4th GRADE Week 7

CLEVELAND METROPOLITAN SCHOOL DISTRICT

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:00	**Learning Warm-Up and Independent Reading** -Review a book from Scholastic Home (see login information under Online Learning) -Complete learning pathway through Imagine Learning Literacy (Access through Clever, found on CMSD website student page)	**Learning Warm-Up and Independent Reading** -Independently Read, "Moon Chasers." -Complete learning pathway through Imagine Learning Literacy.	**Learning Warm-Up and Independent Reading** -Complete "Moon Chasers" Response Journal. -Complete learning pathway through Imagine Learning Literacy.	**Learning Warm-Up and Independent Reading** -Complete "Moon Chasers" Comprehension Questions. -Complete learning pathway through Imagine Learning Literacy.	**Learning Warm-Up and Independent Reading** -Review a book from Scholastic Home. -Complete learning pathway through Imagine Learning Literacy.
8:30	**Language** -Daily Language Practice Journal	**Language** -Daily Language Practice Journal	**Language** -Daily Language Practice Journal	**Language** -Daily Language Practice Journal	**Language** -Daily Language Practice Journal
9:00	**Reading** -Watch the youtube video – Chapter 3 Read Aloud. https://www.youtube.com/watch?v=3KGYLBOICu4 - Read I Survived the Attack of the Grizzlies, 1967. This week read chapters 4 - 8 -Comprehension Journal	**Reading** -Independently Read Chapter 3 this week. I Survived the Attack of the Grizzlies, 1967. -Reading Comprehension Journal	**Reading** -Independently Read, - I Survived the Attack of the Grizzlies, 1967. -Reading Comprehension Journal	**Reading** -Independently Read, I Survived the Attack of the Grizzlies, 1967. -Reading Comprehension Journal	**Reading** -Independently Read, I Survived the Attack of the Grizzlies, 1967 . -Reading Comprehension Journal.=-096a'

Time	Monday	Tuesday	Wednesday	Thursday	Friday
10:00	**Writing** -Writing Journal Why was Pops worried about Glacier National Park?	**Writing** -Writing Journal Watch the youtube video about an overcrowded national park. How does an overcrowded park effect the wildlife? https://www.youtube.com/watch?v=8MRaOrQftxg	**Writing** -Writing Journal According to Pops, why do "all creatures fear the porcupine"?	**Writing** -Writing Journal According to Pops, what would the rangers do to the bear that attacked them at the cabin?	**Writing** -Writing Journal What did Mel hear in the forest after she drenched the fire? How did she feel about what she heard? How did the author's style of writing inform you of her feelings?
11:00	**LUNCH**	**LUNCH**	**LUNCH**	**LUNCH**	**LUNCH**
12:00	**Math** Khan Academy Video: "Angles in Circles Word Problem" Activity: Relate Degrees to Fractional Parts of a Circle (13.4 More Practice/Homework)	**Math** Khan Academy Videos: "Measuring Angles in Degrees" and "Measuring Angles Using a Protractor" Activities: Measure and Draw Angles Using a Protractor (13.5 Reteach) Measure and Draw Angles Using a Protractor (13.5 Additional Practice)	**Math** Khan Academy Videos: "Measuring Angles Using a Protractor 2" and "Constructing Angles" Activity: Measure and Draw Angles Using a Protractor (13.5 More Practice/ Homework)	**Math** Khan Academy Video: "Decomposing an Angle" Activities: Join and Separate Angles (13.6 Reteach) Join and Separate Angles (13.6 Additional Practice)	**Math** Khan Academy Video: "Decomposing Angles" Activity: Join and Separate Angles (13.6 More Practice/ Homework)
12:30	**Art** Continue make your own comic book	**Music** Read info sheet Musical Theater	**Art** Complete make your own comic book	**Music** Leonard Bernstein	**Art** Continue Photo Journal
1:30	**Social Studies** Read, "Why People Move to Ohio;" "Things that Attract People;" and "Evolving Transportation in Ohio"	**Social Studies** -Read, "Moving Goods and People Nationwide;" "From Towpaths to Airplanes;" and "Rolling Business Forward"	**Social Studies** -Complete Activities: Who Got Here First and Illustrating the Move to Ohio	**Social Studies** -Complete, Let's Write	**Social Studies** -Complete, Think and Review
2:00	**Science** Activity/Journal	**Science** Activity/Journal	**Science** Activity/Journal	**Science** Activity/Journal	**Science** Activity/Journal
2:30	**Brain Break** Choose a Movement & Mindfulness Break Option	**Brain Break** Choose a Movement & Mindfulness Break Option	**Brain Break** Choose a Movement & Mindfulness Break Option	**Brain Break** Choose a Movement & Mindfulness Break Option	**Brain Break** Choose a Movement & Mindfulness Break Option

Family and Student Supports:

Please review family letters for these content area assignments: • **Literacy** • **Math** • **Science** • **Social Studies** • **Art** • **Music**	**Student Learning Kits**
	Supplies: ruler, crayons, pencils, glue sticks, scissors, paper, markers, composition book
	Math: Daily Math Practice Journal
	Literacy: Daily Interactive Reading Comprehension Journal, Writing Prompt Journal, Daily Language Practice Book, Interactive Phonics Activities/Journal
	Science: Daily Science Activity & Journal
	Art: watercolor paint, paper

Additional Student Supports:

Individual Supports	Please reference the "Helping Your Child at Home in Reading" and "Helping Your Child at Home in Math" documents shared as well as the *Individual Supports* packet of information for additional access to individual student supports as needed.
English Language Learners	Please reference the *Academic Enrichment Packet for English Language Learners* to access additional student supports as needed.

Please reach out to your child's school if you have any questions or need assistance with login information.

Online Learning:

Resource	Access Information
Imagine Learning – Literacy Online learning for literacy – 30 minutes daily (may replace portion of Reading block)	**Accessible through Clever** (Found on CMSD website student page)
Imagine Learning – Math Online learning for math - 30 minutes daily (may replace Math block)	**Accessible through Clever** (Found on CMSD website student page)
BrainPop Junior Online video clips that can be used for learning in all subject areas.	https://jr.brainpop.com/
Scholastic Learn at Home Access to books and read alouds along with literacy lessons to use at home.	http://www.scholastic.com/learnathome Username: Learning20 Password: Clifford
ExactPath (access through Clever) Individualized instruction linked to student data that allows students to learn content as appropriate (intervention and enrichment supports)	**Accessible through Clever** (Found on CMSD website student page)
Second and Seven Read Alouds Online read alouds for grades K-2. No login is needed.	https://kids.secondandseven.com/
Khan Academy Digital Math Instruction Videos – Free login	https://www.khanacademy.org/

Movement & Mindfulness Break Options:

Outside Play Activities	Playground Visit
Go Noodle https://family.gonoodle.com/	Go for a Run or Walk (with an adult)
The OT Toolbox https://www.theottoolbox.com/best-brain-breaks-videos-on-youtube/	Fluency and Fitness (free for 3 wks) https://fluencyandfitness.com/
Mind Yeti https://www.mindyeti.com	Positive Psychology https://positivepsychology.com/mindfulness-for-children-kids-activities/
Calm (app available also) https://www.calm.com/schools	Teach, Train, Love http://teachtrainlove.com/20-brain-break-clips-fight-the-fidgeting/

Hello Cleveland Metropolitan School Staff,

As we strive to secure a safe learning environment for our students, we know that learning can happen anywhere, anytime. Through the partnership with **Imagine Learning**, students can log into Imagine Learning programs and continue learning literacy, language and math while outside of the classroom. Here is some information on each program in case they are new to you.

Imagine Language & Literacy

Students who have previously used Imagine Language & Literacy will have access as they always have, if they have devices & wifi at home. New students will be added providing broader access to this program and will need to know the program starts with an embedded placement test (don't help!) that will build a custom pathway just for them. Imagine Language & Literacy is very deliberately scaffolded to teach the five elements of literacy, language and grammar and is built specifically to create a wow factor of engagement for students. It will remediate when necessary and will also advance students past previously learned skills to keep them on the leading edge of their learning. They can login 30 minutes a day through the Clever portal. Always click on the Blue Booster tile upon login- ignore anything referencing Galileo as we do not use it in your school district any longer.

Imagine Math PreK-2

Students being added to Imagine Math PreK-2 will login and it will start with a song, an activity, and then a 25-35 minute placement test (don't help!) that will build a custom pathway just for them. Once they are placed, they are immersed in a world of fun characters who do math using everyday items in the world around them. Students can login for 30 minutes a day as an option for home learning!

Imagine Math 3+ (3rd grade- Geometry)

Students being added to Imagine Math 3+ will login and it will start with a 30 question placement test after which they are assigned a quantile score (for teachers to access.) Then students work on a grade level and district-specific pathway. We recommend

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f 801.377.5072

they have scratch paper at all times and that they use it generously. Students are encouraged to use the glossary and the **HELP tabs** to learn multiple strategies when they encounter a challenging problem and to access the **live teacher** who will come on and help them think through the problem. Students can login for 30 minutes or complete one full lesson a day as an option for home learning.

- ✓ Language Support for ELs in Imagine Math
- ✓ Meet the Live Teachers at Imagine Math

Our Virtual Support Commitment to You

Teachers can join our online training modules in Imagine University. Next, we have pre-recorded webinars that are accessible immediately. There are also live webinars they can register for. We are also happy to set up time with teachers or schools individually to address your unique questions and needs. Here are links for these resources:

- Imagine Learning University (teachers will need to create an account)
- Pre-recorded Webinar- Getting Started with Imagine Language & Literacy
- Pre-recorded Webinar- Getting Started with Imagine Math (PreK-2)
- Pre-recorded Webinar – Getting Started with Imagine Math (3+)
- Live Webinars
- Local Team Live Virtual Hours for Q&A (TBD).

These two links will be helpful for educators and families, specific to At-Home Learning:

- https://www.imaginelearning.com/at-home-educator
- https://www.imaginelearning.com/at-home

Let us know if you need anything at all. Stay safe and healthy!

~Kristi Bidinger
Area Partnership Manager | Eastern Ohio
c 216.401.3963
Kristen.bidinger@imaginelearning.com

Cleveland Metropolitan School Families,

As we strive to secure a safe learning environment for our students, we know that learning can happen anywhere, anytime. Through our partnership with **Imagine Learning**, students can log into Imagine Learning programs and continue learning literacy, language and math while outside of the classroom. Families, please visit imaginelearning.com/at-home to learn how our programs work.

If your student has not used Imagine Learning programs before, they will be prompted to take an initial Benchmark test. Please do not help them, as it creates their unique learning pathway. As a guide, students should log approximately 20-30 minutes per program per day.

For Imagine Language & Literacy, students should use Clever logins and then click on this tile:

For Imagine Math, students should use Clever logins and then click on this tile:

**If needed upon first login, use this Site Code:* 3904378.

Clever Login Example:
Username: ccbiyu001
Password: ca0646

Best Regards,
Kristi Bidinger
Imagine Learning Area Partnership Manager

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Daily Assignments Checklist

Name: _____Week: _____

Dear Parents/Guardians,

In the work packet, you will find assignments for the below subjects. Most often there will be more than one assignment for a subject. After your child completes the assignment(s) in each area, he/she should place a check in the box. This checklist will help your child monitor his/her completion of tasks, as well as promote responsibility. --Thank you!

Assignments	Mon.	Tues.	Wed.	Thurs.	Fri.
Learning Warm-Up and Independent Reading					
Language					
Reading					
Writing					
Math					
Art					
Social Studies					
Science					

High-Speed Rail

■ **Before you read the passage:**

1. Quickly scan the two articles included here, looking at the titles and images. What is the topic you will be studying?

- the history of trains
- electromagnets
- high-speed trains
- speed rules of different countries

High-Speed Rail

(DAY1) For hundreds of years, trains have been a reliable mode of ground transportation for people and cargo. Today, new ideas are redefining what trains can be, where they can take us, and how fast they can take us there.

2. What do you know about trains and their purposes? Write 1–2 sentences. If you don't know anything about trains, write one question to think about while you read to understand the text better.

➲ **Read the two articles about high-speed trains and answer the questions.**

Faster than a Speeding Bullet

Written by Gail Skroback Hennessey and Kathiann M. Kowalski

(DAY 1) Right now, you have two choices if you want to see the Golden Gate Bridge in San Francisco and the Hollywood sign in Los Angeles in the same day. (Unless you're a superhero who can fly faster than a speeding bullet.) Would you rather sit in a car for six hours (or longer)? Or would you rather stand in long lines in a noisy airport? What if you could travel that distance in half the time it took to drive, plus have room to stretch out and watch the scenery rush by?

The world's first high-speed train zipped between Tokyo and Osaka on October 1, 1964. This Japanese *Shinkansen* cut the travel time between these two cities from eight to three hours. Today, the Shinkansen connects almost all of Japan's major cities, traveling at speeds up to 200 miles per hour (320 kilometers per hour).

Not only is the Shinkansen fast, it is incredibly safe and is almost always on time. And it's comfortable, too, with lots of room and big windows.

Japan isn't the only country where you can experience the rush of high-speed trains. Although the Shinkansen was the first train of its kind, high-speed trains—often called "bullet trains" because of their shape and speed— now zoom through China, Spain, Germany, France, and other countries throughout Asia and Europe. But what about the United States?

Although many countries have different rules, most agree that in order for a train to be considered a high-speed train, it must be able to reach at least 155 miles per hour (250 kilometers per hour). Most trains in the US only go up to 80 miles per hour. The US has faster trains, including one that can take you from Boston to Washington, DC at up to 150 miles per hour. But right now, the United States doesn't have any official high-speed trains.

However, many people want to change that. Andy Kunz, president of the US High Speed Rail Association, believes a high-speed rail can help with traffic jams and busy airports. Plus, it can help the environment by reducing the pollution caused by cars on the highway. So why can't we just speed up these slow-moving trains? It's not that easy! US trains aren't designed to run at high speeds. High-speed trains like the Shinkansen usually have two engines—one at each end—which get their power from overhead cables. The engines push the trains along tracks made with super-strong materials that won't wear out under the wheels of the speeding trains.

3. Circle the answer that best completes this sentence.

In order to qualify as official high-speed trains, US trains would have to _____ .

reduce pollution travel farther go faster improve traffic

So, will people ever be able to speed across the US at the same speed as travelers in Japan and Spain? Yes— although they will have to wait a little longer. A high-speed rail line between Los Angeles and San

Francisco should be complete by 2030, and other areas of the country are considering their own high-speed trains.

Soon, you may be able to make that trip between the Golden Gate Bridge and the Hollywood sign quickly and comfortably—no cape or superhero mask required!

Go back through "Faster Than a Speeding Bullet," and highlight at least **three** reasons that support the opinion that high-speed trains should be built in the US.

The World's Fastest Train
Written by Nick D'Alto

(DAY 2) A speeding express train whizzes by with no wheels and no motor. In fact, it's not even touching the tracks. This may sound like something straight out of science fiction, but people travel on these "flying" trains every day!

China is home to the world's first high-speed commercial maglev train system. The Transrapid train in Shanghai, one of China's largest cities, can reach 270 miles per hour! But the maglev train doesn't need wheels or an engine to reach top speeds. These trains promise to move us in ways that are smoother, more energy efficient, and more eco-friendly than conventional railroads and highways—and all at incredible speed.

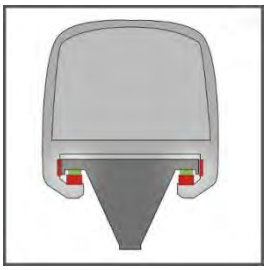
4. Why does the author refer to maglev trains as "flying" trains?

    - They travel as fast as planes.
    - They don't have wheels or engines.
    - They don't touch the tracks.
    - They are on tracks high up in the air.

"Maglev" is short for "magnetic levitation." That's the secret of how these trains can travel so fast: magnets. Magnets have a "north pole" and a "south pole." Opposite poles attract. If you place the north pole of one magnet next to the south pole of another magnet, the two magnets will move toward each

other. However, like poles repel. If you try to put two south poles near each other, the force from the magnets will push them apart. The same thing will happen if you try to put two north poles near each other.

The bottom of the maglev train is lined with strong magnets. The guideway path that it travels along is also lined with strong magnets. These magnets are lined up so that like poles face each other. That causes the train to levitate—or float—above the guideway. As it speeds forward, the train doesn't touch the track.



The magnets on the sides of the train guide it along the track and the magnets below the track raise the train up. The magnets are shown in red.

With ordinary trains, wheels travel along a track which creates friction between the wheels and track. Want an example of friction? Rub your hands together. Some of the energy that moves your hands back and forth is also creating heat and sound. It's the same with train wheels and a track. Friction wastes energy that could be moving the train forward. With a maglev train, no energy is lost.

The maglev trains differ from regular trains in another way. Most trains are pulled forward by an engine. The engine is heavy, so extra energy is needed to move the heavy engine. But the maglev train does not need an engine. Instead, it is moved forward by more magnets that line the sides of the guideway.

5. What are **TWO** ways maglev trains are different from regular trains?

- Maglev trains waste energy from friction.
- Maglev trains move forward by magnets.
- Maglev trains have heavy engines.
- Maglev trains don't have wheels.
- Maglev trains don't follow tracks.

So why aren't we all riding these futuristic trains right now?

Part of the challenge involves the unusual magnets needed to make the systems work. To produce enough force to lift a loaded train, many maglev designs rely on electrical-powered magnets called *electromagnets*. These are powerful, but expensive and complex to operate. Other maglevs lift using superconducting magnets; these are also powerful, but often require special refrigeration to work properly. To compete with other forms of travel, the maglev must make both technological and business sense.

Engineers and inventors are working on the technical challenges right now. If you become a transportation engineer, you might work on the design of a "flying" train one day. Why not get started now?

6. Read this paragraph from the article. Highlight the sentence that explains the main idea of the paragraph.

> Part of the challenge involves the unusual magnets needed to make the systems work. To produce enough force to lift a loaded train, many maglev designs rely on electrical-powered magnets called *electromagnets*. These are powerful, but expensive and complex to operate. Other maglevs lift using superconducting magnets; these are also powerful, but often require special refrigeration to work properly. To compete with other forms of travel, the maglev must make both technological and business sense.

7. Match each characteristic to the high-speed train it describes.

Place a check mark (✓) in the correct column for each answer.

	Shinkansen	Transrapid
can reach 270 mph		
has an engine at both ends		
powered by magnets		
connects almost all of Japan's major cities		
levitates above the guideway		

Go back through "The World's Fastest Train," and highlight at least **two** reasons why high-speed trains like maglev trains aren't being built everywhere.

8. Use the information you've highlighted and the answers to the questions to help you write a paragraph about high-speed trains. Write at least five sentences. Be sure to explain the following:

    - at least three reasons why people support building these trains
    - at least two reasons why they aren't being built everywhere

Discussion Questions

What are the benefits of traveling by high-speed train? Why do many countries build these trains? Do you think high-speed trains—like bullet trains and maglev trains—should be built in the United States? Why or why not?

Do you think high-speed trains—like bullet trains and maglev trains—should be built in the United States? Why or why not?

The Podcast

4th GRADE
Week 7: Literacy

Prepare to participate in a space exploration podcast. You will interview an astronaut from NASA. Prepare six interview questions and answers. Form your questions based on the information you read in "Riding Rockets."

Riding Rockets

➲ **Read the passage and answer the questions.**

Riding Rockets

Written by Rebecca Boyle

(Day 1) When you gaze up at the Moon at night, it looks almost close enough to touch. But if you want to actually go there, you're going to need a powerful rocket that moves faster than anything you've seen here on Earth.

1. What do you know about rockets? Write 1–2 sentences. If you don't know anything about rockets, write one question to think about while you read to understand the text better.

_____

_____

_____

When Were Rockets Invented?

(Day 1) Spaceflight began when the Chinese people invented rockets about 800 years ago. Early rockets were like big fireworks—tubes filled with gunpowder and shot into the air over battles to frighten the enemy. Over the years, people made bigger and better rockets. Many of these were used for wars too. Eventually, engineers began to wonder: if a rocket could travel a mile or more across the ground, could it shoot straight up and get to space?

So You Want to Leave Earth

(Day 1) Modern, space-bound rockets work by burning enormous amounts of fuel very quickly. As the fuel burns, hot gas shoots out one end, pushing the rocket in the opposite direction. To escape the pull of Earth's gravity and get into space, a spacecraft has to reach a speed of 25,000 miles (40,000 km) per hour. That takes a LOT of energy!

In the 1920s, American rocket scientist Robert Goddard began experimenting with liquid rocket fuels instead of gunpowder. Liquid fuels give more bang per pound, so rockets could be lighter and go faster. Goddard also figured out how to steer rockets. Not only could he send a rocket shooting through the air, but he could actually control where it went.

2. Read this passage from the article. Highlight the sentence that explains why Robert Goddard started experimenting with liquid rocket fuel.

> In the 1920s, American rocket scientist Robert Goddard began experimenting with liquid rocket fuels instead of gunpowder. Liquid fuels give more bang per pound, so rockets could be lighter and go faster. Goddard also figured out how to steer rockets. Not only could he send a rocket shooting through the air, but he could actually control where it went!

Goddard tested his rockets by launching them from fields near his house. Each time he launched a rocket he thought about new ways to make the next one go even higher. When the neighbors complained, he moved to the New Mexico desert and kept building bigger and better rockets.

Space Race

(Day 2) During World War I, the United States established a laboratory for researchers to "solve the fundamental problems of flight." Engineers worked on ideas for safer, higher, and faster air travel. Later, the organization became NASA (the National Aeronautics and Space Administration) and their attention turned from air to space. As engineers worked to solve problems, they experimented with planes that would fly faster than the speed of sound. Air Force Captain Chuck Yeager was the first person to break the sound barrier. But that wasn't fast enough, so researchers went back to work. Their high-speed work led to rockets that traveled many times faster than sound.

In the 1950s and 1960s, the Soviet Union (now Russia) and the United States raced to be the first into space. In 1957, the Soviets launched the first satellite into orbit. They called it Sputnik.

Everyone was eager to explore space—but no one was sure whether a living creature could survive the trip. So they sent animals up first. Mice, dogs, birds, monkeys, cats, rabbits, and even a tortoise made it to space before humans did.

3. Why did scientists send monkeys into space before they sent humans?

   - to test if the trip to space was safe for people
   - to save money for spacecraft big enough for people
   - to show they could operate spacecraft without pilots
   - to see if monkeys could do tasks as well as people

Finally, the Soviets sent the first human to space in 1961: the cosmonaut Yuri Gagarin. Eight years later, America landed the first humans on the Moon. The Moon, 240,000 miles away from Earth, took the astronauts 76 hours to reach.

4. Number the events from the history of spaceflight 1- 6 to show the order in which they happened.

   ___ Animals were sent into space to see if they'd survive.
   ___ The Soviet Union sent the first human to space.
   ___ The Soviet Union launched the first satellite into orbit.
   ___ The US landed the first humans on the Moon.
   ___ A US Air Force captain broke the sound barrier.
   ___ Chinese soldiers invented rockets with gunpowder.

5. Draw lines to match each person to his accomplishment.

the first person to walk on the Moon	Yuri Gagarin
the first person to use liquid fuel to power a rocket	Chuck Yeager
the first person in space	Neil Armstrong
the first person to break the sound barrier	Robert Goddard

Going Up

(Day 3) It takes a lot of fuel to push a big rocket all the way up to space and send it zooming toward the Moon. In fact, almost all of a rocket's tall body is fuel tanks. Rockets are built in sections and burn different fuels at different stages. As the fuel gets used up, the empty tank sections fall away. Only the top part reaches space.

So what happens once you're already in space? Don't you need all those fuel tanks to help you get from place to place? Nope! In outer space, there's no air to fight against, and the pull of gravity is weaker. So once in space, spaceships just need little spurts of gas to get them moving in the right direction or to slow them down.

6. Why do the fuel tanks of a rocket fall away?

    - Air pushes the rocket instead of fuel in space.
    - The tanks are empty and no longer needed.
    - Gravity is strong and pulls the fuel tanks off.
    - The tanks make the rocket impossible to steer in space.

Talk Like a Rocket Scientist

So, you still want to leave Earth? Here is some rocket science lingo to use when you talk about your future space adventures!

speed: how fast you are going.

velocity: how fast you are going in one direction (speed + direction)

delta-v: change in velocity. To escape Earth's air and gravity, a rocket needs to change from a velocity of 0 to a velocity of 25,000 miles an hour.

acceleration: how much your speed is changing. If you are going fast but not speeding up or slowing down, your speed is high, but your acceleration is 0. (When you are slowing down, that's deceleration.) **g-force (or g's)**: how much squashing force you're feeling compared to normal Earth gravity

On Earth, gravity tugs with a force of 1 g. But changing speed can also make you feel force, like when a car speeds up or brakes. "Pulling 3 g's" means feeling a force three times as strong as Earth's gravity. That's about what astronauts feel as their rocket speeds up during launch.

zero-g: In space, astronauts float around, but not because there's no gravity. Gravity is everywhere, even in space. Instead, they don't feel any force because the astronauts and the ship are all traveling together at the same speed.

FTL: faster than light travel

So far, traveling faster than the speed of light only exists in science fiction. But you never can tell what the future will bring. Remember Robert Goddard? His work to develop faster rockets in the 1920s began an entire era of space flight and exploration. He said, “It is difficult to say what is impossible, for the dream of yesterday is the hope of today and the reality of tomorrow.”

7. Draw lines to match each name or term to its description.

when astronauts float and don’t feel any force	NASA
traveling faster than the speed of light	delta-v
the name of the first satellite launched into orbit	FTL
a change in velocity like a rocket lifting off	Sputnik
the organization that focuses on researching space	zero-g

Go back through the text and highlight at least **four** events that were important in the history of spaceflight.

8. (Day 4) Use the information you’ve highlighted and the answers to the questions to help you write a paragraph explaining the history of spaceflight and rockets. Write at least five sentences. Be sure to include at least four events that helped make spaceflight with rockets possible.

_____

_____

_____

Discussion Questions

(Day 5)

What are some examples throughout history of ways people have worked on traveling higher, faster, and safer? Who is famous for their work in these areas?

Robert Goddard said, “It is difficult to say what is impossible, for the dream of yesterday is the hope of today and the reality of tomorrow.” Do you agree with him? Why or why not?

Name _____

Solve Problems Using Measurements

1 Ethan needs 4 gallons of paint to paint a shed. If he uses $\frac{1}{2}$ gallon to paint the roof, how many quarts are left to finish painting the sides of the shed? Show your thinking.

2 A headboard that is less than 4 feet high fits under the window in Noelle's room. Her headboard has a height of 42 inches. Does her headboard fit under the window? Explain.

3 Tristan's puppy has a mass of 8 kilograms. His kitten has a mass of 3 kilograms. What is the difference, in grams, of the masses of Tristan's pets? Show your thinking.

4 Kailyn uses 8 centimeters of ribbon to make bookmarks. She buys a roll of ribbon that is 4 meters in length. How many bookmarks can she make with 4 meters of ribbon? Explain how you know.

Name

Solve Problems Using Measurements

1 MP **Construct Arguments** Jaime is helping her brother make pasta for dinner. The recipe makes 8 quarts of baked ziti. If they each eat 1 pint of baked ziti, will they have enough left over to give their grandmother 6 pints? Why or why not?

2 MP **Use Repeated Reasoning** Alex's landscaping company orders 2 tons of stones to put around the houses where they are working. If they use 400 pounds of stones at each house, how many houses can they finish? Explain your thinking.

3 MP **Reason** Jenny is making lemonade for the pep rally after school. She needs to make 8 liters. If one package of lemonade mix makes 2,500 milliliters, how many packages of mix does Jenny need to use? Explain your thinking.

4 MP **Model with Mathematics** A bookcase is 5 feet tall. Janelle is $\frac{1}{2}$ foot taller than the bookcase. How tall is Janelle in inches? Explain. Use an equation to model your thinking.

Test Prep

5 Sean fills three containers that each hold 24 fluid ounces of iced tea. Matt fills four containers that each hold 1 pint of iced tea. Whose containers hold more liquid, Sean's or Matt's?

_____ containers hold more liquid.

6 Mike jogged $1\frac{4}{10}$ kilometers on Tuesday, $2\frac{1}{10}$ kilometers on Thursday, and $1\frac{3}{10}$ kilometers on Friday. How many meters did Mike jog over the course of the week?

Ⓐ $4\frac{8}{10}$ meters
Ⓑ 48 meters
Ⓒ 480 meters
Ⓓ 4,800 meters

7 Liz's cat weighs 187 ounces. She owns a pet carrier for cats that can safely carry up to 12 pounds. How much more weight can the carrier safely hold when Liz's cat is in the pet carrier?

Ⓐ 5 ounces
Ⓑ 8 ounces
Ⓒ 10 ounces
Ⓓ 15 ounces

Spiral Review

8 Use benchmarks to decide which metric unit you would use to measure the length of a crayon.

_____

9 Cheyanne borrows $\frac{4}{5}$ of a can of paint to finish her art project. She only uses $\frac{3}{5}$ of the can. How much paint does Cheyanne have left?

_____

1 Mrs. DeMarco estimates the height of her garage door by comparing it to another object.

Which is the BEST object for her to use to estimate the height?

Ⓐ the width of a paper clip
Ⓑ the length of a baseball bat
Ⓒ the height of a license plate
Ⓓ the distance she can walk in two minutes

2 Greg wants to determine which liquid measures are equal.

Place an X in the table to show if the measurements are equal or not equal.

	Equal	Not equal
1 gallon = 6 pints		
1 pint = 2 cups		
1 quart = 2 pints		
1 cup = 4 quarts		
1 gallon = 4 quarts		

3 Kara adds 1 foot plus 24 inches and gets a total. Then, she determines which measurement is the same as this total. Which measurements are the same as this total? Select **all** that apply.

Ⓐ 1 yard
Ⓑ 2 yards
Ⓒ 3 feet
Ⓓ 6 feet
Ⓔ 36 inches
Ⓕ 48 inches

4 Which of the following measurements is the same as 30 minutes?

Ⓐ one-half hour
Ⓑ one hour
Ⓒ one and one-half hours
Ⓓ two hours

5 Theo needs a drop of food coloring for a science experiment. Fill in the blank with the correct answer from the list to complete the sentence about measuring a drop of food coloring.

A drop of food coloring equals about _____.

1 liter	1 meter	1 milliliter	1 millimeter

Name _____

6 A veterinarian weighs a young puppy and notices that she weighs 3 pounds. How many ounces does this puppy weigh?

Ⓐ 30 ounces
Ⓑ 36 ounces
Ⓒ 48 ounces
Ⓓ 64 ounces

7 Mark's family has lived in the same town for exactly 3 years. How many months has he lived in this town?

Ⓐ 24 months
Ⓑ 30 months
Ⓒ 32 months
Ⓓ 36 months

8 George is making a list to show equivalent metric lengths.

Fill in the blanks with the correct metric equivalent.

2 meters = _____ millimeters

4 meters = _____ centimeters

7 centimeters = _____ millimeters

3 kilometers = _____ meters

9 Kylie threw a football 30 yards in a game. How many feet did she throw the football?

Ⓐ 90 feet
Ⓑ 180 feet
Ⓒ 300 feet
Ⓓ 1,080 feet

10 Ming wants to arrange the following metric units of length in order from LEAST to GREATEST.

Fill in the blanks with the correct answers from the list to put them in order from LEAST to GREATEST.

Least **Greatest**

[ ], [ ], [ ], [ ]

2,000 m	3 km	800,000 cm	1,000,000 mm

1 Patrick mixed 3 quarts and 1 pint of orange juice with 3 pints of cranberry juice and 1 pint of grape juice to make punch. How much punch does he have?

Ⓐ 4 quarts
Ⓑ 4 quarts and 1 pint
Ⓒ 5 quarts
Ⓓ 5 quarts and 1 pint

2 An author signed books at a bookstore starting at 1:30 p.m. She signed books for 1 hour and 25 minutes.

Which graph shows the total time the author signed books?

Ⓐ 

Ⓑ 

Ⓒ 

Ⓓ 

3 Wendy is making potato salad for a picnic. One sack of potatoes weighs $4\frac{1}{2}$ pounds. What is the weight of 2 sacks of potatoes in ounces?

Ⓐ 72 ounces
Ⓑ 128 ounces
Ⓒ 135 ounces
Ⓓ 144 ounces

4 Kyle is practicing for a 3-mile race. His normal time is 23 minutes and 26 seconds. Yesterday it took him only 21 minutes and 38 seconds.

How much faster was Kyle's time yesterday than his normal time?

_____ minute(s) and
_____ second(s)

5 After selling some old books and toys, Gwen and her brother Max had 5 one-dollar bills, 6 quarters, and 8 dimes. They agreed to divide the money equally.

What is the amount of money that Gwen and Max each earned?

Ⓐ $3.40
Ⓑ $3.65
Ⓒ $7.15
Ⓓ $7.30

6 Tran has $5.82. He is saving for a video game that costs $9.00.

How much more money does Tran need to buy the game?

Ⓐ $3.18
Ⓑ $3.28
Ⓒ $13.82
Ⓓ $14.82

Name _____

7 Kylee and two of her friends buy tickets for the museum. The total cost of the tickets is $19.50. Each friend pays the same amount.

How much does each friend pay?

$ _____

8 Sandy cut three pieces of yarn to use for her art project. One piece was 1 foot 8 inches long, one was 10 inches long, and one was 2 feet 6 inches long.

How much yarn did Sandy use?

Ⓐ 3 feet 12 inches

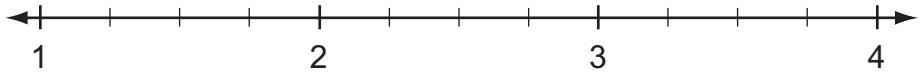
Ⓑ 4 feet 10 inches

Ⓒ 5 feet

Ⓓ 5 feet 6 inches

9 Rita is running a race and starts at the $1\frac{1}{2}$ mile mark. She runs $2\frac{1}{4}$ miles. How far did she run?

Graph the total distance Rita runs on the number line.



10 A bus left for the nature center at 9:15 a.m. The trip there took 1 hour and 45 minutes. What time did the bus arrive at the nature center?

Ⓐ 10:00 a.m.

Ⓑ 10:15 a.m.

Ⓒ 10:45 a.m.

Ⓓ 11:00 a.m.

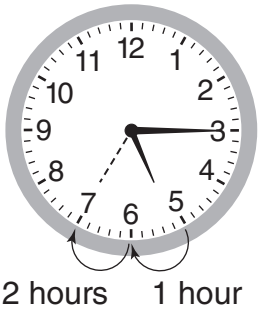
Solve Problems Involving Elapsed Time

Counting can help you find elapsed time. How much time will elapse from 5:15 a.m. to 7:45 a.m.?

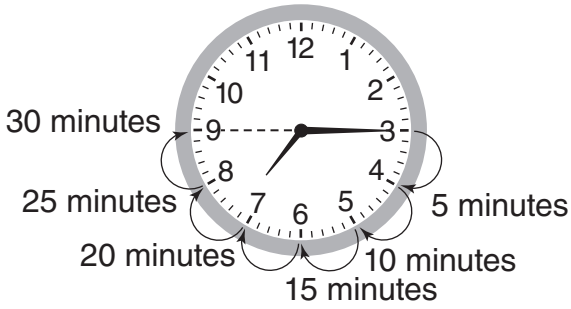
A. Use a clock.

Count the hours.

2 hours elapse from 5:15 a.m. to 7:15 a.m.

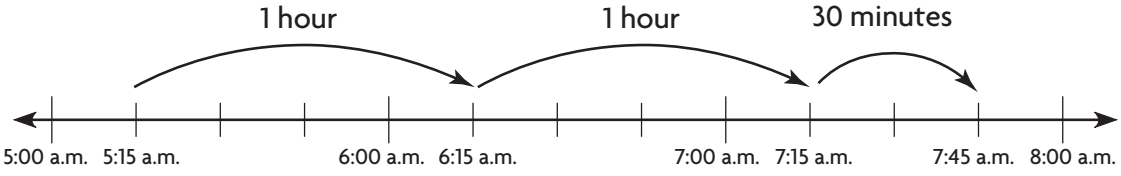


Count the minutes.



30 minutes elapse from 7:15 a.m. to 7:45 a.m.

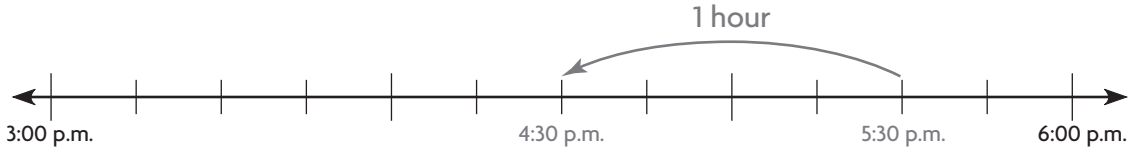
B. Use a number line.



1 hour + 1 hour + 30 minutes = 2 hours 30 minutes

So, 2 hours 30 minutes will elapse.

1 Corrina worked on her science fair project for 2 hours 15 minutes. She stopped working at 5:30 p.m. What time did Corrina begin working on her project? Complete the number line to show a strategy for solving this problem.



_____

2 Ella timed how long it took her to swim one lap. She started swimming at 6:44:19 p.m. She stopped swimming at 6:45:39 p.m. How long did it take Ella to swim one lap?

_____

Name _____

Solve Problems Involving Elapsed Time

1 Samuel needs to arrive at school at 8:35 a.m. It takes him 15 minutes to walk to school. What time should he leave his home? Solve using a strategy of your choice.

2 Jasmine began hiking at 1:08:15 p.m. She stopped hiking at 2:25:09 p.m. How much time did Jasmine spend hiking?

3 Write and solve an elapsed time problem using an elapsed time of 3 hours 20 minutes.

4 Austin solved the following problem incorrectly. This shows Austin's solution. Explain his error, and show the correct solution.

A movie started at 6:45 p.m. The movie ended at 8:20 p.m. How long was the movie?

```
  7  11 10
  8 : 2 0
- 6 : 4 5
-------
  1 : 7 5
```

4th GRADE

Week 7:
Social Studies

WEEK 28

Tables and Charts

How We Share Information

"We're done!" Natalia says happily.

Steven grins. "Our parents said we could celebrate with pizza and ice cream if we finish our report today."

The two friends are working on a report about immigrants who came to the United States.

"Let's read it over to be sure we didn't forget anything," says Natalia.

"Oh!" Steven sighs. "We forgot to include information about when they came."

"Oh, no …" Natalia says sadly. "Well, we just have to look again."

Steven watches as Natalia uses the search engine on their classroom computer. She clicks on a link that says "U.S. Immigrant Groups Over Time."

They see numbers and words in little boxes but aren't sure what they mean. Natalia notices some charts with lines and some with bars. Steven notices some that look like colorful pies.

"Ms. Johnson?" they call out. Their teacher joins them. "What are these?" they ask.

Ms. Johnson smiles. "Those are tables and charts. They are different ways of organizing data. They help us share information."

"How?" Steven and Natalia wonder.

Ms. Johnson points to the numbers and words in little boxes. "This is a table," she explains. "The table tells us how the racial make-up of Ohio and the U.S has changed. Each row is labeled for a different immigrant group. The columns are labeled by a decade. Two columns are for Ohio, and two are for the entire U.S. The numbers in each cell tell what percentage of people belonged to each racial group in those years." She points at a row in one of the tables. "See? This row tells how many people were African American in 1990, then 2010."

"My dad and grandparents must be part of that number." Steven smiles. "Whoa," he says as he reads the table. "Look how that number grew over time."

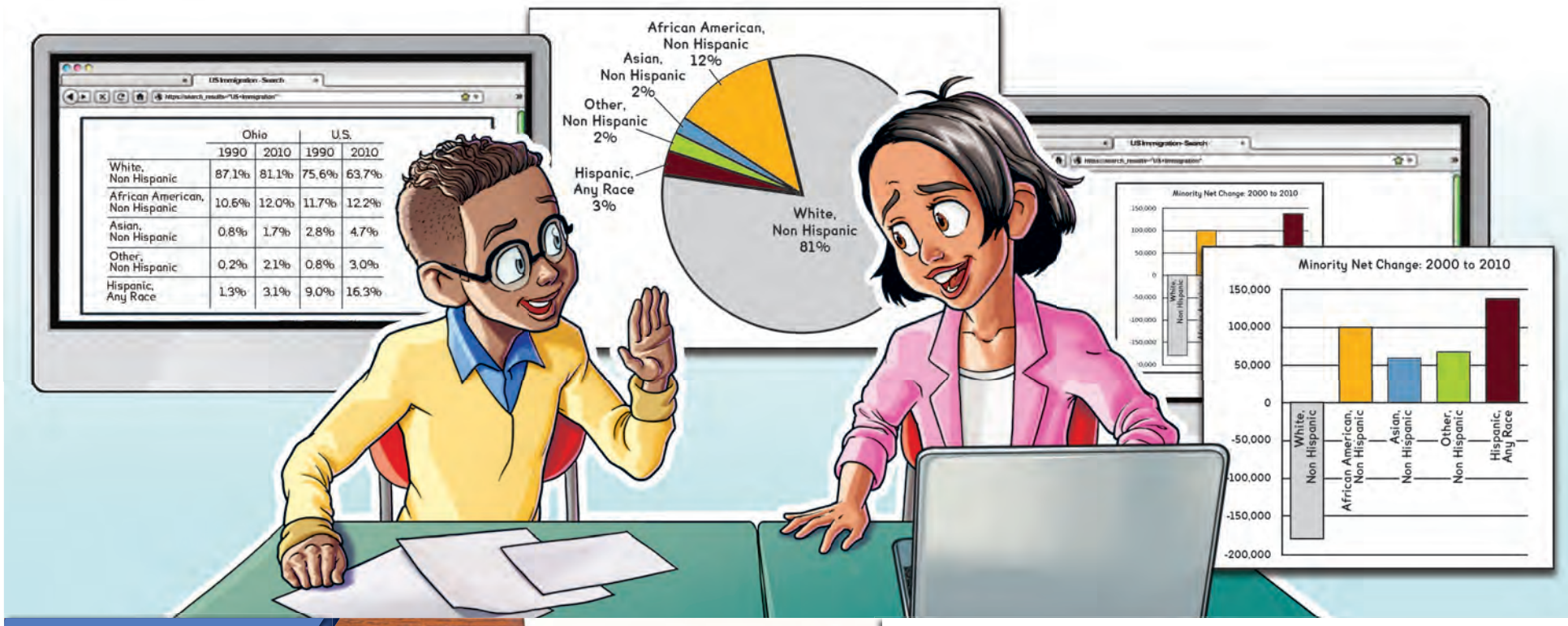
"That's right," Ms. Johnson confirms. "Now look at this bar chart. It's even easier to see how the immigrant numbers have changed." She points to one of the charts. It shows many different colored bars. Each bar is labeled with a different racial group. The horizontal lines tell us what the bars mean. They show how the population of each of these groups changed between 2000 and 2010.

Ms. Johnson now points to the colorful-looking pie. "This is a pie chart. It shows the total amount of immigrants from each group over time. It tells us by percent. The bigger the slice, the higher the percentage."

"So, African Americans like me take about 12 percent of the pie," Steven says.

"This information is perfect for our report," Natalia exclaims. "We can finish it now. Thanks, Ms. Johnson."

"Yeah, thanks," Steven agrees. "All this talk about pie is making me hungry for pizza!"



Connections

What does "data" mean?

What is data? Data is a collection of information. Data is facts of any kind. Data can be numbers or words. It can tell us amounts or descriptions. Data can be specific measurements. Or, it can be estimates of something. It can help us answer questions like How much? What kind? Where? When? Who? and How?

How do we get data? Data is collected by observation and answering questions. It is also collected by counting and measuring. People conduct experiments and surveys to get data.

In order for us to be able to know what data is telling us, it has to be organized. Otherwise it would just be a jumble of words and numbers. Tables and charts are the best way to organize data. The type of data and how it is used determines how it gets organized. Data can be organized into pie charts that show percent. It can be organized into bar graphs that show amount or line graphs that show change over time. There are entire careers dedicated to collecting and organizing information. Data can be powerful when it is organized correctly.

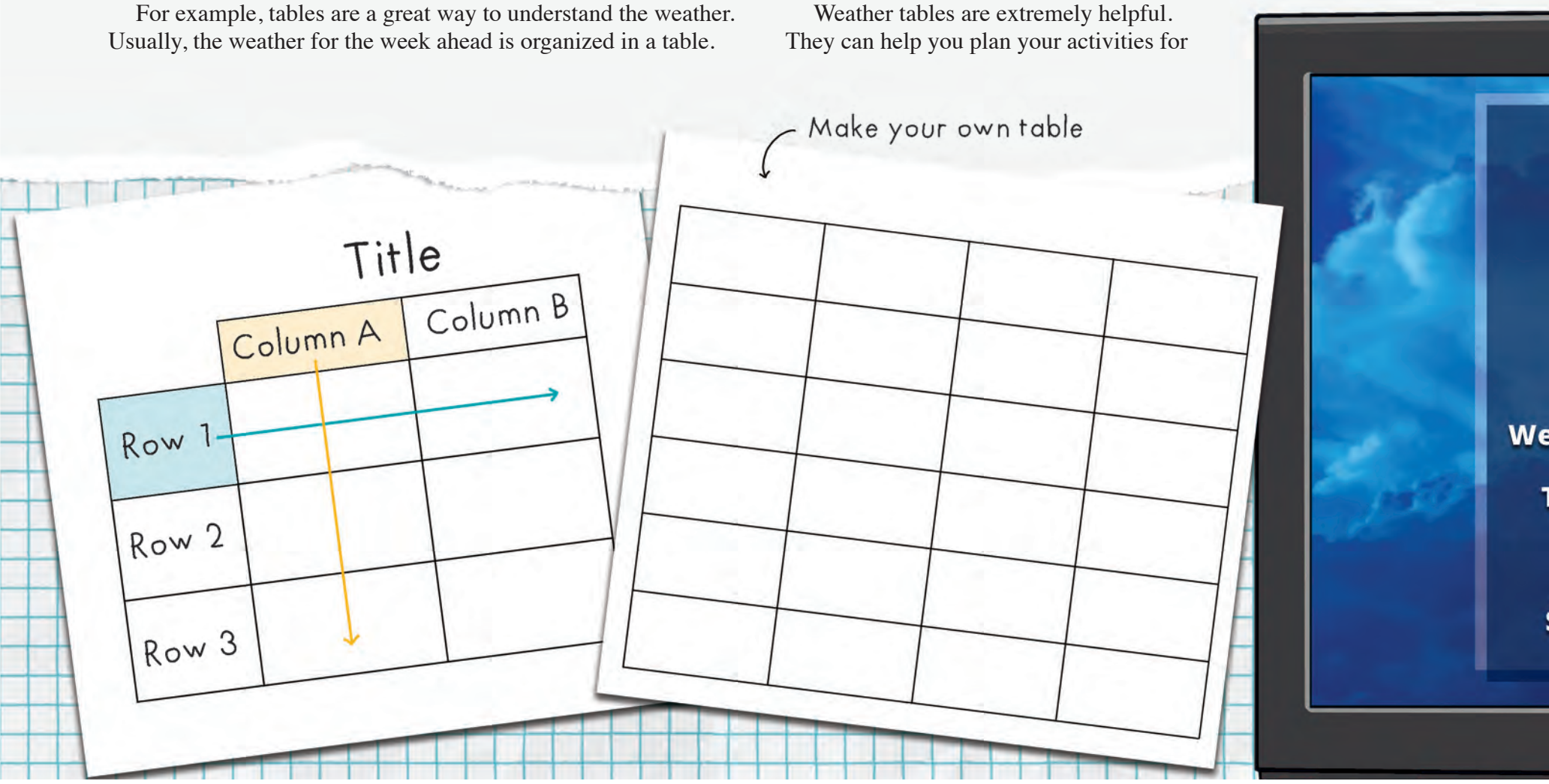
How to Read Tables

Once you know how to read a table, it can change the way you see your world! We see tables everywhere in our daily lives. There are tables on calendars, food labels, restaurant menus, store signs, at sporting events, and even on your report card. Tables collect and present information in an organized way. Tables help us understand information about many things at once.

Tables are organized by titles, rows, columns, cells and labels. The title of the table tells what data the table shows. Individual pieces of data are kept in boxes called cells. These cells are organized in columns or rows, or both. Columns are organized from top to bottom. Rows are organized from left to right. Columns and rows have labels, or headings, that help explain the data found in each.

For example, tables are a great way to understand the weather. Usually, the weather for the week ahead is organized in a table. The title could be something like "Our Local Forecast." There will be seven rows labeled for each day of the week. There will be two columns. The first column will be labeled "Weather." It will tell if the day is predicted to be sunny, cloudy, rainy, snowy or windy. The second column will be labeled "Temperature," and it will tell how hot or cold the day will be. Data in tables can be shown with numbers, words, symbols or even images. In the Weather column, a sun will mean that it is a clear, sunny day. If it is going to rain, the symbol will be a cloud with raindrops. The temperature is always shown in degrees Fahrenheit. In the table, the data for the Temperature column will be a number followed by a degree symbol. The symbol might also have the letter F next to it, which stands for Fahrenheit.

Weather tables are extremely helpful. They can help you plan your activities for

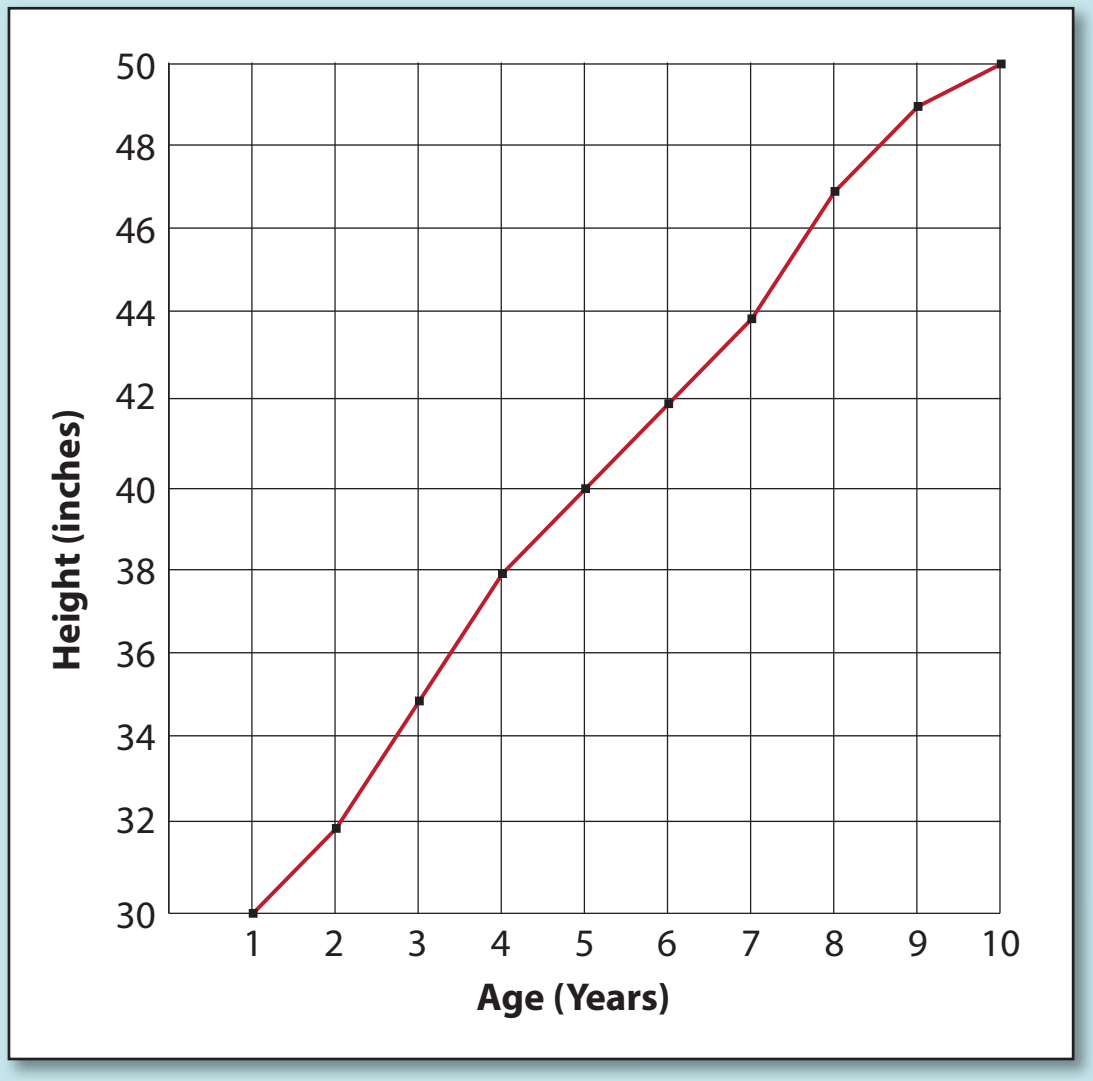


Line Charts

Some families like to track the growth of their children. Maybe you have a certain spot on a wall or doorway where a family member makes marks to show how tall you are over time. Or maybe you are measured each year at your doctor's office. Your doctor will track how much you grow on a line chart.

A line chart is a chart that is often used to track changes or patterns over time. Line charts are good to use for tracking changes over time because they use one line to link data together. Your doctor's line chart has numbers going from left to right across the bottom. These are labeled "Age." On the left and right sides of the chart there are numbers starting from the bottom and going up. The left side measures height and the right side measures weight. Each year, your doctor adds one point to the line chart that represents your age, height, and weight. Each point is connected by a line. Your doctor can now study how you are growing over time.

Line charts are a great way to learn about changes over time. They can also show patterns through history. How would you use a line chart?



the week. If there is a particular day you are wondering about, just look for that label on the left side of the table. Follow that row for the weather and temperature. You will know if you can play outside. If it is too cold or wet, you can plan to stay in with a good book or fun game. You will know if you need a jacket, umbrella, snow boots or sunscreen.

Now, try to make a table of your own! You can work alone or with a partner to make your table. You should think about what kind of data you can gather easily in the classroom. Your data can be information such as the eye or hair color of your classmates. You can organize this data in many ways, such as the seating arrangement of your class. Or you can do it by your classmates' names.

What will your table be about? Be sure your titles and labels are helpful. What data will you put in the rows? What will you put in the columns? How will you show the data? Your table can help others understand something in a new way. Your table might help you, too!

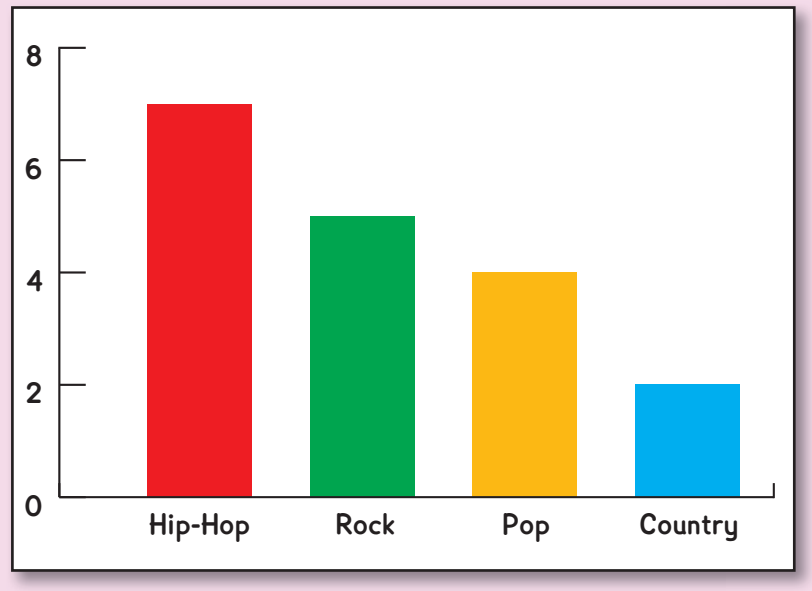
Bar Charts

What kind of music do you like? What about your classmates? Let's say you surveyed the kids in your class about their favorite kinds of music. Seven kids liked hip-hop the best, five liked rock, four liked pop and two liked country. Now you have all of this information, but how can you show it? You can use a bar chart!

Bar charts are a good way to show data in groups or categories. They can show different quantities, or amounts, in an easy way. The left side of the chart is usually labeled with numbers. At the bottom, each bar is labeled according to what it represents. The bars go from the bottom of the chart toward the top. Bar charts can often be colorful, too. Each bar on your music chart can have a color of its own. The colors also help show the information because they help each bar stand out.

In the music survey bar chart, the numbers can go from 1 to 10. The tallest bar will be the "Hip-Hop" bar, colored red. The shortest bar will be the "Country" bar, colored blue. The "Rock" and "Pop" bars will be at different levels in between. The "Rock" bar will be colored green and the "Pop" bar will be colored yellow.

Bar charts are a good way to compare information quickly. A person could look at your bar chart and see that hip-hop is the music most of your class likes best. The person reading your bar chart doesn't need to know exactly how many kids liked hip-hop. She can see that the red "Hip-Hop" bar is the tallest. Bar charts are a great way to compare and contrast information.



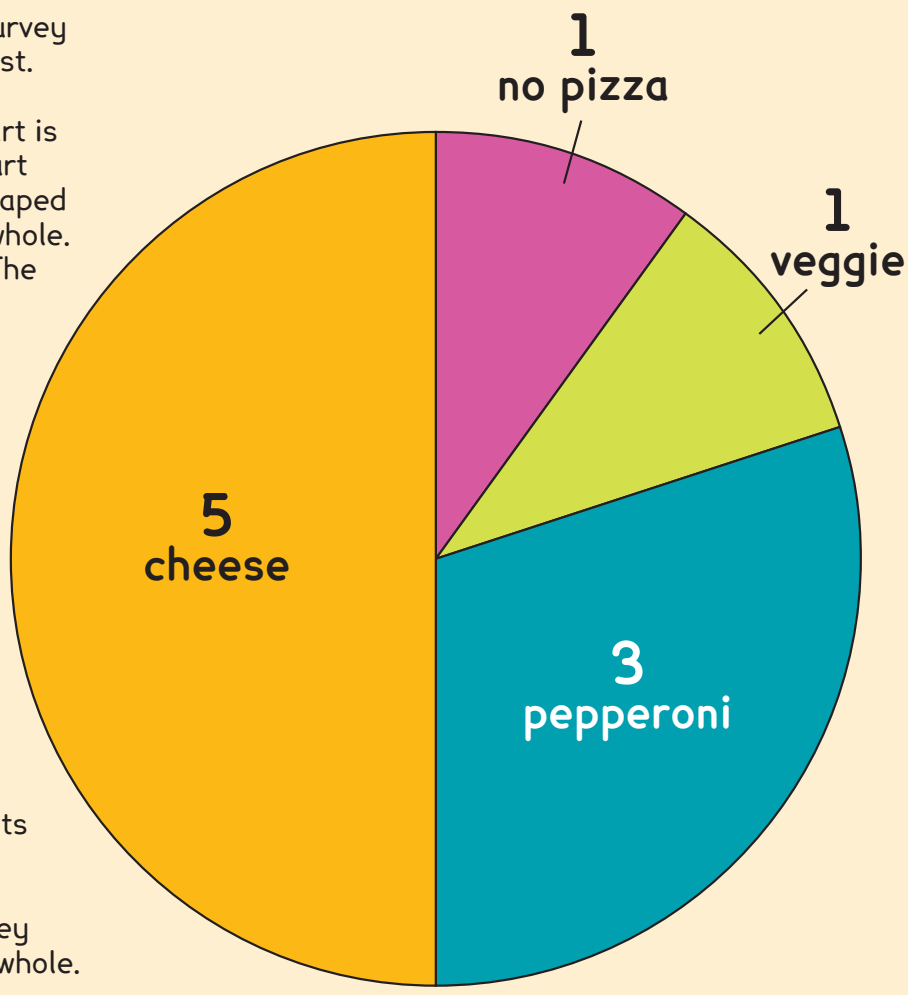
Pie Charts

What are your favorite pizza toppings? Imagine doing a survey of everyone in your class to find out which topping they like best. You can share your findings using a pie chart.

Pie charts help to show data as parts of a whole. A pie chart is a circle, like the shape of a pie that you eat. The entire pie chart represents the data as a whole. The different segments are shaped like pieces of the pie. Each segment represents a part of the whole. You can use different colors to represent each piece of data. The colors help show the information.

Let's say that you surveyed 10 students from your class about their favorite pizza toppings. Five kids like plain cheese the best. Three like pepperoni. One likes veggie. One does not like pizza at all. Now you have to divide your pie chart into segments that represent the total for each answer. Since you surveyed 10 classmates, the five who like cheese the best will take up half of the pie chart. Five is half of ten. The other half of the chart will be split among the other data. The three classmates who like pepperoni will have the next biggest segment of the pie chart. The classmate who likes veggie will have the same size segment as the classmate who does not like pizza at all. Labels for a pie chart can be placed right on the segments if there is enough space. The smaller segments can be labeled outside the pie, with an arrow pointing to them. Your chart should tell how many students you surveyed. Your labels should tell how many students each segment represents.

Pie charts are a good way to share information quickly. They allow people to easily see how different parts compare to the whole.



Name _____

From Table to Chart

Activity

Data can represent groups or categories, changes over time or parts of a whole. Data can be presented in multiple ways. Here are some activities that will help you decide the best way to show certain kinds of data.

1. Marcus took a survey of his classmates to see how they got to school. Some take a bus or a car, and some walk or ride bikes. He created a table of his findings titled "How Do We Get to School?" Look at Marcus's table. Based on his data, create a chart that you think best represents the information. Which kind of chart did you use? Why?

_____

_____

_____

How Do We Get to School?

Method for Getting to School	Number of Classmates
Bus	11
Car	5
Walk	3
Ride a Bike	5
Total	**24**

2. Garth's local community center wants to show a family-friendly movie on Saturday night. There are five movies to choose from. Garth volunteered to ask everyone in his neighborhood which movie they would most like to see. Garth records everyone's answers in a table titled "Neighborhood Movie Picks." Using the information from Garth's table, create a chart that you think best shows how many of his neighbors chose each movie. Which kind of chart did you use? Why?

_____

_____

_____

Neighborhood Movie Picks

Movie Preference	Number of Votes
Movie 1	13
Movie 2	16
Movie 3	36
Movie 4	29
Movie 5	6
Total	**100**

3. Awinita planted a garden of tomatoes, cucumbers and peas. She wonders which of the three plants is growing the fastest. Every day she measures the sprouts from each vegetable and records the information in a table. Look at Awinita's table, titled "My Growing Garden." It shows the first week of growth. Create the chart that you think would best help her see how fast each plant is growing. Which kind of chart did you use? Why?

_____

_____

My Growing Garden

Plant Type	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Tomato	0.60 in	1.20 in	1.80 in	2.40 in	3.00 in	3.60 in	4.20 in
Cucumber	0.92 in	1.84 in	2.76 in	3.68 in	4.60 in	5.52 in	6.44 in
Pea	0.55 in	1.10 in	1.65 in	2.20 in	2.75 in	3.30 in	3.85 in

Let's Write

In your opinion, which chart or table would you use to poll your classmates' favorite after-school snack? Name the chart or table type as well as an explanation as to your reason for your opinion. Please include how you would set up the chart or table to fit your needs.

Think & Review

1. Explain why a graph or chart is useful when we're dealing with data.
2. What are two different ways data can be represented?
3. Say you were a teacher and wanted to direct your students to a particular cell in a table with rows and columns. How would you do it?
4. Explain a situation where a line chart might work better than a bar chart.
5. If a pie chart shows the percentage of students who like different foods (for example, 40 percent like pizza, 25 percent like lasagna), what will all of the numbers in the pie chart add up to?

Art & Music Gr 4 Week 7

Art: Learn about artist Robert Seldon Duncanson by reading the biography sheet or visiting

https://daily.jstor.org/marking-the-grave-of-the-first-african-american-landscape-artist/

Mon: View selections Duncansons's art, and write a response to at least one of the works. Ask yourself what you think he intended with his art. How does it make you feel? Why or why not?

https://americanart.si.edu/artist/robert-s-duncanson-1353

Wed: Create an original Landscape work in the style of Duncanson, using whatever art tools you have available (crayon, chalk, paint, pen, pencil, marker), using a scene from your neighborhood to inspire the work. Write a statement on why you selected the subject of your art.

Fri. Complete work on your photo journal, and use the following themes as inspiration.

Week 7: Future: The future is always on our minds—what will I be when I grow up, what will school be like next year, what will the world look like when I am an adult, etc. Record your thoughts in an essay or artist's statement.

Music: Tue: Read the information about Hip-Hop and write a reflection on the influence of Hip Hop. Thu: Listen to at least two selections, and write a reflection on how Hip Hop makes you feel, and predict what the next style of music will be.

https://www.youtube.com/watch?v=sLf4i078eDc Sugar Hill Gang, *Rapper's Delight*

https://www.youtube.com/watch?v=qBiA_po8TYM Run DMC *It's Tricky*

https://www.youtube.com/watch?v=XCou76T5Y9Q Lil' Nas X *Old Town Road (*w/Billy Ray Cyrus)

Supplemental: NY Philharmonic Young Peoples Concerts, conducted by Leonard Bernstein

https://www.youtube.com/watch?v=rxwWlQNGeKE&list=PLyPLVV5ZP3toAOnj7OcVXN8voaQKFAzUY

Monday	Tuesday	Wednesday	Thursday	Fri
Art Read about Robert Seldon Duncanson	Music Read about Hip-Hop write a reflection	Art Create Landscape art in the style of Duncanson	Music Listen & respond to Hip Hop & speculate on next style of music	Work on Photo Journal

4th GRADE

Week 7: Art

Biography of Robert Seldon Duncanson

By the 1860s the American press proclaimed Robert Seldon Duncanson the “best landscape painter in the West,” while London newspapers hailed him as the equal of his British contemporaries. Both then and now he rivaled the achievements of American landscape painters such as Thomas Cole, Asher Brown Durand, and John Frederick Kensett, who shaped the country’s early landscape tradition in the Hudson River Valley style.

Born to an African-American mother and Scottish-Canadian father, Duncanson grew up in New York near the Canadian border in the 1820-1830s. By 1842 he was known for his painting, exhibiting in Cincinnati Ohio where he moved after childhood. He found patrons among local abolitionists including Nicholas Longworth who commissioned him to paint 8 murals in his home. Longworth also sponsored his first trip to Europe for. “Grand Tour,” making him the first known African American artist to do so. He traveled throughout the United States and Europe and was friends with many painters who influenced his style.

He died of mental illness that may have been partly a result of lead paint poisoning in 1872.

Week 7: Music

Gr 4 W7 D2 Music HIP HOP Background information

Hip hop is a type of culture/art style that started in the 1970s. It began in Jamaican-American, African-American, and Latino-American urban areas in some of the larger cities of the United States. Hip hop uses a style of singing called rapping. The singer or group chants or says words with a rhythm that rhymes. The lyrics of hip hop songs are often about the life of urban people in the big cities. Hip hop music also uses musical styles from pop music such as disco and reggae. Rap and hip hop music have become successful music genres.

Hip hop as a culture involves the music as well as a style of dressing called "urban" clothes (baggy pants, Timberland leather work boots, and oversize shirts); a dancing style called breakdancing or "B-Boying"; and graffiti, a street art in which people paint pictures or words on walls. In the 2000s, hip hop music and hip hop culture are very popular in the United States and Canada. Hip hop musicians usually use nicknames. Many of the popular hip hop musicians from the 2000s use nicknames, such as Snoop Dogg, Jay-Z, Eminem, Lil' Wayne, and 50-Cent.

The Five Elements of Hip-Hop:

1. Emcee: an acronym for the Master of Ceremonies. Emcees began as hosts at hip-hop parties who would prompt the breakers to dance. Influenced by original spoken-word artists, emcees began to do rhythmic call-and-response with the audience, a technique that eventually morphed into the poetic form of rapping that we know now. .
2. DJ: The DJ existed before hip-hop. It's an acronym for the word disc jockey. Originally, the DJ's job was to play recorded music for an audience either on radio or live for an audience. But the hip-hop DJ took it to the next level by making record spinning into an art form called turntabalism.
3. Breaking: The dance element of hip-hop, performed by dancers called B-Girls or B-Boys. Birthed in the late 1970s in New York, breaking blended movement styles such as jazz and martial arts with dance styles from the Caribbean, Latin America, and Africa. B-Girls and BBoys got their name because they danced over the DJ's "breaks" at hip-hop parties in the Bronx.
4. Graffiti: hip-hop's visual element. The modern form of graffiti or "graff" actually began before hip-hop music and dance, but it quickly became a part of the culture as many graffiti artists grew up in the same area as other hip-hop artists. Many graffiti artists are emcees, deejays, and/or breakers.
5. Beatboxing: also known as the "Fifth Element,;" the ability to make a beat with one's mouth instead of drums or drum machines. Beatboxing became a staple sound of hip-hop and modern dance music.