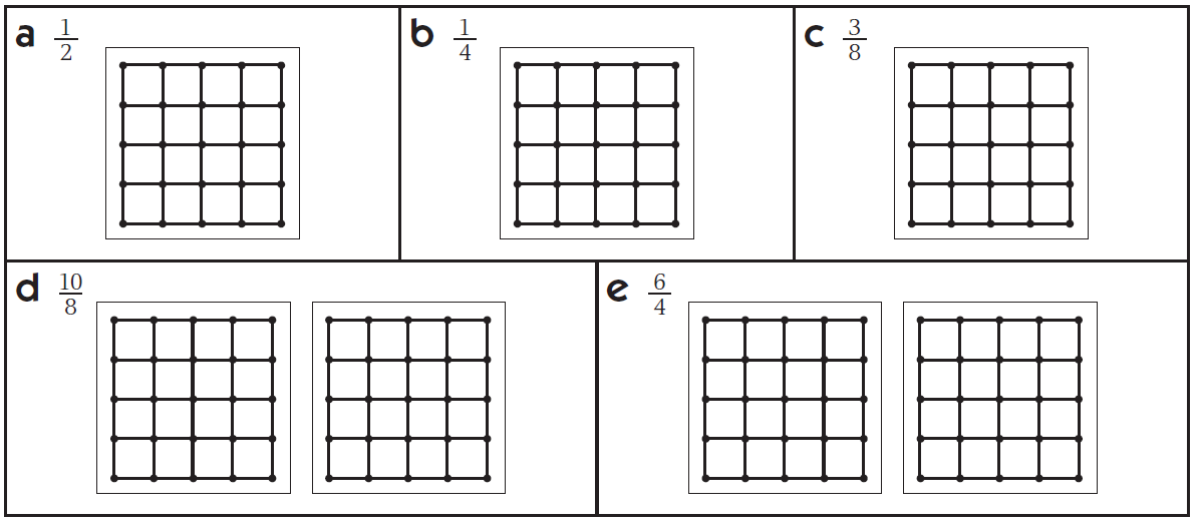
Exit Ticket: Solve with a visual and the standard algorithm. (5 min)

$$1\frac{3}{4} - \frac{6}{7}$$

Week 3 Lesson 3

Objective: I can add and subtract fractions with unlike denominators (including mixed numbers).

Daily Fluency: Color in the geoboard to represent each fraction below. Each board represents one whole. (5 min)



Use the pictures above to help complete each comparison below using <, >, or =.

ex $\frac{1}{2} > \frac{3}{8}$	a $\frac{6}{4}$ $1\frac{1}{2}$	b $\frac{3}{8}$ $\frac{3}{4}$
c $\frac{10}{8}$ $1\frac{1}{2}$	d $\frac{6}{8}$ $\frac{6}{4}$	e $\frac{3}{8}$ $\frac{1}{4}$

Sources: Great Minds Eureka Math,
Bridges in Mathematics,
and Illustrative Math

Daily Task: (20 min)

To add fractions, we usually first find a common denominator.

Find two different common denominators for 1/5 and 1/15.

Use each common denominator to find the value of 1/5 + 1/15. Draw a picture that shows your solution.

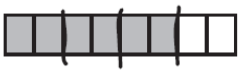
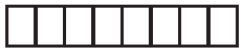
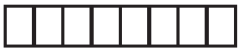
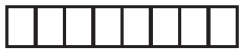
c. Find 3/4 + 1/5. Draw a picture that shows your solution.

Exit Ticket: Find 14/8 + 15/12. (5 min)

Week 4 Lesson 4

Objective: I can solve word problems involving addition and subtraction of fractions.

Daily Fluency: Show the fractions on the strips then add them and write the sum. (5 min)

First	Second	Add Them	Sum
ex $\frac{2}{4}$ 	$\frac{3}{4}$ 		$1\frac{1}{4}$
a $\frac{3}{4}$ 	$\frac{3}{4}$ 		
b $\frac{3}{8}$ 	$\frac{1}{2}$ 		
c $\frac{5}{8}$ 	$\frac{3}{4}$ 		

Daily Task: (20 min)

For each of the following word problems, determine whether or not the expression 2/5 + 3/10 represents the problem. Explain your decision.

1. A farmer planted 2/5 of his forty acres in corn and another 3/10 of his land in wheat. Taken together, what fraction of the 40 acres had been planted in corn or wheat?

_____

_____

_____

2. Jim drank 2/5 of his water bottle and John drank 3/10 of his water bottle. How much water did both boys drink?

_____

_____

_____

3. Allison has a batch of eggs in the incubator. On Monday 2/5 of the eggs hatched, By Wednesday, 3/10 more of the original batch hatched. How many eggs hatched in all?

Exit Ticket: (5 min)

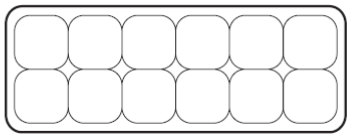
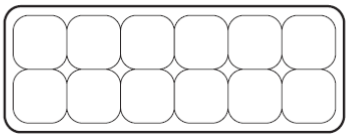
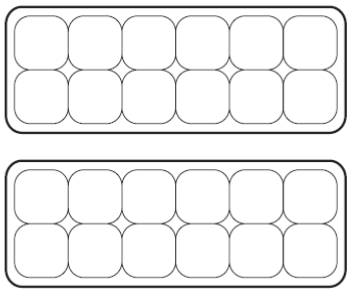
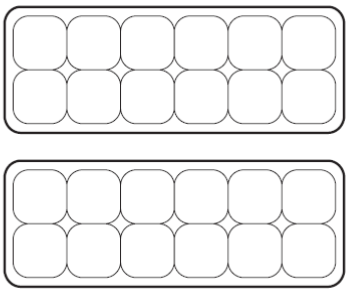
1. Mr. Neville Iceguy mixed $12\frac{3}{5}$ gallons of chili for a party. If $7\frac{3}{4}$ gallons of chili were mild, and the rest was extra spicy, how much extra spicy chili did Mr. Iceguy make? Draw a visual representation and write one sentence explaining your answer.

Sources: Great Minds Eureka Math,
Bridges in Mathematics,

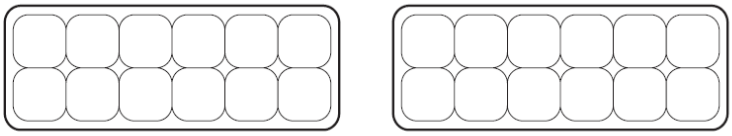
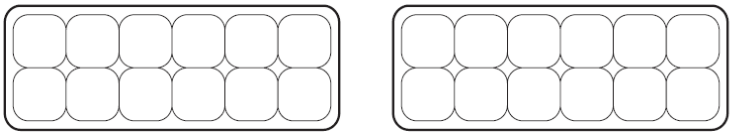
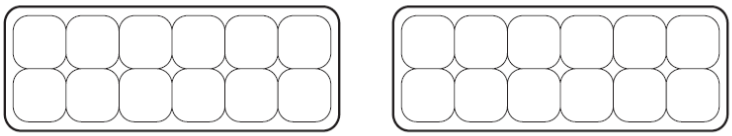
Week 3 Lesson 5

Objective: I can solve word problems involving addition and subtraction of fractions.

Daily Fluency: Show the fractions on the egg cartons. Each carton represents one whole. (5 min)

a $\frac{1}{2}$ 	**b** $\frac{3}{4}$ 
c $1\frac{2}{3}$ 	**d** $\frac{9}{6}$ 

Add the fractions below. If the sum is greater than one, write it as a mixed number.

a $\frac{5}{6} + \frac{1}{2} =$	
b $\frac{2}{3} + \frac{3}{6} =$	
c $\frac{13}{12} + \frac{3}{4} =$	

Daily Task: (20 min)

Aunt Barb's Salad Dressing Recipe

- $\frac{1}{3}$ cup olive oil
- $\frac{1}{6}$ cup balsamic vinegar
- a pinch of herbs
- a pinch of salt

Makes 6 servings

a. How many cups of salad dressing will this recipe make? Write an equation to represent your thinking. Assume that the herbs and salt do not change the amount of dressing.

b. If this recipe makes 6 servings, how much dressing would there be in one serving? Write a number sentence to represent your thinking.

Exit Ticket: (5 min)

1. Gavin had 20 minutes to do a three-problem quiz. He spent $9\frac{3}{4}$ minutes on Problem One and $3\frac{4}{5}$ minutes on Problem Two. How much time did he have left for Problem Three? Write the answer in minutes and seconds.

DISTRICT OF COLUMBIA
PUBLIC SCHOOLS

Grade 5 Science: Week 3

Dear Students and Families,

We hope you are safe and healthy while you are out of school and learning from home! In science, you will be reviewing, applying, and extending content from first semester. This week you will be focused on the creating your Action Plan from **Unit 1: Observing Our Sky.** The Action Plan summarizes what you should know and invites you to apply your science knowledge and skills to a new situation. In most cases you will need to use some imagination and creativity to create your plan. There is no single correct answer! Screenshots of handouts are included here, while full page versions of handouts are located at the end of the packet.

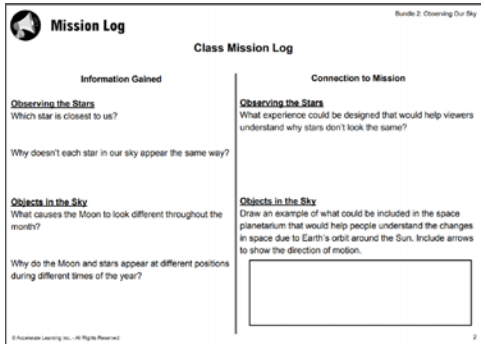
Part 1: Mission Briefing (Review)

During the first part of the week, you will review content from each of topic in the unit and apply it to a mission.

a. Review the **Mission Briefing** below:
   Your town wants to build a state-of-the-art planetarium combined with a thrill ride to attract tourists from all over the area. They want the planned "space experience" to be in 4-D with events seemingly happening right next to the visitors, making them not only see visual images but also feel as if they are flying into space, rotating like a planet, and revolving like Earth around the Sun. Viewers will feel a little of the heat of the scorching Sun and the coldness of space. The town wants people to have an incredible experience and, at the same time, learn something about the objects in our sky. Your mission is to help design an amazing space-experience show.

Part 2: Mission Log (Explanation)

After you complete the Part 1, you should move on to reviewing the **Mission Log** (below). The Mission Log summarizes what you should know and invites you to record your science knowledge. Questions are included to guide your work. Make sure you've completed all parts of the Mission Log before you move on to the Action Plan.



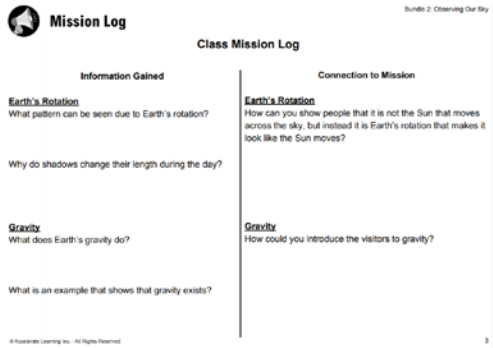
Bundle 2: Observing Our Sky

Mission Log

Class Mission Log

Information Gained	Connection to Mission
Observing the Stars Which star is closest to us? Why doesn't each star in our sky appear the same way?	**Observing the Stars** What experience could be designed that would help viewers understand why stars don't look the same?
Objects in the Sky What causes the Moon to look different throughout the month? Why do the Moon and stars appear at different positions during different times of the year?	**Objects in the Sky** Draw an example of what could be included in the space planetarium that would help people understand the changes in space due to Earth's orbit around the Sun. Include arrows to show the direction of motion.

2



Bundle 2: Observing Our Sky

Mission Log

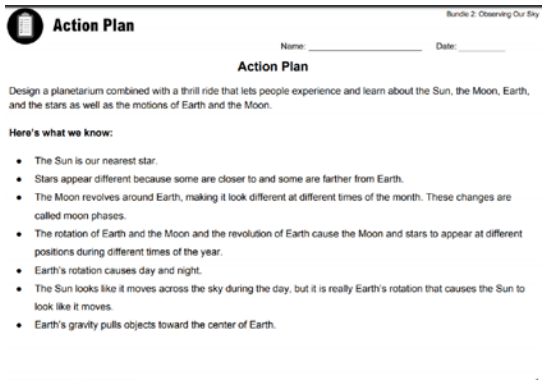
Class Mission Log

Information Gained	Connection to Mission
Earth's Rotation What pattern can be seen due to Earth's rotation? Why do shadows change their length during the day?	**Earth's Rotation** How can you show people that it is not the Sun that moves across the sky, but instead it is Earth's rotation that makes it look like the Sun moves?
Gravity What does Earth's gravity do? What is an example that shows that gravity exists?	**Gravity** How could you introduce the visitors to gravity?

3

Part 3: Action Plan (Application)

After you have completed and reviewed Parts 1 and 2, you should move on to the **Action Plan** (below). The Action Plan summarizes what you should know and invites you to apply your science knowledge and skills to a new situation. In most cases you will need to use some imagination and creativity to create your plan. There is no single correct answer! Questions are included to guide your work.



Bundle 2: Observing Our Sky

Action Plan

Name: _____ Date: _____

Action Plan

Design a planetarium combined with a thrill ride that lets people experience and learn about the Sun, the Moon, Earth, and the stars as well as the motions of Earth and the Moon.

Here's what we know:

- The Sun is our nearest star.
- Stars appear different because some are closer to and some are farther from Earth.
- The Moon revolves around Earth, making it look different at different times of the month. These changes are called moon phases.
- The rotation of Earth and the Moon and the revolution of Earth cause the Moon and stars to appear at different positions during different times of the year.
- Earth's rotation causes day and night.
- The Sun looks like it moves across the sky during the day, but it is really Earth's rotation that causes the Sun to look like it moves.
- Earth's gravity pulls objects toward the center of Earth.

Bundle 2: Observing Our Sky

Action Plan

Action Plan

What is important for people to learn about our Sun and the stars?

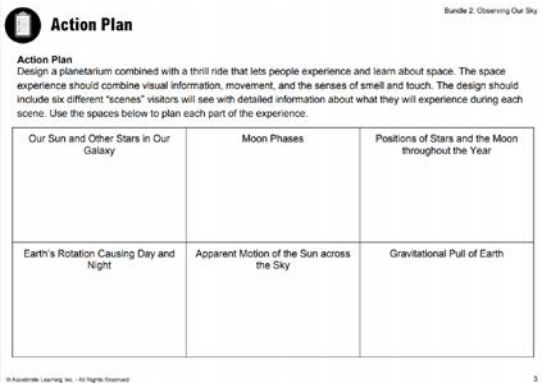
In a planetarium, how can you show people the Moon phases and demonstrate why they occur?

How would you demonstrate why the Moon and stars appear to be in different positions at different times of the year?

How will people use their five senses to experience the show?

What is a good way to show or tell people about the importance of Earth's gravity?

2



Bundle 2: Observing Our Sky

Action Plan

Action Plan

Design a planetarium combined with a thrill ride that lets people experience and learn about space. The space experience should combine visual information, movement, and the senses of smell and touch. The design should include six different "scenes" visitors will see with detailed information about what they will experience during each scene. Use the spaces below to plan each part of the experience.

Our Sun and Other Stars in Our Galaxy	Moon Phases	Positions of Stars and the Moon throughout the Year
Earth's Rotation Causing Day and Night	Apparent Motion of the Sun across the Sky	Gravitational Pull of Earth

3

Action Plan

Name: _____ Date: _____

Action Plan

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Action Plan

Action Plan

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_____

_____

In a planetarium, how can you show people the Moon phases and demonstrate why they occur?

_____

_____

How would you demonstrate why the Moon and stars appear to be in different positions at different times of the year?

_____

_____

How will people use their five senses to experience the show?

_____

_____

What is a good way to show or tell people about the importance of Earth's gravity?

_____

_____

Action Plan

Action Plan

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