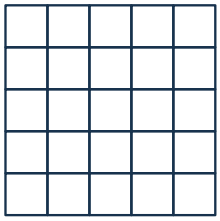
Session 1

MOU-S01-C01 | Grade 5 | Unit Cubes and Volume

5.MD.C.4 | word problem

This drawing shows the bottom layer of a prism. There are 3 full layers. How many unit cubes fill the prism?



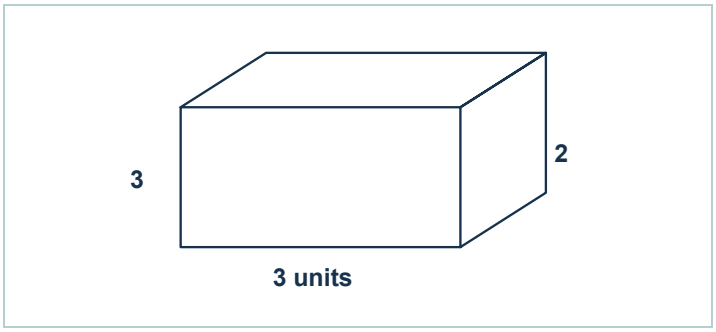
Writing space

Session 1

MOU-S01-C02 | Grade 5 | Expressions for Finding Volume

5.MD.C.5 | reasoning

Which expressions give the volume of this prism? Select all that apply.



- □ **A.** (3 × 2) × 3
- □ **B.** 3 + 2 + 3
- □ **C.** 3 × (2 × 3)

Writing space

MOU-S01-C03 | Grade 5 | Volumes of Solid Figures

5.MD.C.5 | word problem

A solid joins two prisms without overlap. Their dimensions are 6 by 2 by 3 and 2 by 2 by 2. Find the total volume.

Writing space

Session 1

MOU-S01-C04 | Grade 5 | Fractions as Quotients

5.NF.B.3 | word problem

4 identical sandwiches are shared equally by 6 children. What fraction of a sandwich does each child get?

Writing space

MOU-S01-C05 | Grade 5 | Fractions of Whole Numbers

5.NF.B.4 | word problem

3/4 of 8 students choose art. How many students choose art?

Writing space

MOU-S01-C06 | Grade 5 | Area and Fractional Side Lengths

5.NF.B.4 | word problem

A rectangle is 3/4 meter long and 5/2 meters wide. What is its area in square meters?

Writing space

MOU-S01-C07 | Grade 5 | Fraction Multiplication

5.NF.B.4 | word problem

A rectangle is 4/5 meter long and 3/2 meters wide. What is its area in square meters?

Writing space

Session 1

MOU-S01-C08 | Grade 5 | Fraction Division

5.NF.B.7 | word problem

6 meters of ribbon are cut into pieces of length 1/5 meter. How many pieces are made?

Writing space

MOU-S01-C09 | Grade 5 | Problem Solving with Fractions

5.NF.B.7 | word problem

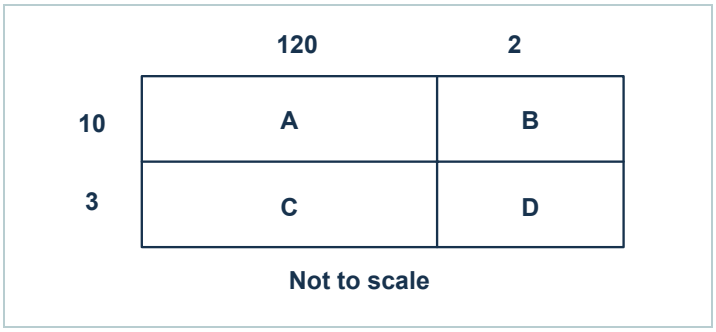
A recipe uses 1/2 cup of oil. Ella makes half a recipe. How many cups of oil are needed?

Writing space

MOU-S01-C10 | Grade 5 | Multi-digit Multiplication Using the Standard Algorithm

5.NBT.B.5 | word problem

Use the area model to find the whole product.



Writing space

Session 1

MOU-S01-C11 | Grade 5 | Multi-digit Division Using Partial Quotients

5.NBT.B.6 | explanation

325 tiles fill boxes of 13. How many boxes are filled? Use partial quotients. Explain your reasoning and check your result.

Writing space

Session 1

MOU-S01-C12 | Grade 5 | Let's Put It to Work

5.NBT.B.6 | word problem

33 boxes each contain 16 books. 48 books are donated. How many remain?

Writing space

MOU-S01-C13 | Grade 5 | Numbers to Thousandths

5.NBT.A.3 | word problem

A number is 6 tenths plus 4 thousandths. Write it as a decimal.

Writing space

MOU-S01-C14 | Grade 5 | Add and Subtract Decimals

5.NBT.B.7 | word problem

Two ropes are 4.37 meters and 0.58 meter long. What is their combined length?

Writing space

MOU-S01-C15 | Grade 5 | Multiply Decimals

5.NBT.B.7 | word problem

Fabric costs $2.40 per meter. What is the cost of 0.2 meter, in dollars?

Writing space

Session 1

MOU-S01-C16 | Grade 5 | Divide Decimals

5.NBT.B.7 | word problem

How many 0.2-meter pieces fit in 1 meters of ribbon?

Writing space

MOU-S01-C17 | Grade 5 | Measurement Conversions and Powers of 10

5.MD.A.1 | word problem

A ribbon is 3.3 meters long. 30 centimeters are cut off. How many centimeters remain?

Writing space

MOU-S01-C18 | Grade 5 | Add and Subtract Fractions with Unlike Denominators

5.NF.A.1 | word problem

Add 1/2 and 1/18. Give a fraction.

Writing space

MOU-S01-C19 | Grade 4 | Understand Factors and Multiples

4.OA.B.4 | word problem

24 chairs form equal rows with no chairs left over. There are 8 rows. How many chairs are in each row?

Writing space

Session 1

MOU-S01-C20 | Grade 4 | Find Factor Pairs and Multiples 4.OA.B.4 | word problem

12 chairs form equal rows with no chairs left over. There are 4 rows. How many chairs are in each row?

Writing space

MOU-S01-C21 | Grade 4 | Size and Location of Fractions 4.NF.A.1 | word problem

How much more of this whole must be shaded to make one whole? Give a fraction.



One whole

Writing space

Session 1

MOU-S01-C22 | Grade 4 | Equivalent Fractions

4.NF.A.1 | reasoning

Every part of a 2-part strip is split into 3 equal smaller parts. What happens to the shaded fraction? Choose one answer.

- ○ **A.** Its value stays the same.
- ○ **B.** Its value is multiplied by the number of new parts.

Writing space

Session 1

MOU-S01-F01 | Grade 4 | Fast facts: Addition
4.NBT.B.4 | fluency

___ + 949 = 4648. Find the missing addend.

Writing space

MOU-S01-F02 | Grade 4 | Fast facts: Subtraction
4.NBT.B.4 | fluency

4326 - ___ = 3888. Find the missing amount.

Writing space

MOU-S01-F03 | Grade 5 | Fast facts: Multiplication
5.NBT.B.5 | fluency

Complete 167 x 29 = ___ using division to check.

Writing space

MOU-S01-F04 | Grade 5 | Fast facts: Division
5.NBT.B.6 | fluency

Find 3441 / 31 using multiplication to check.

Writing space

MOU-S01-F05 | Grade 5 | Fast facts: Addition
5.NBT.B.7 | fluency

___ + 0.1 = 1.4. Find the missing addend.

Writing space

MOU-S01-F06 | Grade 5 | Fast facts: Subtraction
5.NBT.B.7 | fluency

2.1 - ___ = 1.6. Find the missing amount.

Writing space

MOU-S01-F07 | Grade 5 | Fast facts: Multiplication
5.NBT.B.5 | fluency

Find 151 x 21 using a related fact.

Writing space

MOU-S01-F08 | Grade 5 | Fast facts: Division
5.NBT.B.6 | fluency

Find 2646 / 21.

Writing space

Session 2

MOU-S02-C01 | Grade 5 | The Size of a Product

5.NF.B.5 | reasoning

Without multiplying, compare 4 × 4/3 with 4. Choose one answer.

- ○ **A.** The product is greater.
- ○ **B.** The product is less.

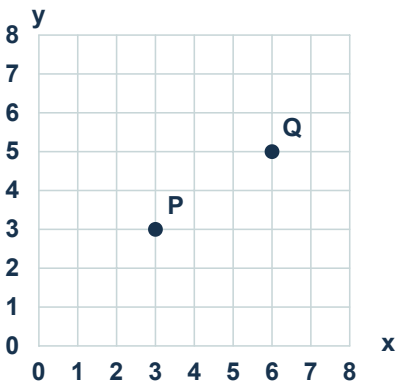
Writing space

Session 2

MOU-S02-C02 | Grade 5 | The Coordinate Grid

5.G.A.2 | word problem

Travel from P to Q using only right and up moves on grid lines. How many unit moves are needed?



Writing space

Session 2

MOU-S02-C03 | Grade 5 | The Hierarchy of Shapes

5.G.B.4 | reasoning

Which statements are always true? Select all that apply.

- ☐ **A.** Every square is a rectangle.
- ☐ **B.** Every rectangle is a square.
- ☐ **C.** Every square is a rhombus.

Writing space

MOU-S02-C04 | Grade 5 | Numerical Patterns

5.OA.B.3 | word problem

Two patterns start at 3. A adds 5 each step. B adds 7. How far apart are their values after 3 steps?

Writing space

MOU-S02-C05 | Grade 5 | Multiply and Divide Whole Numbers

5.NBT.B.6 | word problem

36 boxes each contain 17 books. 102 books are donated. How many remain?

Writing space

Session 2

MOU-S02-C06 | Grade 5 | Apply Volume Concepts

5.MD.C.5 | word problem

A box is 4 by 2 by 4 units. A designer doubles only its height. How many additional unit cubes will fit?

Writing space

MOU-S02-C07 | Grade 5 | Fraction and Decimal Operations

5.NBT.B.7 | word problem

Add 2/2 and 0.25. Give a decimal.

Writing space

MOU-S02-C08 | Grade 5 | Creation and Design

5.MD.C.5 | word problem

A box is 5 by 3 by 4 units. A designer doubles only its height. How many additional unit cubes will fit?

Writing space

MOU-S02-C09 | Grade 5 | Unit Cubes and Volume

5.MD.C.4 | word problem

A prism has 8 cubes in each layer and volume 24 cubic units. How many layers are there?

Writing space

Session 2

MOU-S02-C10 | Grade 5 | Expressions for Finding Volume

5.MD.C.5 | word problem

A prism has 20 cubes in each layer and volume 60 cubic units. How many layers are there?

Writing space

Session 2

MOU-S02-C11 | Grade 5 | Volumes of Solid Figures

5.MD.C.5 | explanation

Two non-overlapping prisms make a solid of volume 65. One prism has dimensions 3 by 5 by 3. What is the other prism's volume? Explain your reasoning and check your result.

Writing space

Session 2

MOU-S02-C12 | Grade 5 | Fractions as Quotients

5.NF.B.3 | word problem

6 liters of juice are shared equally among 8 pitchers. How much goes in each pitcher? Give a fraction.

Writing space

MOU-S02-C13 | Grade 5 | Fractions of Whole Numbers

5.NF.B.4 | word problem

Noor says 1/2 of 8 is 7. Find the correct value.

Writing space

MOU-S02-C14 | Grade 5 | Area and Fractional Side Lengths

5.NF.B.4 | word problem

A rectangle is tiled with squares that each have area 1/9 square meter. There are 2 rows of 2 tiles. Find the area of the rectangle.



Writing space

Session 2

MOU-S02-C15 | Grade 5 | Fraction Multiplication

5.NF.B.4 | word problem

A strip has 2/3 shaded. 4/5 of that shaded part is crosshatched. What fraction of the original whole is crosshatched?

Writing space

MOU-S02-C16 | Grade 5 | Fraction Division

5.NF.B.7 | word problem

1/4 liter is shared equally among 3 cups. How much goes in each cup? Give a fraction.

Writing space

MOU-S02-C17 | Grade 5 | Problem Solving with Fractions

5.NF.B.7 | word problem

Ella has 6 liters of soup. After using 1 liter, the rest fills 1/4-liter bowls. How many bowls are filled?

Writing space

MOU-S02-C18 | Grade 5 | Multi-digit Multiplication Using the Standard Algorithm

5.NBT.B.5 | word problem

In the standard algorithm for 124 × 15, what is the partial product from the tens digit of 15?

Writing space

Session 2

MOU-S02-C19 | Grade 4 | Fraction Comparison

4.NF.A.2 | reasoning

Ribbon A is 3/4 meter long. Ribbon B is 1/2 meter long. Which ribbon is longer? Choose one answer.

- ○ **A.** Ribbon A
- ○ **B.** Ribbon B

Writing space

MOU-S02-C20 | Grade 4 | Equal Groups of Fractions

4.NF.B.4 | word problem

Each of 6 bottles holds 1/2 liter. How many liters do they hold altogether?

Writing space

MOU-S02-C21 | Grade 4 | Addition and Subtraction of Fractions

4.NF.B.3 | word problem

A path is 5/3 kilometers long. Jude walks 2/3 kilometer. How much farther is the end?

Writing space

Session 2

MOU-S02-C22 | Grade 4 | Addition of Tenths and Hundredths

4.NF.C.5 | word problem

Add 2/10 and 4/100. Give a fraction.

Writing space

Session 2

MOU-S02-F01 | Grade 4 | Fast facts: Addition
4.NBT.B.4 | fluency

2726 + ___ = 3502. Find the missing addend.

Writing space

MOU-S02-F02 | Grade 4 | Fast facts: Subtraction
4.NBT.B.4 | fluency

Find 3888 - 969 using an inverse operation.

Writing space

MOU-S02-F03 | Grade 5 | Fast facts: Multiplication
5.NBT.B.5 | fluency

Find 127 x 22 using a related fact.

Writing space

MOU-S02-F04 | Grade 5 | Fast facts: Division
5.NBT.B.6 | fluency

32 is a factor of 3392. What other factor completes the pair?

Writing space

MOU-S02-F05 | Grade 5 | Fast facts: Addition
5.NBT.B.7 | fluency

1.0 + ___ = 1.4. Find the missing addend.

Writing space

MOU-S02-F06 | Grade 5 | Fast facts: Subtraction
5.NBT.B.7 | fluency

Find 1.6 - 0.3 using a related addition fact.

Writing space

MOU-S02-F07 | Grade 5 | Fast facts: Multiplication
5.NBT.B.5 | fluency

Find 203 x 32.

Writing space

MOU-S02-F08 | Grade 5 | Fast facts: Division
5.NBT.B.6 | fluency

___ / 23 = 121. Find the dividend.

Writing space

Extra practice

MOU-R01 | Grade 5 | Unit Cubes and Volume

5.MD.C.4 | word problem

A prism has 4 cubes in each layer and volume 12 cubic units. How many layers are there?

Ask for a second method or a check.

Writing space

MOU-R13 | Grade 5 | Numbers to Thousandths

5.NBT.A.3 | word problem

How many thousandths are in 0.6?

Ask for a second method or a check.

Writing space

Extra practice

MOU-R25 | Grade 5 | Fraction and Decimal Operations

5.NBT.B.7 | word problem

A bottle holds 5.75 liters. 5.25 liters are used. Give the remaining amount as a fraction of a liter.

Ask for a second method or a check.

Writing space