



Acadience Math Pathways of Progress™

Highly Skilled Learner Criteria and Description

Highly Skilled Learners are students who are solidly on track in learning basic math skills and are very likely to stay on track in the following year. The Highly Skilled Learners criteria in *Table 1* are based upon beginning-of-year math expectations for each grade level. Values correspond to the 60th percentile using Acadience Math K–6 National Norms.

In our analysis, students who met the Highly Skilled Learner criteria at the beginning of one school year had the following outcomes at the beginning of the next school year (averaged across grades; exact percentages varied somewhat by grade):

- 57% earned scores at or above the 80th percentile the following year,
- 84% met the Highly Skilled Learner criteria (60th percentile or higher) the following year,
- 93% earned scores in the At or Above Benchmark range at the beginning of the following year, and
- 94% earned scores in the At or Above Benchmark range at the end of the following year.

These percentages are very consistent for students who met the Highly Skilled Learner criteria at the beginning of the year but made Below Typical or Well Below Typical Progress (Pathways 1 or 2) over the course of the year. Consequently, for the purpose of summarizing the number of students who have made adequate progress, students who meet the Highly Skilled Learner criteria will be assigned to Pathway 3 (Typical Progress) or higher at the end of the year. For example, if a student who is a Highly Skilled Learner is on the Below Typical Progress pathway (Pathway 2) at the end of the year, they will be assigned to Pathway 3 for reporting purposes. If a student who is a Highly Skilled Learner achieves Above Typical Progress (Pathway 4) or Well Above Typical Progress (Pathway 5), then no changes will be made to their pathway for reporting purposes.

For some students who meet the Highly Skilled Learner criteria, it may be appropriate to shift instructional emphasis to more advanced skills in the scope and sequence of math skills—and potentially to skills above their grade placement. For example, kindergarten students who meet the Highly Skilled Learner criteria and have very high skills in early math skills such as magnitude comparison, strategic counting, and number identification may benefit more from an instructional emphasis on beginning computation as well as understanding and applying math concepts instead of continued emphasis on the early math skills. For students in Grade 1 and higher who meet the Highly Skilled Learner criteria and have very high skills in their grade-level math materials, educators may consider instructional material at a grade level above their grade placement. We recommend that these decisions involve teacher judgment and consideration of the pattern of student scores and performance in other domains.

Highly Skilled Learners are those students in grades K–6 whose Acadience Math benchmark scores are all equal to or higher than the scores reported in *Table 1*. A student must meet the Highly Skilled Learner criteria for each measure listed in the table below, for the grade in question, in order to meet the Highly Skilled Learners criteria.

Table 1. Acadience Math Scores for Highly Skilled Learner Criteria by Grade

Grade	MCS	NNF	NIF	BQD	AQD	MNF	Comp	C&A
K	110	16	34	16	-	-	-	-
1	68	-	-	-	25	12	20	-
2	86	-	-	-	-	-	19	47
3	126	-	-	-	-	-	39	45
4	150	-	-	-	-	-	58	93
5	149	-	-	-	-	-	70	81
6	159	-	-	-	-	-	77	82

Note. Student must meet all criteria to be classified as a Highly Skilled Learner. Scores referring to beginning of year. MCS = Math Composite Score; NNF = Next Number Fluency; NIF = Number Identification Fluency; BQD = Beginning Quantity Discrimination; AQD = Advanced Quantity Discrimination; MNF = Missing Number Fluency; Comp = Computation; C&A = Concepts and Applications.