Interactive Technologies in STEM Teaching and Learning

Task with App Application

# The Product of Two Fractions Grade 5 Number and Operations - Fractions

**Topic:** Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction..

**Content Standards**

* *Number and Operations - Fractions*
* Interpret the product (*a*/*b*) × *q* as *a* parts of a partition of *q* into *b* equal parts; equivalently, as the result of a sequence of operations*a* × *q* ÷ *b*. *For example, use a visual fraction model to show (2/3) × 4 = 8/3, and create a story context for this equation. Do the same with (2/3) × (4/5) = 8/15. (In general, (a/b) × (c/d) = (ac)/(bd).*

**Practice Standards**

* *Model with mathematics*

Students create representations and number sentences associated with the problem.

* *Use appropriate tools strategically*
Students use tools and/or hands-on manipulatives to show or create representations associated with the problem.
* *Look for an make use of structure*
Students look closely to discern a pattern or structure

**Materials**

Students can use paper and writing tools, concrete and/or virtual manipulatives such as the Number Frames or Fractions apps (© The Math Learning Center); some of the possible results can be represented using the Multiplying Fractions - Area Model applet at: https://www.geogebra.org/m/NZQ5dBrG. Students could also use a screen-recording app.

**The Product of 2 Fractions**

You multiply two fractions and the product is $\frac{12}{20}$.

Neither fraction is equivalent to 1.

1. What are two fractions that you could have multiplied?
2. Write a story problem that can be answered by multiplying your two fractions.
3. How many other pairs of fractions can you think of that have the product $\frac{12}{20}$?