



## Multiplying Fractions and Whole Numbers

### Today's Standard

5.NF.B5b - Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence  $a/b = (n \times a)/(n \times b)$  to the effect of multiplying  $a/b$  by 1.

Cues	Notes
What happens when you multiply by a fraction greater than 1?	Multiplying by a fraction greater than 1 results in a product greater than the original number.
What happens when you multiply by a fraction less than 1?	Multiplying by a fraction less than 1 results in a product smaller than the original number.
What is fraction equivalence?	Fraction equivalence means that $a/b$ is the same as $(n \times a)/(n \times b)$ .
How does multiplying by 1 affect a fraction?	Multiplying a fraction by 1 does not change its value.

### Summary

Understanding how multiplying by fractions greater or less than 1 affects the product is crucial. Fraction equivalence helps in simplifying and comparing fractions.