



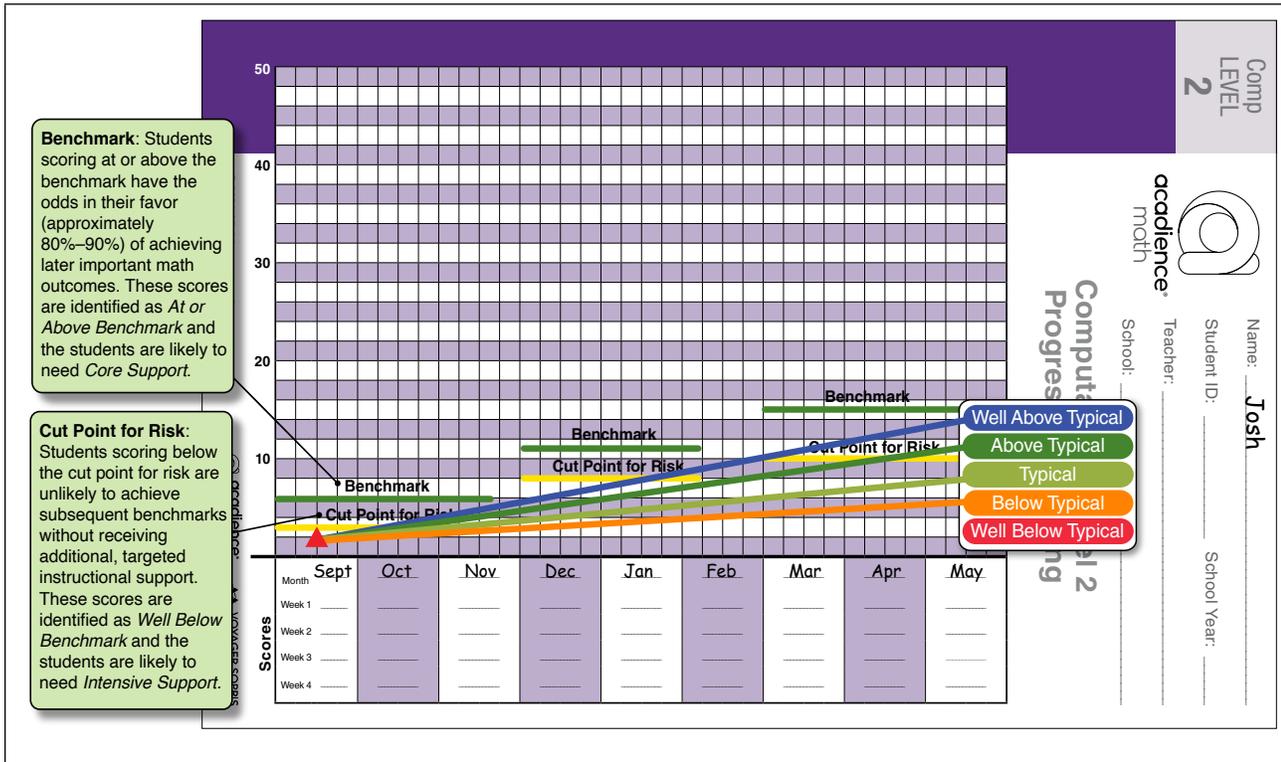
Using the Acadience® Math Goal-Setting Utility

The ADM goal-setting utility empowers educators to set goals that are meaningful, ambitious, and attainable. The goal-setting utility takes into account the research-based benchmarks for each measure, grade, and time of year as well as a normative comparison of progress using Pathways of Progress.

The Acadience Math benchmarks are empirically derived target scores that represent adequate math skill for a particular grade and time of year. Benchmarks are provided for each Acadience Math measure as well as for the Math Composite Score (MCS). Benchmarks are based on research that examines the predictive validity of a score on a measure at a particular point in time compared to later math outcomes. Acadience Math benchmarks are the same for all students in a grade, and represent the lowest score for which a student is likely to be on track to reach future math outcomes. While benchmarks provide meaningful outcomes, there may be some students for whom the benchmarks would not be adequately ambitious, and other students for whom the benchmarks would be difficult to attain. For example, a benchmark may not be an adequately ambitious goal for a student whose skills are already in the Above Benchmark range. Similarly, the fourth-grade level benchmark may be difficult to attain for a fourth-grade student who does not have basic addition and subtraction skills.

Pathways of Progress provides educators with a normative context, in addition to the benchmarks, when setting goals for individual students. Pathways of Progress classifies rates of progress as Typical, Above Typical, or Well Above Typical compared to other students with the same level of skills. *Figure 1* shows how the Pathways of Progress might correspond to the Acadience Math benchmarks for a sample second-grade student, Josh. As illustrated in *Figure 1*, Pathways of Progress is particularly helpful for determining when grade-level, end-of-year benchmarks are meaningful, ambitious, and attainable.

Figure 1. Sample Progress Monitoring Booklet with Pathways Shown



Teachers can use the goal-setting utility available in Acadience Data Management (ADM) to see the benchmarks for each measure and time of year as well as the target scores for each pathway. These features will assist teachers when tracking students' progress toward their goals throughout the year. Setting goals that are meaningful, ambitious, and attainable is particularly important for students who are performing Below or Well Below Benchmark and in need of additional instructional support. Goal setting is a professional decision that should be made with several considerations in mind. Student goals should represent a professional judgment about a goal that is simultaneously meaningful, ambitious, and attainable. When setting goals, consider the following:

1. What is a meaningful goal?

- The big idea is to increase a student's odds of achieving important math outcomes in the future. Therefore, goals should be set with the intention of students exceeding, achieving, or coming as close as possible to their Acadience Math grade-level benchmarks.
- Moving a student from Below Benchmark to At or Above Benchmark or moving a student from Well Below Benchmark to either Below Benchmark or to At or Above Benchmark represents a meaningful goal.

2. What is an ambitious goal?

- Above Typical Progress (Pathway 4) and Well Above Typical Progress (Pathway 5) represent ambitious goals. Below Typical Progress (Pathway 2) and Well Below Typical Progress (Pathway 1) are not considered ambitious goals.
- Typical Progress (Pathway 3) may be sufficient for students whose scores are already At or Above Benchmark.
- Typical Progress may *not* be adequate for students who have scores Below or Well Below Benchmark

3. What is an attainable goal?

- Goals in the Well Above Typical range are more difficult to attain.
- Typical and Above Typical Progress are likely attainable. Well Below Typical and Below Typical Progress may be attainable, but are not ambitious or meaningful. Appropriate goals are both *attainable* and *ambitious*.
- It is important to consider what might be possible with an effective, research-based intervention, especially in early elementary grades.

Goal-Setting Example: Janet

This section illustrates how the Acadience Data Management goal-setting utility could be used to set goals for a second-grade student, Janet. This utility allows educators to set goals by considering Pathways of Progress information in conjunction with the Acadience Math benchmarks.

At the beginning of second grade, Janet earned the following scores, most of which are below her grade-level benchmark:

- Math Composite Score = 11 (Well Below Benchmark)
- Computation = 3 (Below Benchmark)
- Concepts and Applications = 5 (Well Below Benchmark)

To establish a goal for Janet, her teacher would need to consider what end-of-year goals would be meaningful, attainable, and ambitious.

- A meaningful goal will result in proficient math skills At or Above Benchmark
- An attainable goal would be Typical or Above Typical Progress (Pathways 3 or 4) relative to students who began the year at a similar skill level.

- Because Janet is scoring is Well Below Benchmark, an ambitious goal of Above Typical Progress (Pathway 4) would be appropriate to bring her skills up to, or as close as possible to, benchmark.

Figure 2 shows Janet’s beginning-of-year Acadience Math data as it would appear in the Acadience Data Management goal-setting utility. Janet’s beginning-of-year Acadience Math scores are listed on the left-hand side, including her Math Composite Score (MCS) and the scores for each individual measure. The square next to each score represents the benchmark status of that score (i.e., open square indicates Well Below Benchmark, half-filled square indicates Below Benchmark, solid square indicates At or Above Benchmark).

Figure 2. Acadience Data Management Goal-Setting Utility for Janet, a Second-Grade Student

	Beg of Year Score	Pathways of Progress	End of Year Student Goal
Computation	3 <input checked="" type="checkbox"/>	★ ★ ★ ★ ★	—
C&A	5 <input type="checkbox"/>	★ ★ ★ ★ ★	—
Math Composite Score	11 <input type="checkbox"/>	★ ★ ★ ★ ★	—

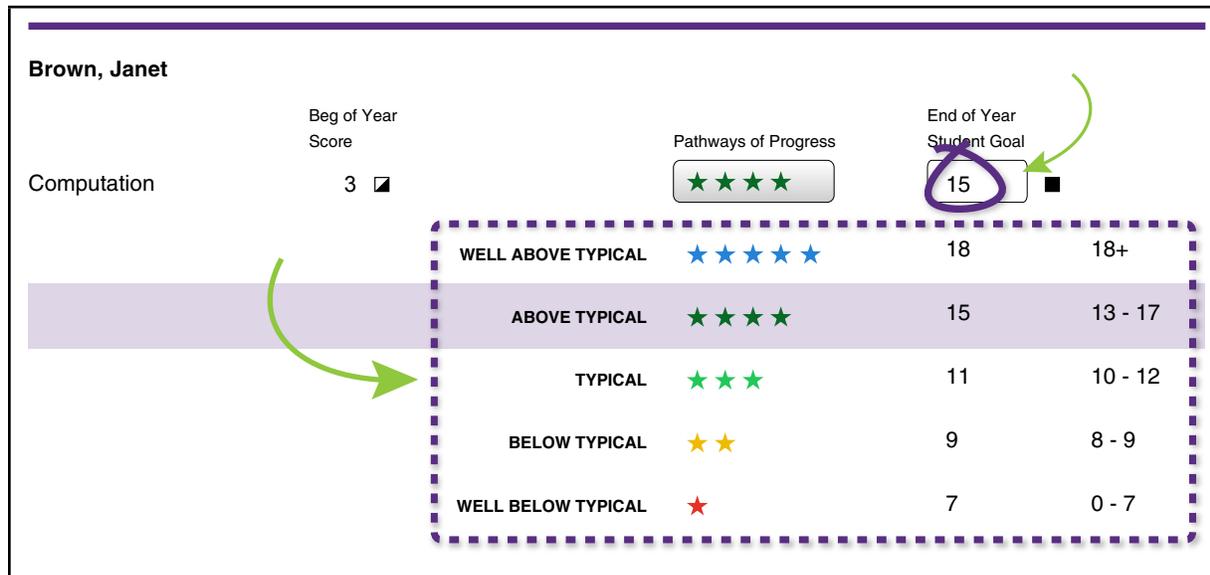
To activate the goal-setting utility, the teacher clicks on Janet’s name and boxes appear where the end-of-year goals can be entered for each measure (as shown in Figure 3).

Figure 3. Activated Goal-Setting Utility for Janet

	Beg of Year Score	Pathways of Progress	End of Year Student Goal
Computation	3 <input checked="" type="checkbox"/>	★ ★ ★ ★ ★	<input type="text"/>
C&A	5 <input type="checkbox"/>	★ ★ ★ ★ ★	<input type="text"/>
Math Composite Score	11 <input type="checkbox"/>	★ ★ ★ ★ ★	—

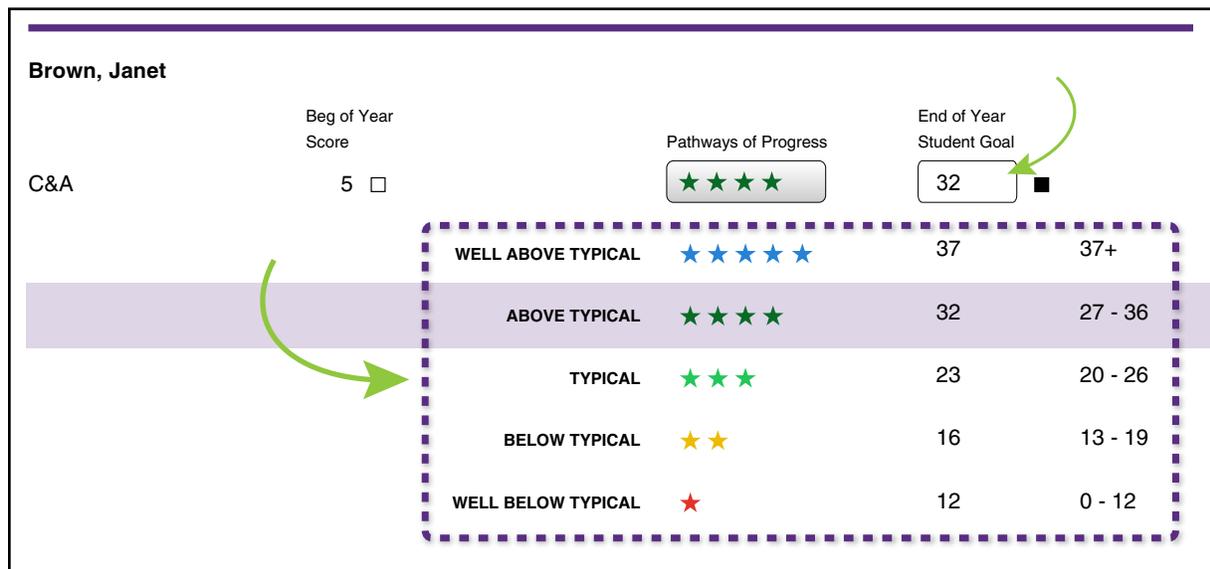
To set a goal for a measure, the teacher selects (i.e., clicks on) that measure. The teacher will then see a screen that shows the five possible Pathways of Progress choices, a default score from the middle of each pathway, and the range of scores for each pathway. In *Figure 4*, the teacher believes Above Typical Progress is appropriate for Janet, so the teacher enters 15 as the end-of-year goal for the Computation score (in the Above Typical Progress range).

Figure 4. Computation Goal Setting for Janet



Figures 5 show the teacher setting Janet’s goal on the other measure: Concepts and Applications. Because the teacher believes that Above Typical Progress is both ambitious and attainable, the end-of-year goal fall in the Above Typical Progress score range.

Figure 5. Concepts and Applications Goal Setting for Janet



Once goals for each component measure have been entered, the screen will appear as shown in *Figure 6*. All end-of-year goals are shown along with their associated pathway. In this example, all end-of-year goals for component measures and the MCS represent Above Typical Progress.

Figure 6. Completed Goal Setting for Janet

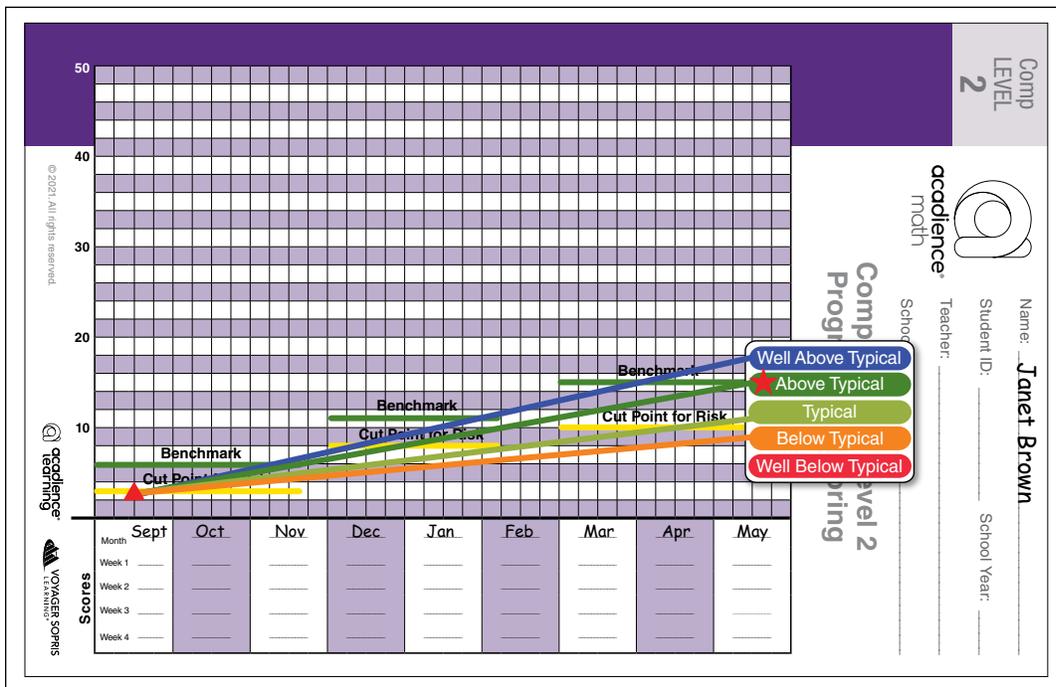
	Beg of Year Score	Pathways of Progress	End of Year Student Goal
Computation	3 <input checked="" type="checkbox"/>	★★★★★	15 <input type="checkbox"/>
Concepts and Applications	5 <input type="checkbox"/>	★★★★★	32 <input checked="" type="checkbox"/>
Math Composite Score	11 <input type="checkbox"/>	★★★★★	62 <input checked="" type="checkbox"/>

Based upon the end-of-year goal selections made using the goal-setting utility, Janet’s end-of-year goal would be written as:

By the end of the year, Janet will score 15 correct digits on a second-grade level Computation probe and score 32 points on a second-grade level Concepts and Applications probe.

Once goals have been established, that information can be transferred to the student’s progress monitoring graphs, as shown for Janet in *Figure 7*. Her end-of-year goal for Computation, represented by the star, and all five Pathways of Progress borders are noted on the sample graph.

Figure 7. Janet’s Progress Monitoring Graph



Acadience Math measures, on which Pathways of Progress is based, are powerful, reliable, and valid indicators of a student’s math proficiency. They are also brief and efficient. The goal is always to make good decisions. Establishing end-of-year goals is a professional judgment informed by the end-of-year benchmarks and the Pathways of Progress. For additional information on using the Acadience Data Management goal-setting utility, please contact us at info@acadiencelearning.org.