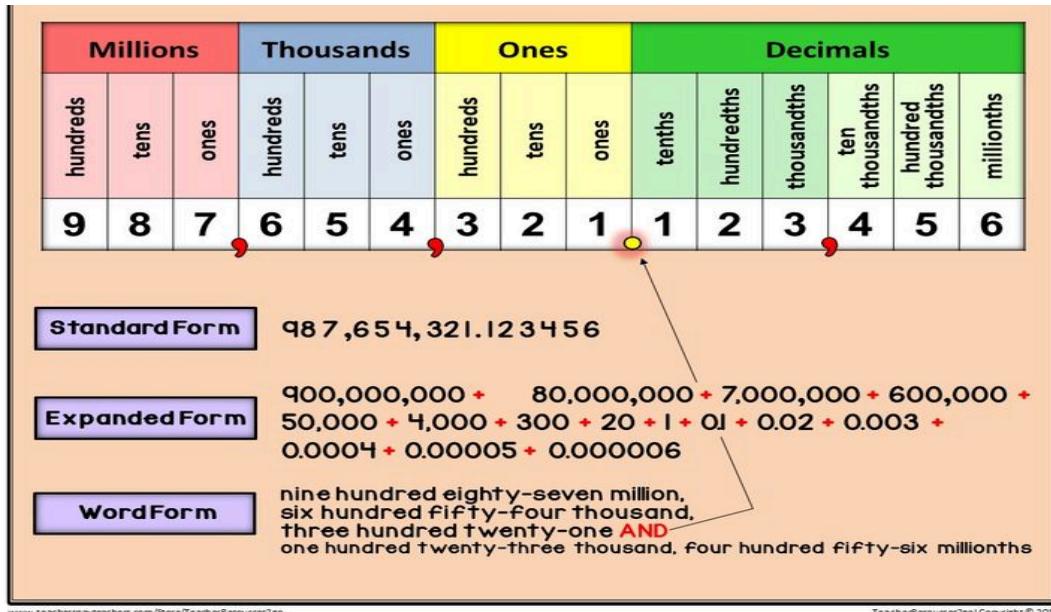




General Topic: Whole Numbers and Place Value

Lesson Overview:

Whole numbers are numbers without fractions or decimals. **Place value** helps us understand the value of each digit based on its position in a number.



Key Concepts and Subtopics:

1. Understanding Digits – Ones, tens, hundreds, thousands

Ones
Ones are individual units.

Tens
Ten ones make a ten.

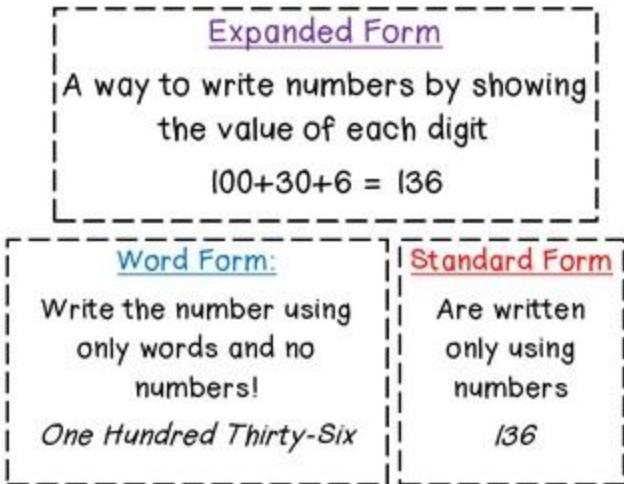
Hundreds
Ten tens make a hundred.
A hundred ones make a hundred.

Worksheets PLANET © Worksheetsplanet.com

Reference:<https://www.worksheetsplanet.com/ones-tens-and-hundreds/>



2. Reading and Writing Numbers – Standard, word, and expanded form



Reference: <https://www.pinterest.com/pin/91972017370190977/>

3. Comparing and Ordering Numbers – Using $>$, $<$, $=$ symbols

$$> \quad = \quad <$$

Greater than Equal to Less than

Reference: <https://www.splashlearn.com/math-vocabulary/comparing-and-ordering>

Real-Life Example:

Counting money in your piggy bank and knowing the value of each bill or coin using place value.

Remember This!

- *Each digit has a value depending on where it is in the number.*



General Topic: Addition and Subtraction

Lesson Overview:

Addition combines numbers to find a total, while **subtraction** finds the difference between numbers. These operations are foundational for solving daily problems.

$$1,284 + 4,642$$

$$4,284 - 3,642$$

Key Concepts and Subtopics:

1. **Adding and Subtracting Whole Numbers** – Using mental math, number lines, and regrouping
2. **Word Problems** – Applying addition and subtraction in real-life situations

Real-Life Example:

Buying 12 candies and eating 5, then finding out how many are left.

Remember This!

- *Addition makes numbers grow; subtraction makes numbers shrink.*



General Topic: Multiplication and Division

Lesson Overview:

Multiplication is repeated addition, while **division** is splitting numbers into equal groups. Both are closely related and essential for faster calculations.

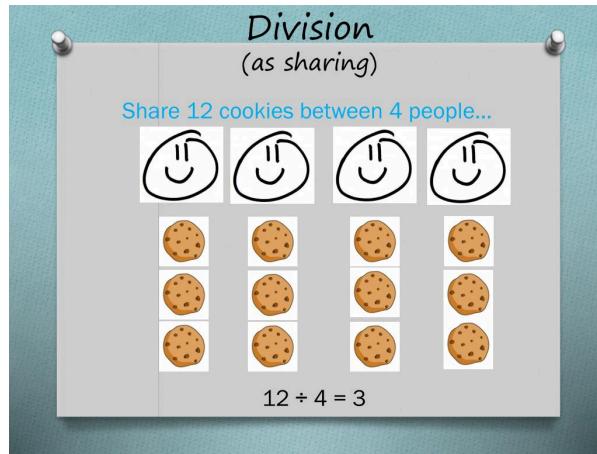
Key Concepts and Subtopics:

1. Multiplication Facts – Times tables up to 12×12

Multiplying by 1	Multiplying by 2	Multiplying by 3	Multiplying by 4	Multiplying by 5	Multiplying by 6	Multiplying by 7	Multiplying by 8	Multiplying by 9	Multiplying by 10	Multiplying by 11	Multiplying by 12
$1 \times 1 = 1$	$1 \times 2 = 2$	$1 \times 3 = 3$	$1 \times 4 = 4$	$1 \times 5 = 5$	$1 \times 6 = 6$	$1 \times 7 = 7$	$1 \times 8 = 8$	$1 \times 9 = 9$	$1 \times 10 = 10$	$1 \times 11 = 11$	$1 \times 12 = 12$
$2 \times 1 = 2$	$2 \times 2 = 4$	$2 \times 3 = 6$	$2 \times 4 = 8$	$2 \times 5 = 10$	$2 \times 6 = 12$	$2 \times 7 = 14$	$2 \times 8 = 16$	$2 \times 9 = 18$	$2 \times 10 = 20$	$2 \times 11 = 22$	$2 \times 12 = 24$
$3 \times 1 = 3$	$3 \times 2 = 6$	$3 \times 3 = 9$	$3 \times 4 = 12$	$3 \times 5 = 15$	$3 \times 6 = 18$	$3 \times 7 = 21$	$3 \times 8 = 24$	$3 \times 9 = 27$	$3 \times 10 = 30$	$3 \times 11 = 33$	$3 \times 12 = 36$
$4 \times 1 = 4$	$4 \times 2 = 8$	$4 \times 3 = 12$	$4 \times 4 = 16$	$4 \times 5 = 20$	$4 \times 6 = 24$	$4 \times 7 = 28$	$4 \times 8 = 32$	$4 \times 9 = 36$	$4 \times 10 = 40$	$4 \times 11 = 44$	$4 \times 12 = 48$
$5 \times 1 = 5$	$5 \times 2 = 10$	$5 \times 3 = 15$	$5 \times 4 = 20$	$5 \times 5 = 25$	$5 \times 6 = 30$	$5 \times 7 = 35$	$5 \times 8 = 40$	$5 \times 9 = 45$	$5 \times 10 = 50$	$5 \times 11 = 55$	$5 \times 12 = 60$
$6 \times 1 = 6$	$6 \times 2 = 12$	$6 \times 3 = 18$	$6 \times 4 = 24$	$6 \times 5 = 30$	$6 \times 6 = 36$	$6 \times 7 = 42$	$6 \times 8 = 48$	$6 \times 9 = 54$	$6 \times 10 = 60$	$6 \times 11 = 66$	$6 \times 12 = 72$
$7 \times 1 = 7$	$7 \times 2 = 14$	$7 \times 3 = 21$	$7 \times 4 = 28$	$7 \times 5 = 35$	$7 \times 6 = 42$	$7 \times 7 = 49$	$7 \times 8 = 56$	$7 \times 9 = 63$	$7 \times 10 = 70$	$7 \times 11 = 77$	$7 \times 12 = 84$
$8 \times 1 = 8$	$8 \times 2 = 16$	$8 \times 3 = 24$	$8 \times 4 = 32$	$8 \times 5 = 40$	$8 \times 6 = 48$	$8 \times 7 = 56$	$8 \times 8 = 64$	$8 \times 9 = 72$	$8 \times 10 = 80$	$8 \times 11 = 88$	$8 \times 12 = 96$
$9 \times 1 = 9$	$9 \times 2 = 18$	$9 \times 3 = 27$	$9 \times 4 = 36$	$9 \times 5 = 45$	$9 \times 6 = 54$	$9 \times 7 = 63$	$9 \times 8 = 72$	$9 \times 9 = 81$	$9 \times 10 = 90$	$9 \times 11 = 99$	$9 \times 12 = 108$
$10 \times 1 = 10$	$10 \times 2 = 20$	$10 \times 3 = 30$	$10 \times 4 = 40$	$10 \times 5 = 50$	$10 \times 6 = 60$	$10 \times 7 = 70$	$10 \times 8 = 80$	$10 \times 9 = 90$	$10 \times 10 = 100$	$10 \times 11 = 110$	$10 \times 12 = 120$
$11 \times 1 = 11$	$11 \times 2 = 22$	$11 \times 3 = 33$	$11 \times 4 = 44$	$11 \times 5 = 55$	$11 \times 6 = 66$	$11 \times 7 = 77$	$11 \times 8 = 88$	$11 \times 9 = 99$	$11 \times 10 = 110$	$11 \times 11 = 121$	$11 \times 12 = 132$
$12 \times 1 = 12$	$12 \times 2 = 24$	$12 \times 3 = 36$	$12 \times 4 = 48$	$12 \times 5 = 60$	$12 \times 6 = 72$	$12 \times 7 = 84$	$12 \times 8 = 96$	$12 \times 9 = 108$	$12 \times 10 = 120$	$12 \times 11 = 132$	$12 \times 12 = 144$

Math-Drills.com

2. Division as Sharing – Understanding remainder and quotient



Reference: <https://www.slideserve.com/ginger-lyons/ks1-maths-information-evening>

3. Word Problems – Using multiplication and division in real-life situations



Real-Life Example:

Sharing 24 chocolates equally among 6 friends; each friend gets 4 chocolates.

Remember This!

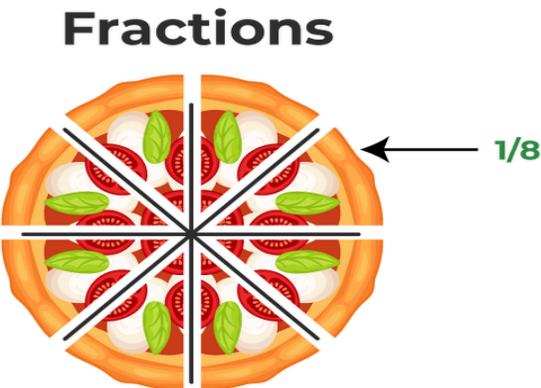
- *Multiplication and division are opposites—one combines, the other separates.*



General Topic: Fractions

Lesson Overview:

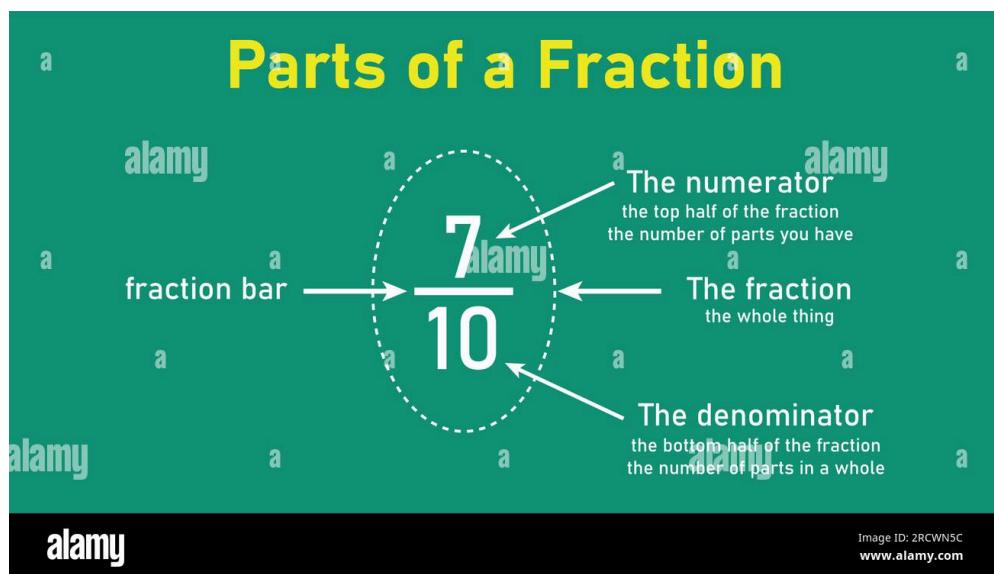
Fractions represent parts of a whole. They help in measuring, sharing, and comparing parts of objects or quantities.



Reference: <https://animalia-life.club/qa/pictures/fractions>

Key Concepts and Subtopics:

1. Understanding Fractions – Numerator, denominator





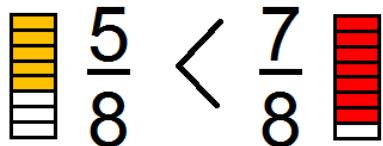
2. Equivalent Fractions – Different fractions representing the same value

twinkl

$\frac{1}{2} = \frac{2}{4} = \frac{3}{6} = \frac{4}{8} = \frac{5}{10} = \frac{6}{12}$

Reference: <https://www.twinkl.co.uk/teaching-wiki/equivalent-fractions>

3. Comparing and Ordering Fractions – Using benchmarks like $\frac{1}{2}$



Ordered from least to greatest:

$$\frac{2}{10} < \frac{5}{10} < \frac{9}{10}$$

Reference: <https://www.mindomo.com/fr/mindmap/what-to-know-about-fractions-537c2b6d29f0451eaab6523c84e6240f>

Real-Life Example:

Eating $\frac{1}{2}$ of a pizza and understanding that it is one part out of two equal parts.

Remember This!

- Fractions show parts of a whole—always check how many equal parts make up the whole.



General Topic: Measurement (Length, Mass, Capacity, Time)

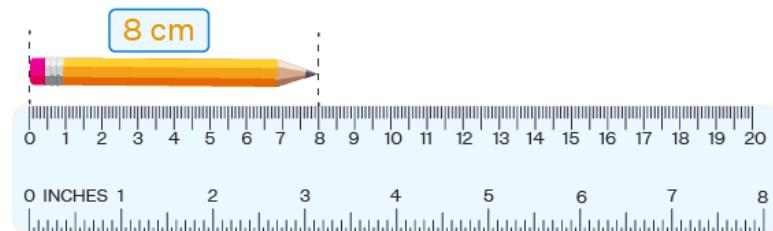
Lesson Overview:

Measurement helps us understand and compare quantities using standard units.

Key Concepts and Subtopics:

1. Length – Meter, centimeter, kilometer

Measuring Length



2. Mass – Gram, kilogram

Weight and Mass



Mass On Earth = Mass On Moon = Mass On Space



Weight On Earth ≠ Weight On Moon ≠ Weight On Space

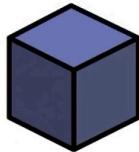


MASS is constant
WEIGHT is variable



3. Capacity/Volume – Liter, milliliter

Volume



The amount of space that an object occupies.

$$\text{Volume} = l \times w \times h$$

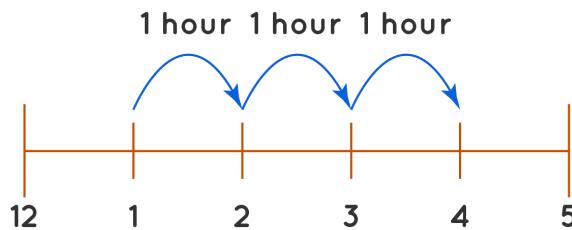
Capacity



The amount that something can hold.

Reference: <https://www.youtube.com/watch?v=pqcDnjDw0hg>

4. Time – Hours, minutes, seconds, reading clocks



Real-Life Example:

Measuring ingredients for cooking, or timing a race in school sports.

Remember This!

- *Measurement is everywhere—knowing the right units makes life easier.*



General Topic: Geometry (2D and 3D Shapes)

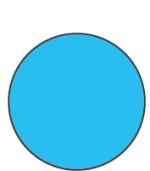
Lesson Overview:

Geometry helps identify shapes, sizes, and their properties in two and three dimensions.

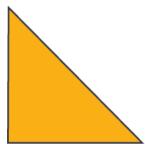
Key Concepts and Subtopics:

1. **2D Shapes** – Circle, square, rectangle, triangle

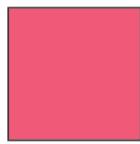
2D Shapes



Circle



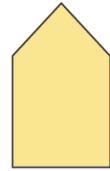
Triangle



Square



Rectangle



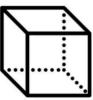
Pentagon

2. **3D Shapes** – Cube, sphere, cylinder, cone

3D Geometric Shapes



Cube



Cuboid



Sphere



Pyramid



Cone



Cylinder





3. Attributes – Sides, corners, faces, edges

Shape Attributes

Triangle
I am a three-sided shape with three corners or angles.

Hexagon
I am a six-sided shape with six corners or angles.

Quadrilateral
I am a four-sided shape with four corners or angles.

Pentagon
I am a five-sided shape with five corners or angles.

Reference: <https://quizzschoolrushiness.z14.web.core.windows.net/defining-attributes-of-a-triangle.html>

Real-Life Example:

Recognizing 3D shapes in toys, boxes, and buildings.

Remember This!

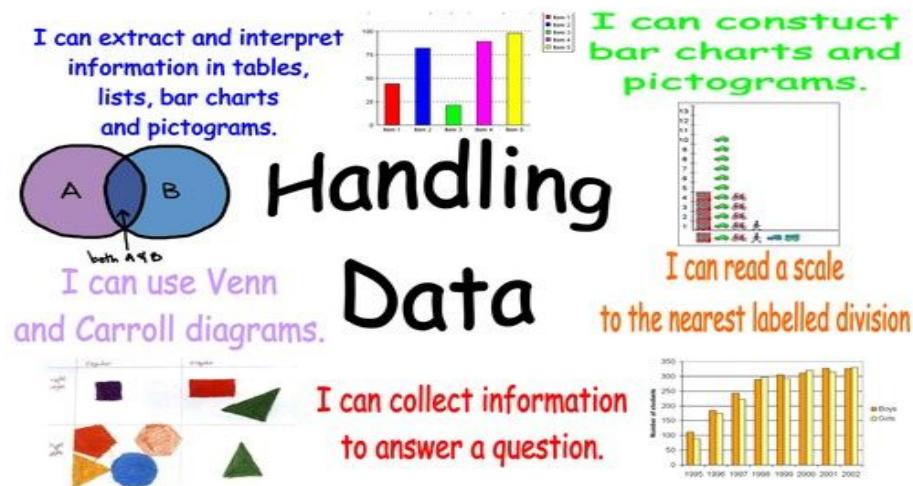
- Shapes are all around us; knowing their properties helps us understand the world.



General Topic: Data Handling and Simple Graphs

Lesson Overview:

Data handling is collecting, organizing, and presenting information. **Graphs** make it easier to understand data visually.



Reference:<https://www.pinterest.co.uk/pin/data-handling-336925615871916398/>

Key Concepts and Subtopics:

1. **Collecting Data** – Counting and recording observations

2. **Organizing Data** – Tables and charts

3. **Presenting Data** – Pictographs, bar graphs, and tally marks

Real-Life Example:

Recording the favorite fruits of classmates and creating a bar graph to see which fruit is most liked.

Remember This!

- *Data becomes more meaningful when organized and presented clearly.*