Grade 7
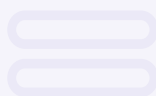
MINNESOTA STANDARDS FAMILY GUIDE

What Your Child Should Know
Activities & Examples of ELA & Math
Tips for Talking with Teachers

great
MN
SCHOOLS

About This Guide

Families want to know what their child is learning in school. They want to advocate for their child and help them succeed in school.

The Minnesota Department of Education decides what every child will learn in school in all subjects. This guide helps you understand those standards in English Language Arts (ELA) & Math. This will help you partner with your child's teachers to support learning during 7th grade.

BEFORE YOU START
Before reviewing this guide, we encourage you to check your student's current grade level at www.bealearninghero.org/readiness-check-mn.

This Guide Includes

What your child should know & be able to do–
PAGE 4 FOR ELA **& PAGE 16** FOR MATH
The most important content (knowledge & skills) for
students to learn by the end of 7th grade

Examples of ELA & Math–
PAGE 8 FOR ELA **& PAGE 19** FOR MATH
Example work your child should be able to write by the
end of 7th grade

Everyday activities to support learning–
PAGE 14 FOR ELA **& PAGE 21** FOR MATH
Ways you can support your child in learning important
content & skills in English Language Arts (ELA) & Math

Tips for talking with teachers–
PAGE 15 FOR ELA **& PAGE 22** FOR MATH
How you & your child's teacher can work together to
help your child grow

Education words glossary–
PAGE 23
Definitions of common education words relevant to
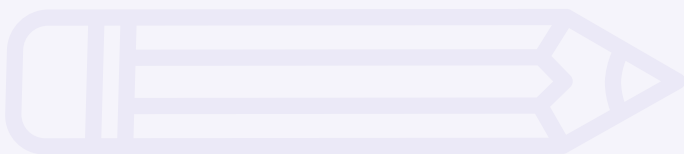7th grade

English Language Arts

WHAT YOUR CHILD SHOULD KNOW & BE ABLE TO DO

In 7th grade, students look at what a writer is saying & how they are saying things. Students ask themselves what the writer thinks, look for important points in a text, & check if what the writer says is true. They'll read to learn new words & to learn more about the world. Students should read about half fiction & half nonfiction. Books should have a range of **text complexity** & teach them about new people, places, & ideas, including the voices of past & present Dakota & Anishinaabe people.

7th graders should write often. They will write short assignments & longer assignments that take many days. Students should know most spelling, grammar, & punctuation rules & how to use them. They should type easily. They will practice researching, thinking, & rewriting based on feedback from their teacher & classmates. They will write about many topics for different reasons.

To see all 7th grade state standards for ELA see here: **education.mn.gov/mde/dse/stds/ela**

7th graders need to know how to do the things below by the end of the year:

APPLYING LITERACY SKILLS

- ☑ Read texts at a 7th grade level, which is a Lexile level 925-1185

- ☑ Read 7th grade texts smoothly, which is 170 words per minute

- ☑ Read with expression that shows they understand the text as they read it

- ☑ Write & rewrite complete essays with correct spelling, grammar, & punctuation

- ☑ Use technology to write & work with others & do research on a topic using trusted sources

- ☑ Never copy work that is not theirs, which is called **plagiarism**

- ☑ Understand their **digital footprint**, which is the trail of data we each leave on the internet

- ☑ Type 38-40 words in one minute. Type at least three pages in one hour

LEARNING ABOUT THE WORLD THROUGH TEXT

⊘ Ask & answer questions about texts they have read. Re-read the text to find specific information to support their understanding. Understand the meaning even when it is not directly stated. Be able to do the following:

- Summarize the text without inserting their own opinion

- Find themes, key points, & main ideas

- Study how a key person, event, or concept is introduced & how they change

- Explain how different parts of the text impact the meaning

- Describe how the story moves & how the characters respond

- Study how the author & their viewpoint affect text

- Compare fictional stories with historical accounts

- Question what an author or a speaker assumes

- Think about what a text says. Is there enough proof that the ideas are true?

⊘ Find the meaning of new words and **figurative language**, using clues in the text, context, dictionaries, or the root word.

⊘ Write about a text after reading it. Include an introduction with a simple **thesis statement**, examples in order, & a conclusion

⊘ Explain something using their writing. Use different ways to explain themselves, including compare/contrast, cause/effect, problem/solution, & critique. Write with specific words that relate to the subject. Use connecting words to link ideas.[1]

Jean Baptiste de Lamarck and Charles Darwin were both naturalists that had theories about organisms getting helpful variations. Lamarck's theory was called the theory of acquired characteristics and Darwin's was called the theory of evolution by natural selection. Lamarck and Darwin's theories are the same and different in some ways.

⊘ Write convincing ideas. Use different ways to convince the reader. Be able to respond to disagreement.

Dear Teachers,

I have recently begun learning about the "Shut Down Your Screen" week. This is a program where kids in school and out of school don't use any electronics for one week. Everyone in your school would participate. This is a way to save the way we think and try something new. My question is, should we participate in the national "Shut Down Your Screen Week?" I think it would be a good idea for many reasons.

First, I think we should participate because using too much technology affects the way we think and behave. In the article Attached to Technology and Paying a Price by Matt Richtel it gives many scientifically proven facts that using technology too much affects the way we think. If you are juggling e-mail, phone calls and other incoming information it can lose people's focus. Also as the text states, "The stimulation provokes excitement that researchers say can be addictive. In its absence, people feel bored." This means that people can become addicted and when not using technology become bored with things they used to love to do.

⊘ Write to create & express themselves (poetry, stories, biographies, myths, & plays). Use conversations, descriptive words, & the 5 senses to show a character's emotions, motivations, & experiences. Use the right structure (e.g., chapters, stanzas, scenes) & different transition words to show how experiences & events connect.
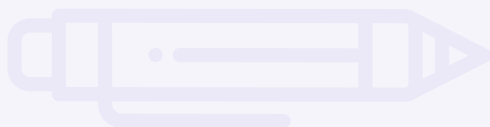
Below is an example of a 7th grade level text.[2] This text is at a **Lexile** level of 1050. 7th graders should be able to read this text smoothly & with expression. Afterward, they should be able to tell you what happened in the text & answer the questions below.

How Jackie Robinson Changed Baseball
By Jessica McBirney
2017

Today, when you turn the TV to Major League Baseball, you will not be surprised at all to see an African American or Latino player take the mound. Maybe your favorite player is a person of color. But baseball has not always been as diverse as it is now. In 1947, Jackie Roosevelt Robinson became the first African American to play on a Major League Baseball team. The road he paved was an important, but difficult one.

Early Athletic Success
Robinson was born in Georgia on January 31, 1919, the youngest of five children. His father left the family just a year later, and his mother moved her children to Pasadena, California. She worked odd jobs to support her family, but Robinson still grew up in relative poverty.
When Jackie enrolled in high school, his siblings encouraged him to get involved in school sports teams. He excelled in football, basketball, track, and baseball. He broke many school sports records. Robinson continued to play all of these sports in junior college. Ironically, he viewed baseball as his weakest sport. He transferred to UCLA to complete his degree, where he became the first athlete to letter 3in all four of those sports. UCLA had some of the most racially integrated college sports teams at the time, but Robinson was still among a very small minority of non-white athletes on all his teams.

Fighting Racism
Even early in his life, Robinson confronted racism head on. In 1938, while still at junior college, he was arrested after disputing the police detention of one of his Black friends. He managed to escape a long jail sentence, but this and other run-ins with the police earned him a reputation as someone who was both eager and willing to stand up against racial oppression. When the U.S. entered World

War II, Robinson enlisted in the army. He never saw direct combat, but his military career was marred by racial problems. While stationed in Texas, Robinson boarded a non-segregated bus, but he was instructed to sit in the back anyway. He refused, and military police took him into custody for his insubordination. Fortunately, one month later, an all-white jury acquitted him, but the situation was an early indication of the racial prejudice he'd come to face later in life.

A Negro Player with Guts
Robinson joined the professional Negro Leagues to play baseball in early 1945. He signed with the Kansas City Monarchs and had great success, but he was frustrated by all the disorganization that plagued the Negro Leagues. At the time, a few Major League teams were recruiting from the Negro Leagues, and Robinson struck up a relationship with the General Manager of the Brooklyn Dodgers, Branch Rickey. Rickey liked the potential he saw in Robinson, but he had one question. He knew Robinson would face racial discrimination and injustice if he joined the Major Leagues. Could he be "a Negro player with enough guts not to fight back?" Robinson promised that he could, and signed a contract with the Montreal Royals, the Dodgers' top minor league team. After just one season, he transferred to the Brooklyn Dodgers. As he stepped onto the field as first baseman in 1947, Jackie Robinson became the first Major League Baseball player to break the color barrier since 1880. He was 28 years old. African-American fans flooded to Dodgers games, and even the general public and the press had a mostly positive view of the team's newest addition. However, Robinson faced discrimination from a few of his own team members, who threatened to sit out of games if he was allowed to play. Management took Robinson's side — "I say he plays," said the manager. "I say he can make us all rich. And if any of you cannot use the money, I will see that you are all traded." Other teams also disliked Robinson's admittance into the League. Many threatened not to play against him. Most managers rejected these threats and forced the players to participate anyway. Instead, they took it out on Robinson directly during the games. Some players were physically violent — he once received a 7-inch gash in his leg from an opponent who spiked him with his cleats — while others hurled verbal racial insults at him and his teammates. The racism from other teams only united the Dodgers, however, and the team grew more accepting of him.

Major Success

Robinson won Rookie of the Year in 1947. In later seasons, more African-Americans joined other teams in the Major Leagues, as Robinson continued to excel. His success gained him fans from all over the country. He started at second base for the National League in the 1949 All-Star game, and he helped the Dodgers win the 1949 National League pennant. Over the next several years his success grew, and by 1955 the Dodgers pulled out a win in the World Series. Robinson was 36 and starting to feel the effects of his age. In 1956 he did not dominate the league as much as he used to, partially because of the adverse effects of the diabetes he suffered from. When the Dodgers traded him to the New York Giants, Robinson decided to quit baseball altogether and become an executive for a coffee company instead. A Legendary Impact After his retirement, Robinson remained a baseball legend. In 1962, he received baseball's highest honor when he was elected into the Hall of Fame. His playing style changed many team strategies. For example, he inspired players to be more aggressive in their base-running, rather than relying only on the distance they could hit the ball.

Robinson also made important racial breakthroughs in the sports world. The first baseball player to break the color barrier in 60 years, he paved the way for many future African-American and minority athletes. His career helped the upcoming Civil Rights Movement by giving Americans a heroic African-American sports figure to rally around.

COMPREHENSION QUESTIONS

Answer the following questions, use evidence from the text to support your answers.

1. Compare and contrast Robinson in early life and later in his career.

2. How did Jackie Robinson overcome the discrimination he experienced (in life and in baseball) despite being told not to fight back?

3. Describe Robinson's experience as a Major League Baseball player.

4. How did Jackie Robinson's accomplishments in baseball make him a hero to many?

5. Describe Robinson's impact on the Civil Rights Movement.

Below is an example of writing at a 7th grade level.[3]

The Boy

The young boy stood with the most menacing look he could muster spread across his face. He just stood there watching the endless columns stretch as far as the eye could see down the long, dusty road. The soldiers would turn and look as they went by, and he made sure to look right back. He made sure to stare as far as he could into the dark pupils of their eyes, as if it would raise the house that was now nothing more than a heap of ashes. Only a few charred remains of the walls were left.

> Introduces reader to the main character & setting of the story

> Uses specific words, descriptive details, & figurative language ("giant snake of blue tails")

As his eyes went from soldiers to remains he saw a small soft lump poking up from the ashes. He knew exactly what it was and he turned away. That teddy bear had been his favorite friend. Not a toy, it was more than a toy to him. For a second he was back on a green lawn, with the shutters of a house tapping softly on the window pane. And there was his bear. They waited for the next pirate ship to come around the bend in the road, so they could board it and make the captain walk the plank.

> Uses transition words to show a shift back in time (flashback). Uses precise words to describe the memory the boy has of his life before the soldiers came

But then he heard a shout and knew he was back on the dusty road with no green lawn and no shutters tapping softly.

> The writer has organized a strong plot that unfolds naturally (though not in linear time order)

He leaped down from his perch on an old dresser, one of the few things that hadn't been pillaged or burned in the fire. He bent down, putting both hands on his knees as his eyes searched the ground intently. He picked up the most deadly rock he could find and hopped back up on his perch to resume his watchful glare. No soldier escaped the watchful eyes as he probed them. The giant snake of blue tails was tapering off, and the boy could now see the end of the tail. The boy

> Uses specific words, descriptive details, & figurative language ("giant snake of blue tails")

once again hopped down from his perch. He could feel the sweat-covered rock in his palm. The last of the blue columns were passing.

The boy took a step forward and leaned back, then whipped his body forward and released the rock at the same moment. The boy heard a thud as the rock came home and the rear most soldier clutched his side and looked back – but all he saw were those hateful eyes with tears rolling forth.

Provides a conclusion that follows from & reflects on the events

EVERYDAY ACTIVITIES TO SUPPORT LEARNING

If your 7th grader gets stuck on words often, or if they sound choppy when reading, talk with their teacher about their fluency. Also, have your child practice reading short texts to get better, such as poems or short stories

- Ask your 7th grader to choose a book they want to read on their own each day. Reading many books over time is important. Let your child pick, so they will be excited to read

- Go to the Hennepin County library together often-it's free! Anyone can get a free library card, regardless of immigration status

- Pick a topic to learn about together. Read books, look online, or do short research projects together. Ask what they learned in their reading. Have them share with you, with friends, or with other family members

- Ask your child to practice their writing. They can keep a journal, write letters or emails, or take notes about what they are learning

- Listen to podcasts together & talk or write about what you learned

- Show your 7th grader how they can use what they learn at school later in life:
  - Ask friends & family to show your 7th grader how they can use the things they are learning at school
  - Attend a writing class at the community center
  - Ask your child to volunteer at community events & activities

- Talk about college with your 7th grader. Look at what you need to apply to go to college. Show your middle schooler how the classes they are taking now will prepare them for high school & college

- Give your child weekly chores that make them read like cooking, shopping, & sorting mail

- Make a homework schedule & stick to it. Make sure your child has finished their homework every day

TIPS FOR TALKING TO TEACHERS

1. Can you show me the results of my child's most recent reading assessment?

2. What is my 7th grade student good at, & how do you use these skills in class?

3. How do you choose what the class reads? Will my 7th grader see faces & places they know in the books? Will they learn about new people & places?

4. What are the 7th graders learning when they read? What should my 7th grader be able to understand & talk about based on what they read? What topics do they read about in history & science?

5. Does my 7th grader get to choose to read books that are interesting to them? Are they only allowed to read books you have chosen? Are they only allowed to choose books at a specific reading level? Can they read things that help them in class & that are interesting to them?

6. Can my 7th grader write in a way that shows you they know what they are reading & learning? Do they use examples from the text & enough details? Do they use the right spelling, grammar, & punctuation? If they are not, how can I help them?

7. How much can my child write in a single class period? How do they get feedback & revise their writing?

8. Do you have any examples of my child's writing? Has my child rewritten anything?

9. Can my 7th grader speak & listen in class that shows they understand what they are learning? Do they use proof from the text, present their answers in detail, & speak with enough depth to show they understand? If not, what challenges are they facing?

10. What can I do to support my 7th grader in class? How can they build a strong relationship with you & take responsibility for their learning?
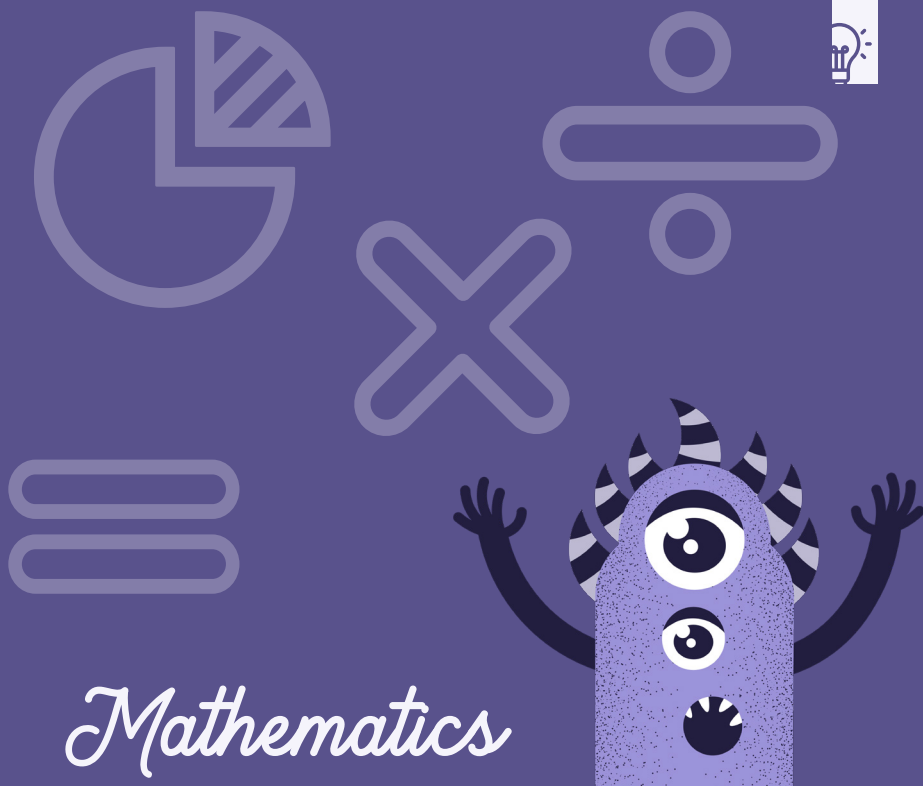
Mathematics

In 7th grade, students focus on solving problems with **ratios** & **proportional relationships**. They also apply **algebraic properties** to **expressions** & solve different kinds of problems with **rational numbers**. Students should work together in class, talk about how they solve problems, & learn from each other. 7th graders should make mathematical arguments & try different ways to solve problems. They should solve both number & word problems, including real world problems. Lastly, they should estimate solutions before solving & know if their estimate is reasonable.

To see all 7th grade state standards for Math see here: **education.mn.gov/MDE/dse/stds/Math**

LEARNING 7TH GRADE MATHEMATICS

⊘ Analyze **proportional** relationships by using a table or graph on a **coordinate plane**. Tell the difference between proportional relationships & those that are not

⊘ Use proportions to solve multi-step problems with:

- Unit rates
  Raul drove 468 miles in 2 days at an average speed of 52 miles per hour. On the first day, he traveled 4 hours at an average speed of 62 miles per hour. What was Raul's average speed on the second day of driving?

- Scale factors, length ratios, & area ratios
  If two similar rectangles have heights of 3 and 5, and the first rectangle has a base of length 7, what is the length of the base of the second rectangle?

- Scale drawings & conversions of measurement
  Using the conversion rate 1 km = 0.62 miles, how many kilometers are there in 26.2 miles?

- Interest, tax, unit price, markups & markdowns, tips & commissions
  Sandra bought a book for 25% off the original price. If she paid $16.50 for the book, what was the original price?

⊘ Understand **rational numbers**, compare, & plot them on a coordinate grid. Apply **order of operations** to add, subtract, multiply, & divide rational numbers

⊘ Use **algebraic properties** to write & rearrange **equivalent expressions**. Evaluate expressions that have rational numbers, **absolute value**s, & whole number **exponents**

$$\tfrac{1}{3}(2x-5)^2 \text{ at } x = 5$$

⊘ Solve real-world & math problems using **equations** & **inequalities** involving **variables** & positive & negative **rational numbers**

> **Miguel knocked over a carton of milk & 3 cups were spilled before he set the carton upright again. When Miguel poured out the remaining milk equally into two measuring cups, there was 3/4 of a cup of milk in each cup. How much milk was in the carton originally?**

⊘ Solve two-step equations involving rational numbers & exponents

$$x + 4\tfrac{1}{8} = \tfrac{2}{3} \quad \text{then} \quad x = \text{?}$$

⊘ Solve real-life problems involving angle measures, area, **circumference**, & **volume**. Explain the formulas they used

⊘ Use statistics to make guesses about populations when given a random sample

⊘ Find the probability of simple & compound events, write **probabilities** as fractions, decimals, & percents

> **The probability of rolling one die and getting a "3" is a simple event and the probability is 1 in 6 or ⅙**
>
> **The probability of rolling one die and getting a "3" and flipping a coin and getting "tails" is a compound event and the probability is ⅙ x ½ which is 1 in 12 or ½₂**
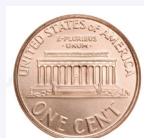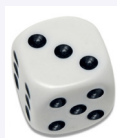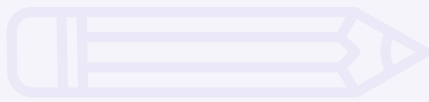
Below are examples of math problems at a seventh grade level.[4]

1. What is the value of 4^3

2. One less than twice a number, x, is 27. Write an equation that can be used to find x.

3. The length & width of an 8-inch by 12-inch photo are each reduced by 50%. Then they are reduced a second time by 25%. What is the perimeter of the new photo?

4. Which number is not rational?

   a.) ⅔

   b.) 0.39

   c.) 3.$\overline{3939}$

   d.) 3.393993999....

5. Graph the solution to |x|=3 on a number line.

6. The distance Jan travels in 2 hours is 18 miles more than the distance she travels in 0.5 hours. The distance she travels is proportional to the time. How many miles does Jan travel in 2 hours?

7. The surface area of a cylinder is 175.8 square centimeters.
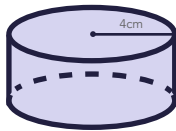
   What is the height of the cylinder? (Use 3.14 for π.)

   a.) 2.3 centimeters   c.) 3.5 centimeters

   b.) 3.0 centimeters   d.) 4.5 centimeters

8. A teacher records the book report scores of some students in her class using scores from 1 to 100.

    95 75 88 82 60 89 95 73

    The teacher has 1 more book report score to record. What score will make the mean & the median of the scores the same?

9. Which equation represents a proportional relationship?
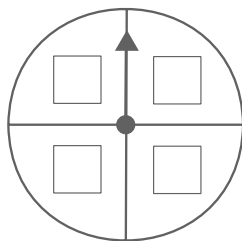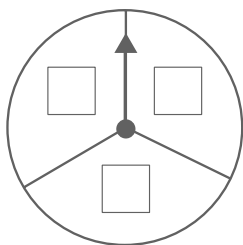
    a.) $y = \dfrac{5}{x}$

    b.) $y = \dfrac{1}{6}x$

    c.) $y = 3x + 1$

    d.) x^2

10. A game uses 2 spinners that have sections colored blue (B), red (R), & yellow (Y). The probability of spinning blue on both spinners is 1/6. The probability of spinning red on both spinners is 1/6. What color is each section of the spinners? Write B, R, or Y in the corresponding box.

B R Y

EVERYDAY ACTIVITIES TO SUPPORT LEARNING

Talk to your 7th grader about the math they can do. What new things are they learning? Are they having any trouble? Can you help them?

- When your 7th grader needs help with homework, ask them questions that help them learn how to solve the problem. Don't solve the problem for them

- Help your 7th graders find things that will help them learn. Ask your student to talk to their teachers about things that can help, such as practice activities, extensions, or more resources

- Have your child talk about the things they are learning & where they see these things in the world around them. For example, where do they see negative numbers outside of math class?

- Take your child shopping. Ask them to compare prices to find the best deal. Ask them to estimate the tax

- Ask your 7th grader about math problems they want to solve. Can they use this math when they are older at their jobs?

- Ask your 7th grader to do statistical research in categories that interest them. For example, have them find the top 30 songs they've listened to this month. Find range, mean, & mode song duration

- Show them where you use math in your everyday life

ANSWER KEY
1: 64; **2:** 2x - 1 = 27; **3:** 15 inches; **4:** D: 3. 393993999....; **5:** the points should be on -3 and 3 with a line connecting them; **6:** 24 miles; **7:** 3.0 centimeters; **8:** 85; **9:** B. ; **10:** Answers may vary.

TIPS FOR TALKING TO TEACHERS

1. Can you show me my child's most recent math test?

2. What are the most important topics 7th graders are learning about in math? Is my child understanding the materials? Can you share specific examples?

3. How does my child approach hard math tasks? How can I help them face challenging problems?

4. What should my child understand & talk about from what they have learned?

5. Can my child show you that they understand what they learned? If not, what challenges them? How can I help?

6. How can I support & encourage my 7th grader to take charge of their learning?

Education words glossary

Educators use words that have a specific meaning in schools. Understanding those terms will help you talk to the teacher.
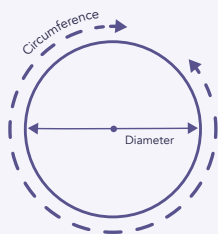
ABSOLUTE VALUE

The distance a number is from zero. The symbol "l" is placed on both sides of a number to mean absolute value, so we the absolute value of x is written as lxl.

|4| = 4 |-5| = 5

CIRCUMFERENCE

Circumference is the distance around a shape. It is found by adding the length of all of the sides. For a circle, the circumference is proportional to the diameter by a factor of .

COORDINATE PLANE

A coordinate plane is a flat plane formed by the intersection of a vertical number line called y-axis & a horizontal number line called x-axis. These are perpendicular lines that intersect each other at zero, & this point is called the origin.
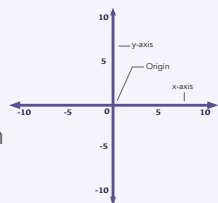
DIGITAL FOOTPRINT

The information about a person that exists on the internet as a result of their online activity. This includes posts on social media, photos, online purchases & reviews, passwords, subscriptions, & many other types.

EQUIVALENT EXPRESSIONS

Equivalent expressions are expressions that work the same even though they look different. If two expressions are equivalent, then the two expressions have the same value when we put in the same value for the variable. For example, **2x + x + x** is equivalent to **4x**.

EQUATION

A statement in which two things are equal. Equations often have unknown numbers (called variables) that are shown as a letter. For example: **3b + 5 = 14**.

EXPONENT

An exponent refers to the number of times the base number is multiplied by itself. $7^3 = 7 \times 7 \times 7$

exponent
base

EXPRESSION

Numbers, symbols, & operations (such as + & ÷) grouped together that show the value of something. For example, **y + 4** is an expression, & **3 − x/₂** is also an expression.

FIGURATIVE LANGUAGE

Figurative language uses figures of speech to be more interesting, effective, & impactful. For example: "My dog's coat is as black as coal." "She is feeling blue." "He fought with the strength of a lion." 7th graders should use context to determine the meaning of figurative language and know that this is different from the actual meaning of the words.

LEXILE

A popular leveling system used by students, teachers, & parents to show two things:
    1) A student's individual reading level
    2) The difficulty of the text
You can often find the Lexile number on the back of the book or by searching the title on www.lexile.com. Grade-appropriate Lexile levels: Grade 6-8 level 925–1185

ORDER OF OPERATIONS

The order of operations is the rule that tells us the order we should use to solve an expression with many steps. The order we follow can be remembered with the acronym PEMDAS:
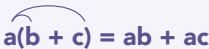1) **P**arentheses
2) **E**xponents
3) **M**ultiplication & **D**ivision from left to right
4) **A**ddition & **S**ubtraction from left to right

PLAGIARISM

Claiming someone else's work or ideas as your own.

PROPERTIES OF ALGEBRA

Properties of algebra describe the different ways that numbers can be combined. In 6th grade students use the associative, commutative & distributive properties of algebra.

Property	Explanation	Example
Associative	Changing the grouping in parentheses of terms you are adding does not change the total. Changing the grouping in parentheses of terms you are multiplying does not change the total	(-3 + 5) + 2 is equal to -3 + (5 + 2) (3 x 5) x -2 is equal to -3 x (5 x -2)
Commutative	Changing the order you add terms does not change the total Changing the order you multiply terms does not change the total	3 + 5 + 2 is equal to 2 + 3 + 5 3 x 5 is equal to 5 x 3
Distributive	When you are multiplying a term by terms in parentheses that are being added, you can distribute the multiplication across both terms and add the products $a(b + c) = ab + ac$	5(3 + 2) = 5 x 3 + 5 + 2 = 15 + 10 = 25

PROPORTIONAL RELATIONSHIPS

A relationship between two varying quantities in which one quantity is a constant multiple of another quantity. For example, every ant has 6 legs, so in an ant farm, the total number of legs is six times the total number of ants. Therefore, the number of legs is proportional to the number of ants.

PROBABILITY

The chance of something happening. Probability is expressed as a decimal or fraction from 0-1 or as a percent from 0-100%. For example, the probability of flipping a coin & it being "tails" is .5, 1/2, or 50%.
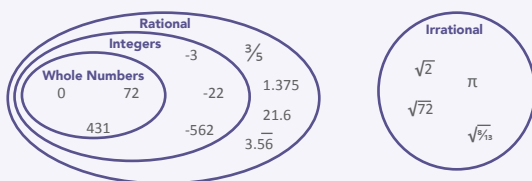
$$\text{Probability of event} \; = \; \frac{\text{Number of times it can occur}}{\text{Total number of possible outcomes}}$$

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RATIONAL NUMBERS

A rational number is any number that can be shown as a fraction of two integers. An irrational number cannot be shown as a fraction. A decimal is irrational if it never ends & it has no repeating pattern.

Rational
Integers
Whole Numbers
0   72
431
-3
-22
-562
$\frac{3}{5}$
1.375
21.6
$\overline{3.56}$

Irrational
$\sqrt{2}$ π
$\sqrt{72}$
$\sqrt{\frac{5}{13}}$

READING LEVEL

Teachers often measure a student's reading level, usually marked by a letter or number. This helps teachers know what students need to learn. But sometimes, children are only allowed to read texts at that level. Be wary of this practice. Children should not be limited to reading only texts that are at or below their grade level goal.

TEXT COMPLEXITY

A measure of how difficult a text is. Text complexity is based on many factors. Text structure & word choice can make it more complex. A text is more complex if readers need more knowledge to understand the meaning, or if the text has a complicated meaning.

THESIS STATEMENT

A thesis statement is one or two sentences that summarize the essay's main idea.

VARIABLE

A variable is an unknown numerical value in an equation or a math expression. Variables are shown with a symbol (usually a letter).
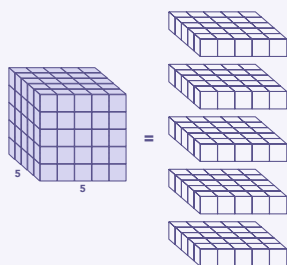
$$2x + 1 = 9$$

variable

VOLUME

The amount of 3-dimensional (3D) space that an object takes up. Volume tells us the amount we need to fill the object. For example, the amount of water needed to fill a bottle. We measure the volume of an object in cubic units such as cubic centimeters, cubic inches, cubic feet, etc.

REFERENCES

Minnesota Department of Education Academic Standards **https://education.mn.gov/mde/dse/stds/**

Seek Common Ground Family Guides **https://seekcommonground.org/family-guides**

Math Milestone Grade Level Grids **https://www.mathmilestones.org/gradelevel-grids**

NOTES

Tell us what you did with this guide!

SCAN ME