

Division Strategies

Objective: Correctly identify the meaning of the terms used in division

*Remember to practice by clicking on the 2 wordwall links



Division Vocabulary

- **dividend** – the number being divided
- **divisor** – the number dividing the dividend
- **quotient** – the answer to a division problem

$$6 \div 2 = 3$$

dividend \div divisor = quotient

- **remainder** – the number left over after dividing into equal groups

$$7 \div 2 = 3 \text{ r } 1$$



Wordwall

<https://wordwall.net/play/10572/709/9>

<https://wordwall.net/play/27238/5>

compatible number

Numbers that are easy to compute mentally

$$\begin{array}{r} 24 \times 47 \\ \downarrow \quad \downarrow \\ 25 \times 50 \end{array}$$

partial quotient

A strategy of division

$$\begin{array}{r} 4 \overline{) 381} \\ \underline{-200} \\ 181 \\ \underline{-160} \\ 21 \\ \underline{-20} \\ 1 \end{array} \quad \begin{array}{l} 50 \\ 40 \\ 5 \\ 95 \text{ r } 1 \end{array}$$

equal groups

Groups that have the same number of objects



Objective: Divide by multiples of 10's, 100's and 1000's

<https://youtu.be/LxM0plPzzw>

$$15 \div 3 = \underline{5}$$

$$150 \div 3 = \underline{50}$$

$$1,500 \div 3 = \underline{\hspace{2cm}}$$

$$15,000 \div 3 = \underline{\hspace{2cm}}$$

$$27 \div 9 = \underline{\hspace{2cm}}$$

$$270 \div 9 = \underline{\hspace{2cm}}$$

$$2,700 \div 9 = \underline{\hspace{2cm}}$$

$$27,000 \div 9 = \underline{\hspace{2cm}}$$



Objective: Estimate quotients using compatible numbers

<https://youtu.be/YLQBYDvVhlo> youtube

<https://youtu.be/dqmAf5fGkUQ> mine

1. Which is a reasonable **estimate** for $231 \div 7$
- A. 300
 - B. 30
 - C. 400
 - D. 40



2. **Estimate** the range for $6,428 \div 9$

Higher number _____ $\div 9 =$ _____

Lower number _____ $\div 9 =$ _____

Range from _____ to _____

Objective: Use Fair sharing to find the quotient

Division by Sharing

Drag and drop the sweets to share them into the bags. Fill in the empty boxes.

Start



<https://wordwall.net>

<https://www.liveworks>



Use fair sharing to solve the problem.

$8 \div 4 =$



Objective: Use partial quotient strategy to solve problems

<https://youtu.be/8XsOdDbL96U>

A bakery has 218 muffins ready to place into boxes. The baker puts an equal number of muffins into 6 boxes.

$$\begin{array}{r}
 218 \\
 - 180 \\
 \hline
 38 \\
 - 36 \\
 \hline
 2
 \end{array}$$

(6 x 30)

(6 x 6)



5.1 How many muffins are in each box? _____

5.2 How many muffins are left over? _____

<https://www.liveworksheets.com/zm2772310js>

Objective: Understand Remainders

<https://youtu.be/KGMf314LUc0>



Wordwall

<https://wordwall.net/play/20236/373/544>



vall.net/play/15397/790/515

Objective: Interpret Remainders

The remainder forces the quotient to be the next whole

ignore the remainder

The remainder is a part of the solution

<https://youtu.be/7C0Z9t2V1qY>

<https://youtu.be/8YykaqSHzDI>

<https://youtu.be/IUjTCD-ajpc>

1. A van can seat 9 people. How many vans like this one, are needed to take 33 people to the airport? _____
2. Asma fills 5 pencils in each box. She has 20 pencils. How many boxes does she use? _____
3. Hamad has 23 cars. He puts them on shelves in his room. Each shelf holds 7 cars. How many cars are left over? _____



Objective: Solve multi-step and word problems involving division



Key Words Used in Math Word Problems

Addition



- Add
- All together
- Altogether
- And
- Combined
- How many in all
- How much
- In all
- Increased by
- Plus
- Sum
- Together
- Total

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Subtraction



- Minus
- Lost
- Change
- Difference
- Fewer
- Fewer than
- How many are left
- Need to
- Reduce
- Subtract
- Take away
- Remain

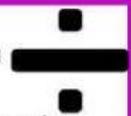
Multiplication



- By
- Double
- Every
- Factor of
- Increased by
- Multiplied by
- Of
- Product
- Times
- Triple

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Division



- As much
- Cut up
- Each group has
- Equal sharing
- Half
- How many in each
- Parts
- Per
- Percent
- Quotient of
- Ratio of
- Separated
- Share something equally

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A florist has 875 flowers. She uses 49 flowers in a bouquet. The rest will be put in vases. Each vase can hold 8 flowers. How many vases will the florist need for the rest of the flowers?

Step 1: Choose the correct first step

$$875+49= 924$$

$$875-49=826$$

Step 2: Use the answer in step 1 to solve

$$\underline{\hspace{2cm}} \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \text{ R } \underline{\hspace{2cm}}$$

Vases: needed

Carly has 168 stickers in one book and 492 stickers in another book. There are 6 stickers on each page of the books. How many pages has she filled in the books?

Step 1: Choose the correct first step

$$168+492= 660$$

$$492-168= 324$$

Step 2: Use the answer in step 1 to solve

$$\underline{\hspace{2cm}} \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

<https://www.liveworksheets.com/qs2658628yh>