



The GRID GRAB Game: A two player game that helps students convert between fractions, decimals and percents.

**Grade Level:** 4<sup>th</sup> – 6<sup>th</sup> grades

**Topics:** Addition of fractions, decimals and percents  
Conversion of fractions, decimals and percents  
Comparison of fractions, decimals and percents

**Standards:** 4.NF.5      5.NBT.1      6.RP.3  
4.NF.6      5.NF.3  
4.NF.7

**Goals:** While playing the game, students will be able to work with fractions, decimals and percents simultaneously. Students will recognize that an amount on a 100 grid can be expressed by all three representations and be able to add numbers accurately. Assessment is embedded with use of the 100 grid model and shading.

**Pre-requisite Knowledge:** Students can accurately identify the number of squares to shade on a 100 grid using benchmark fractions, decimals and percents. This includes decimals greater than 1.

**Materials:** Each player will need game rules, a recording sheet and three 10 x 10 grids

**Preparation time:** Approximately ten minutes for students (or the teacher) to label spinner sections.

**Activity time:** 1 to 2 lessons

**Directions:** Students should have a partner or form two small teams. Each player needs a set of directions, recording sheet and three 10 x 10 grids. Each player should have a copy of the two spinners. One has five sections and should be labeled with the following fractions:  $\frac{1}{2}$ ,  $\frac{1}{4}$ ,  $\frac{1}{5}$ ,  $\frac{1}{10}$  and  $\frac{3}{4}$ . The spinner with six sections should be labeled as 15%, 30%, 5%, .40, .35 and .45. As an option, the game could use the ten section spinner and use all of the previous numbers except  $\frac{3}{4}$ .

**Additional Resources:**

NCTM Illuminations Activity **Fraction Models:** A computer activity that has students practice with models for fractions, decimals, and percents

<http://illuminations.nctm.org/ActivityDetail.aspx?ID=11>