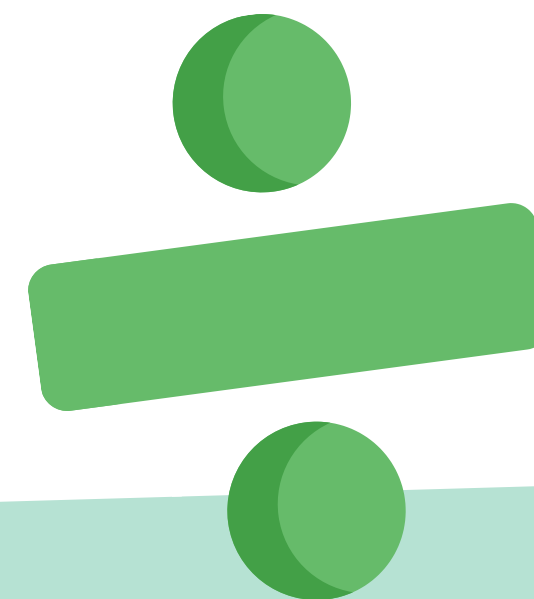
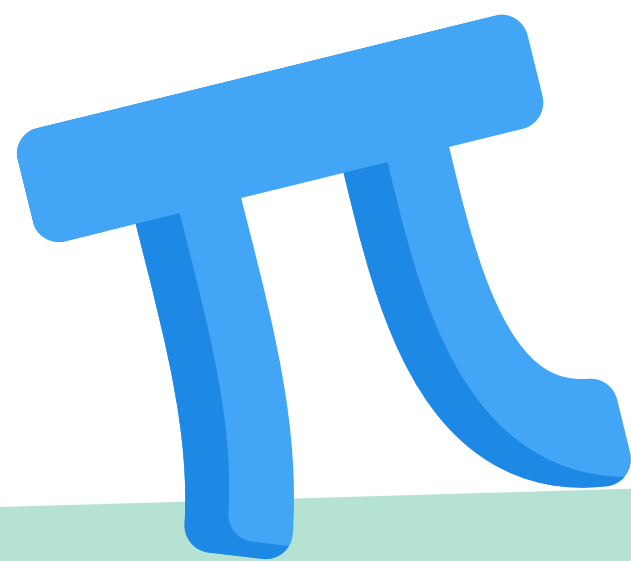




Fourth Grade



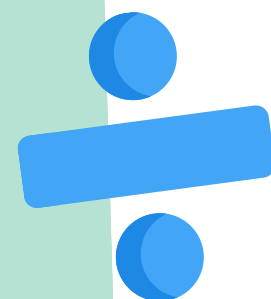
Math Curriculum

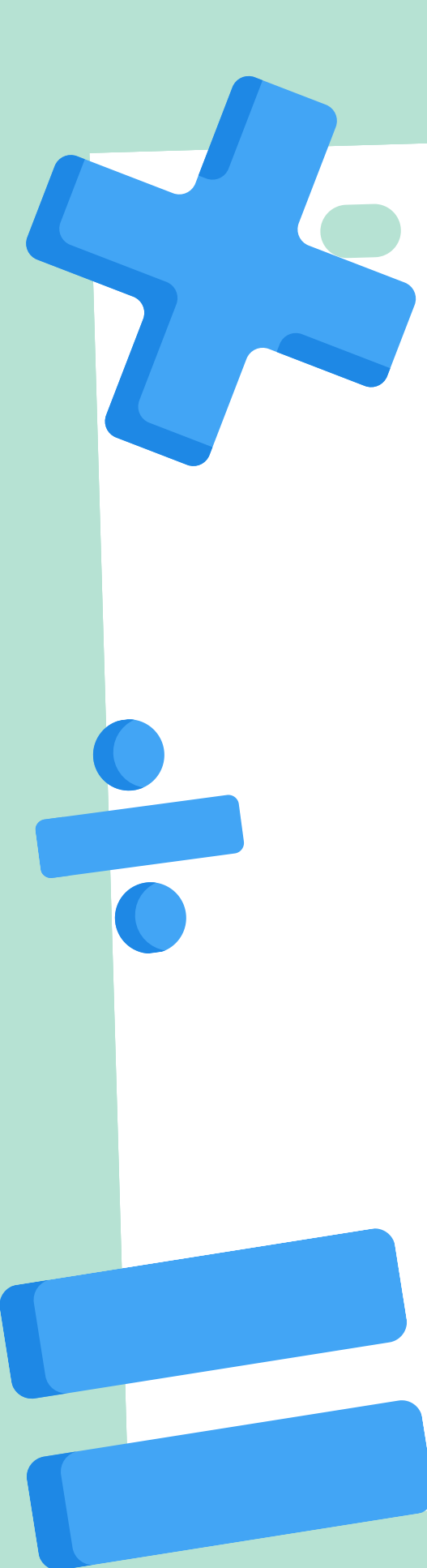




Numbers and Number Sense

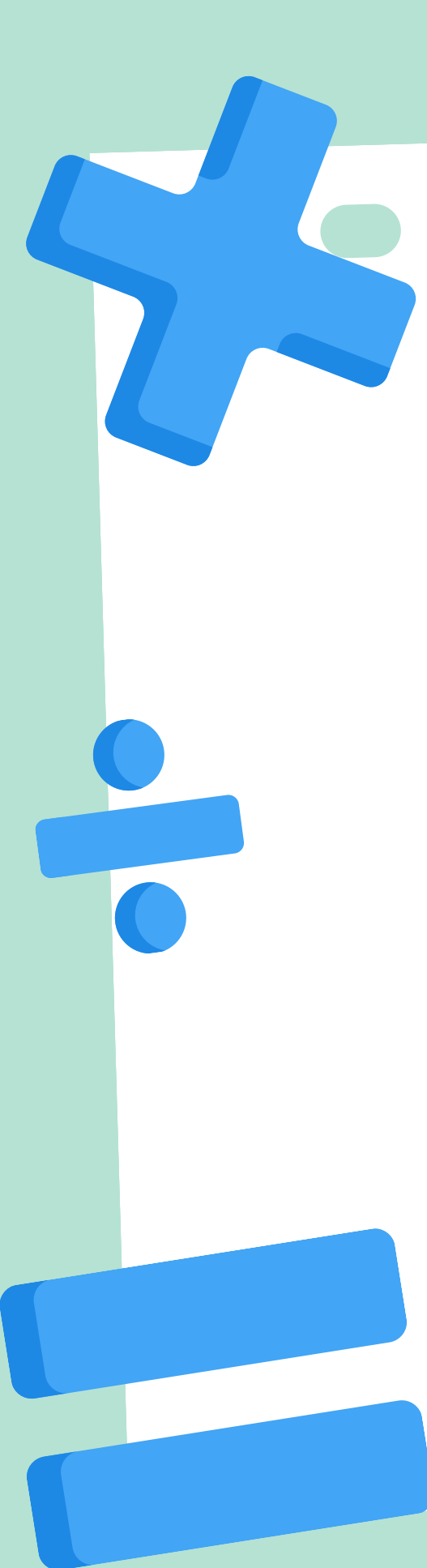
- Read and write numbers (in digits and words) up to nine digits.
- Recognize place value up to hundred millions.
- Order and compare numbers to 999,999,999 using the signs $<$, $>$, and $=$.
- Write numbers in expanded form.
- Use a number line; locate positive and negative whole numbers on a number line.
- Round to the nearest ten; to the nearest hundred; to the nearest thousand.
- Identify perfect squares (and square roots) to 144; recognize the square root sign: $\sqrt{}$
- Identify Roman numerals from 1 to 1,000 (I - M), and identify years as written in Roman numerals.
 - Create and interpret bar graphs and line graphs.
- Plot points on a coordinate plane (grid), using ordered pairs of positive whole numbers.
- Know the meanings of multiple, factor, prime number, and composite number.





Fractions

- Recognize fractions to one-twelfth.
 - Identify numerator and denominator.
 - Write mixed numbers; change improper fractions to mixed numbers and vice versa.
 - Recognize equivalent fractions (for example, $\frac{1}{2} = \frac{6}{12}$).
 - Put fractions in lowest terms.
 - Rename fractions with unlike denominators to fractions with common denominators.
 - Compare fractions with like and unlike denominators, using the signs $<$, $>$, and $=$.
 - Solve problems in the form of $\frac{2}{3} = \frac{12}{?}$.
 - Add and subtract fractions with like denominators.
 - Express simple outcomes as fractions (for example, 3 out of 4 as $\frac{3}{4}$).
- 

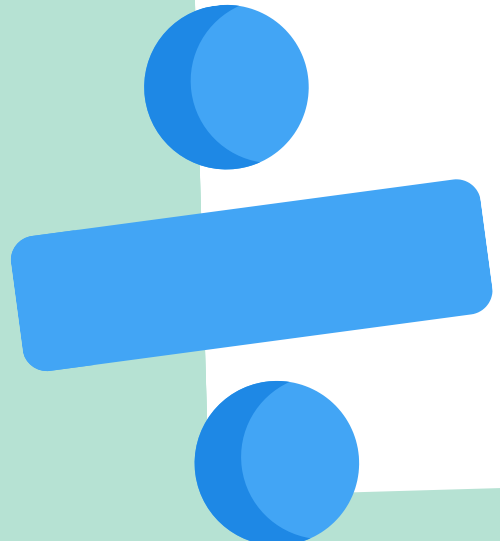


Decimals

- Read and write decimals to the nearest thousandth.
 - Read and write decimals as fractions (for example, $0.39 = \frac{39}{100}$).
 - Write decimal equivalents for halves, quarters, eighths, and tenths.
 - Compare fractions to decimals using the signs $<$, $>$, and $=$.
 - Write decimals in expanded form.
 - Round decimals to the nearest tenth; to the nearest hundredth.
 - Compare decimals, using the signs $<$, $>$, and $=$.
 - Read and write decimals on a number line.
 - Add and subtract with decimal numbers to two places.
- 



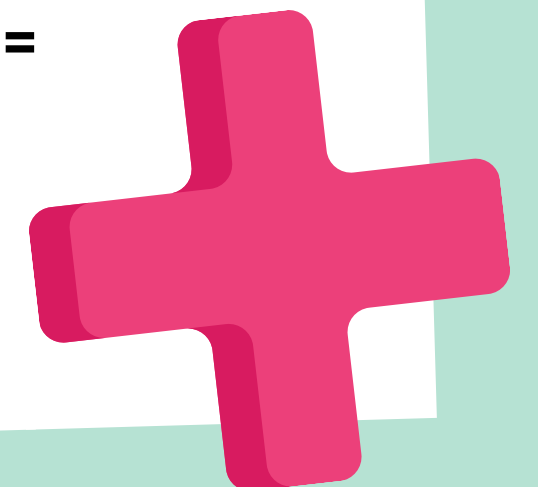
Money

- Solve problems involving making change in amounts up to \$100.00.
 - Solve multiplication and division problems with money
- 
- 
- 



Multiplication

- Review and reinforce basic multiplication facts to 10×10 .
 - Mentally multiply by 10, 100, and 1,000.
 - Identify multiples of a given number; common multiples of two given numbers.
 - Multiply by two-digit and three-digit numbers.
 - Write numbers in expanded form using multiplication.
 - Estimate a product.
 - Use mental computation strategies for multiplication, such as breaking a problem into partial products, for example: $3 \times 27 = (3 \times 20) + (3 \times 7) = 60 + 21 = 81$.
 - Check multiplication by changing the order of the factors.
 - Multiply three factors in any given order.
 - Solve word problems involving multiplication
- 





Division

• Division

- Understand multiplication and division as inverse operations.

- Review the meaning of dividend, divisor, and quotient.

- Review and reinforce basic division facts to $100 \div 10$. ____

- Identify different ways of writing division problems: $28 \div 7$ $7 \overline{)28}$ $28/7$

- Identify factors of a given number; common factors of two given numbers.

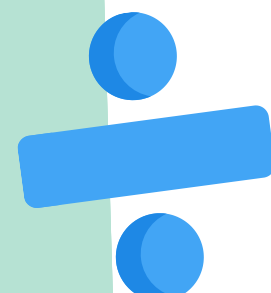
- Review: you cannot divide by 0; any number divided by 1 = that number.

- Estimate the quotient.

- Divide dividends up to four-digits by one-digit and two-digit divisors.

- Solve division problems with remainders.

- Check division by multiplying (and adding remainder).

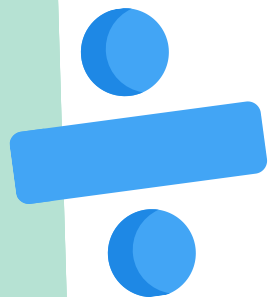


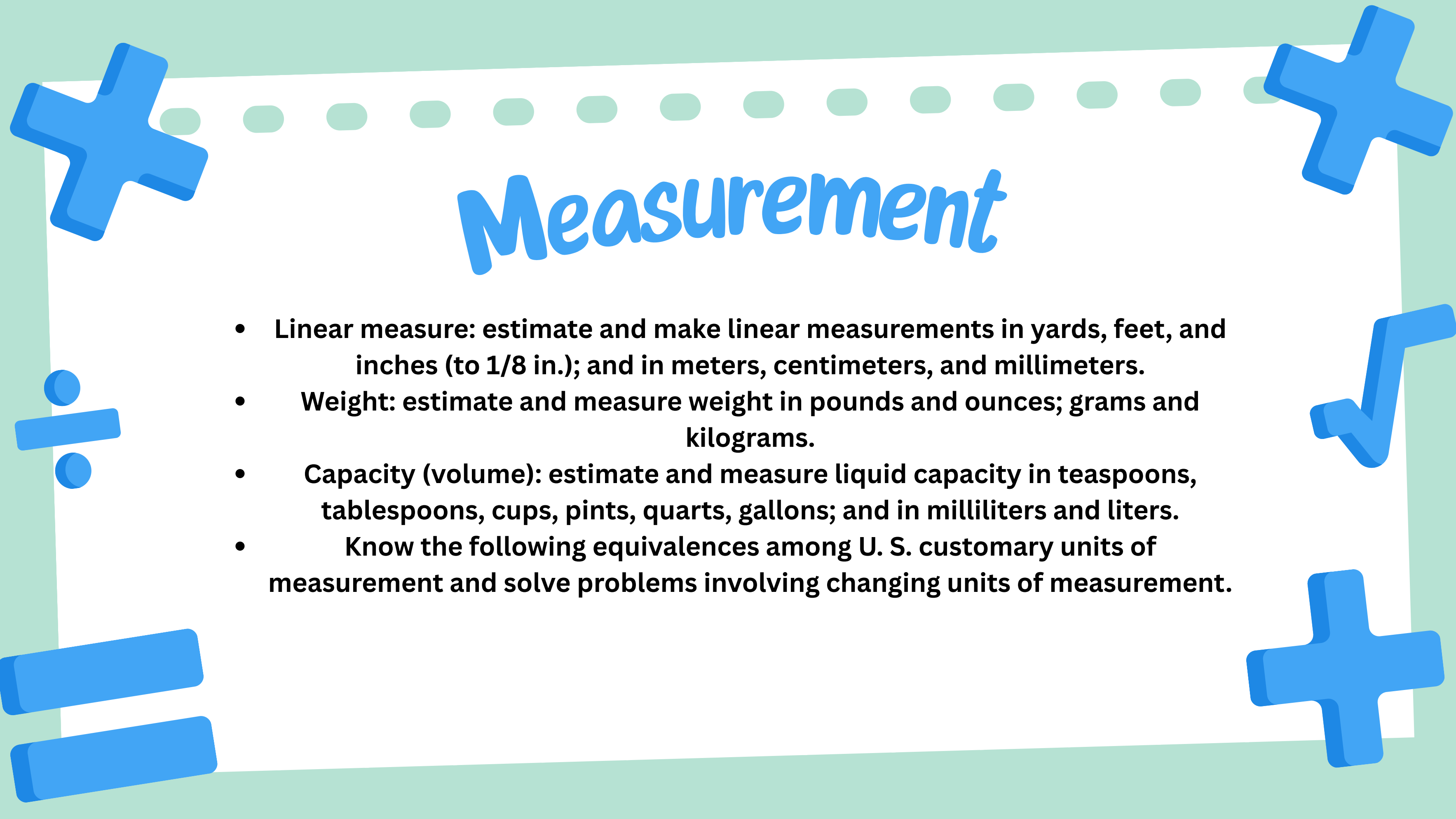


Solving Problems and Equations



- Solve two-step word problems.
- Solve equations in the form of $__ \times 9 = 63$; $81 \div __ = 9$.
- Solve problems with more than one operation, as in $(72 \div 9) \times (36 \div 4) = __$
- Equality properties Know that equals added to equals are equal. Know that equals multiplied by equals are equal
- Use letters to stand for any number, as in working with a formula (for example, area of rectangle: $A = L \times W$)



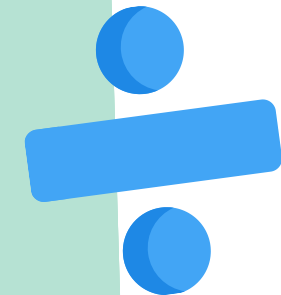


Measurement

- **Linear measure:** estimate and make linear measurements in yards, feet, and inches (to $\frac{1}{8}$ in.); and in meters, centimeters, and millimeters.
- **Weight:** estimate and measure weight in pounds and ounces; grams and kilograms.
- **Capacity (volume):** estimate and measure liquid capacity in teaspoons, tablespoons, cups, pints, quarts, gallons; and in milliliters and liters.
- **Know the following equivalences among U. S. customary units of measurement and solve problems involving changing units of measurement.**

-

Time: solve problems on elapsed time.





Geometry

- Identify and draw points, segments, rays, lines.
 - Identify and draw lines: horizontal; vertical; perpendicular; parallel; intersecting.
 - Identify angles; identify angles as right, acute, or obtuse.
 - Identify polygons: Triangle, quadrilateral, pentagon, hexagon, and octagon (regular)
 - Parallelogram, trapezoid, rectangle, square
 - Identify and draw diagonals of quadrilaterals.
 - Circles: Identify radius (plural: radii) and diameter; radius = $\frac{1}{2}$ diameter
 - Recognize similar and congruent figures.
 - Know the formula for the area of a rectangle (Area = length x width) and solve problems involving finding area in a variety of square units (such as mi²; yd²; ft²; in²; km²; m²; cm²; mm²) • Compute volume of rectangular prisms in cubic units (cm³, in³).
- 
- 
- 