

Adaptive Play

During Solo Play, Percent Bingo will adapt to the player's speed and accuracy in finding correct percents. Adaptive play is not needed in Classroom Mode as the teacher will set the difficulty levels.

Adaptive Play internal tracking will be reset (Fraction Accuracy for only that level and mean time) when each new level is reached.

Level	Prob. of Decimal	Prob of Fraction	Notes
Beginner	66	33	No percents greater than 100% Fraction Difficulty Level: 0
Grasshopper I	60	40	Grasshopper Achievement when meets: Fraction accuracy >85%, AND Mean Time < 15 seconds Fraction Diff. Level 1
Grasshopper II	50	50	Fraction accuracy > 85% AND Mean Time < 12 seconds Add values greater than 100% but less than 150%
Eagle I	40	60	Eagle Achievement when meets: Fraction accuracy > 90% AND Mean Time < 15 seconds Fraction Difficulty Level: 2
Eagle II	33	66	Fraction accuracy > 90% AND Mean Time < 12 seconds Add values game percents > 150%
Master I	33	66	Master Achievement when Meets: Fraction accuracy > 92% Mean Time < 15 seconds Fraction Difficulty Level: 3
Master II	25	75	Fraction accuracy > 92% Mean Time < 15 seconds Fraction Difficulty Level: 4 Add thirds, sixths, and eighths to fractions
Wizard	25	75	Wizard Achievement when Meets: Fraction accuracy > 95% Mean Time < 15 seconds

Fraction Difficulties

Level	Description/Examples
0	Basic form/reduced form OR denominator of 10/20/25/50 for less common standard fractions
1	Use Denominators of 10,20,25, and 50/reduced forms of more obscure fractions Use fractions over 100%-150% as mixed number (1 $\frac{1}{5}$)
2	Fractions $> 100\%$ can be written as improper fractions ($\frac{12}{10}$) or ($\frac{5}{6}$) Use fractions with denominators $\times 2$ ($\frac{8}{12}$), ($\frac{12}{30}$)
3	Non-reduced fractions, use multipliers of prime #'s (2,3,5) ($\frac{6}{15}$, $\frac{9}{24}$)
4	Higher multiples of simple fractions and prime # multipliers