Alison's Montessori
www.alisonsmontessori.com

COMMON CORE STANDARDS

CCS.M30.06: Multiplying Fractions (9 - 12)

Grade 4: Build an intuitive understanding of multiplication as scaling and begin exploring fraction-based visual models.

CCSS.MATH.CONTENT.4.NF.B.4.A – Understand a fraction as a multiple of a unit fraction

Standard Summary: Use visual models to multiply unit fractions.

Focus Area: Multiply whole numbers by fractions as repeated addition.

Students will:

- Use fraction materials to model multiplication as scaling.
- Explore simple problems like 3×143 \times \frac{1}{4}3×41.

CCSS.MATH.CONTENT.4.OA.A.2 – Multiply to solve word problems

Standard Summary: Apply multiplication in contextual settings.

Focus Area: Begin using fraction multiplication in practical situations.

Students will:

- Use fraction tiles to solve scaling and sharing problems.
- Model word problems like “half of a half.”

Grade 5: Multiply fractions and mixed numbers fluently using visual and symbolic methods.

CCSS.MATH.CONTENT.5.NF.B.4.A – Interpret multiplication of fractions

Standard Summary: Multiply two fractions using models and equations.

Focus Area: Understand that multiplying fractions reduces size.

Students will:

- Use fraction insets to multiply proper fractions.
- Multiply mixed numbers by converting to improper fractions.

CCSS.MATH.CONTENT.5.NF.B.6 – Solve real-world problems involving fraction multiplication

Standard Summary: Apply multiplication of fractions to solve problems.

Focus Area: Connect operations to word problems.

Students will:

- Solve problems involving area and part of a part.
- Show reasoning with models and symbolic work.

Grade 6: Apply fraction multiplication within rational number operations and multi-step problems.

CCSS.MATH.CONTENT.6.NS.A.1 – Compute with rational numbers

Standard Summary: Multiply and divide all types of fractions.

Focus Area: Multiply fractions in abstract and applied settings.

Students will:

- Solve multi-step problems involving fractional factors.
- Multiply and simplify results using visual and symbolic checks.