

# Benchmarks and Gate Score Worksheets

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Acadience Reading 7–8 provides two types of scores at each benchmark assessment period: (a) a total score for each individual measure and (b) gate scores. Each of the scores is interpreted relative to benchmarks and cut points for risk to determine if a student's score is at or above the benchmark, below the benchmark, or below the cut point for risk (well below the benchmark).

## Benchmarks and Cut Points for Risk

Acadience Reading 7–8 *benchmarks* are empirically derived, criterion-referenced target scores that represent adequate content-area reading skills for a particular grade and time of year. Benchmarks and cut points for risk are provided for the individual Acadience Reading 7–8 measures and the gate scores.

A *benchmark* indicates a level of skill at which students are likely to score at or above the 40th percentile on any high-quality reading assessment and achieve the next Acadience Reading 7–8 benchmark or content-area reading outcome. Thus, for students who achieve a benchmark and are receiving effective, research-based instruction from a core classroom curriculum, the odds are in their favor of achieving later content-area reading outcomes.

Conversely, the *cut points for risk* indicate a level of skill below which students are unlikely to achieve subsequent content-area reading outcomes without receiving additional, targeted instructional support. For students who have scores below the cut point for risk, the probability of achieving later benchmarks is low unless intensive support is provided.

The Acadience Reading 7–8 benchmarks and cut points for risk provide three primary benchmark status levels that describe students' performance: (a) At or Above Benchmark, (b) Below Benchmark, and (c) Well Below Benchmark. These levels are based on the overall likelihood of achieving specified benchmarks on subsequent Acadience Reading 7–8 assessments or external measures of reading achievement.

**At or Above Benchmark.** For students who score at or above the benchmark, the overall likelihood of achieving subsequent reading benchmarks is approximately 80% to 90%. These students are likely to need effective core instruction to meet subsequent content-area reading benchmarks. Within this range, the likelihood of achieving subsequent benchmarks is lower for students whose scores are right at the benchmark and increases as scores increase above the benchmark (see *Table 1*). A score at or above the benchmark indicates that the odds are in the student's favor of achieving the next benchmark, but it is not a guarantee. For example, if students at or above the benchmark have an 85% chance of meeting the next benchmark, that means that 15% of students in the At or Above Benchmark range may not achieve the subsequent benchmark. Some students who achieve scores at or above the benchmark may still need supplemental support to achieve the next benchmark. It is important to attend to other indicators of risk when planning support for students, such as attendance, behavior, motivation, vocabulary and language skills, and other related skill areas.

**Below Benchmark.** Between the benchmark and cut point for risk is a range of scores where students' future performance is more difficult to predict. For students with scores in this range, the overall likelihood of achieving subsequent content-area reading benchmarks is approximately 40% to 60%. These students are likely to need strategic support to ensure their achievement of future benchmarks. Strategic support generally consists of carefully targeted supplemental support in specific skill areas in which students are having difficulty. To ensure that the greatest number of students achieve later reading success, it is best for students with scores in this range to be monitored regularly to ensure that they are making adequate progress and to receive increased or modified support if necessary to achieve subsequent reading benchmarks.

**Well Below Benchmark.** For students who score below the cut point for risk, the overall likelihood of achieving subsequent content-area reading benchmarks is low, approximately 10% to 20%. These students are identified as

likely to need intensive support. Intensive support refers to interventions that incorporate something more or something different from the core curriculum or supplemental support.

Intensive support might entail:

- delivering instruction in a smaller group or individually,
- providing more instructional time or more practice,
- remediating foundational skills in the instructional hierarchy that may be difficult,
- presenting smaller skill steps in the instructional hierarchy,
- providing more explicit modeling and instruction, and/or
- providing greater scaffolding and practice.

Because students needing intensive support are likely to have individual and sometimes unique needs, we recommend monitoring their progress more frequently and, based on progress monitoring results, modifying interventions to ensure adequate progress. See the *Acadience Reading 7–8 Assessment Manual* for additional information about progress monitoring with Acadience Reading 7–8.

*Table 1* summarizes the interpretations of each benchmark status and provides descriptions for the likely need for support for each benchmark status. It is important to note that while there is an overall likelihood of achieving subsequent content-area reading outcomes for each benchmark status, the likelihood of achieving later reading outcomes increases as students' scores increase. This is illustrated in the first column of *Table 1*.

*Table 1. Student Performance Interpretations*

Likelihood of Meeting Later Content-Area Reading Benchmarks	Benchmark Status	What It Means
>99%	<b>At or Above Benchmark</b> <i>overall likelihood of achieving subsequent content-area reading benchmarks: 80% to 90%</i>	For students with scores in this range, the odds are in favor of achieving subsequent content-area reading benchmarks. The higher above the benchmark, the better the odds.  These students likely need effective core instruction to meet subsequent content-area reading benchmarks. Some students may require monitoring and strategic support on specific component skills as needed, while other students may benefit from instruction on more advanced skills.
95%		
90%		
80%		
70%		
60%		
55%	<b>Below Benchmark</b> <i>overall likelihood of achieving subsequent content-area reading benchmarks: 40% to 60%</i>	For students with scores in this range, the overall odds of achieving subsequent content-area reading benchmarks are approximately even, and hard to predict. Within this range, the closer students' scores are to the benchmark, the better the odds; the closer students' scores are to the cut point, the lower the odds.  In order to meet subsequent content-area reading benchmarks, these students likely need core instruction coupled with strategic support targeted to their individual needs. For some students whose scores are close to the benchmark, effective core instruction may be sufficient; students whose scores are close to the cut point may require more intensive support.
50%		
45%		
40%		
30%	<b>Well Below Benchmark</b> <i>overall likelihood of achieving subsequent content-area reading benchmarks: 10% to 20%</i>	For students with scores in this range, the overall odds of achieving subsequent content-area reading benchmarks are low.  These students likely need intensive support in addition to effective core instruction. They may also need support on prerequisite skills (i.e., below grade level) depending upon the grade level and how far below the benchmark their skills are.
20%		
10%		
<5%		

## Development of Benchmarks

The benchmarks and cut points for risk summarized in this document are based on research that examined the predictive probability of a score on an Acadience Reading 7–8 measure at a particular point in time, compared to later Acadience Reading 7–8 measures and external measures of reading proficiency and achievement. Two outcome criteria were used to develop and evaluate the benchmarks and cut points for risk: (a) the Stanford Achievement Test Series, Tenth Edition–Total Reading score (SAT10; Pearson, 2003); and (b) scores from Acadience Reading 7–8 measures administered at subsequent benchmark assessment time points. The 40th percentile on the SAT10 assessment was used as an indicator that the students had adequate reading skills for their grade. When the Acadience Reading 7–8 measures were used as a criterion, benchmarks were based on the prediction of subsequent benchmark status. For instance, the middle-of-year benchmarks were based on the prediction of end-of-year benchmark status. The exception was when the Acadience Reading outcome was from the beginning of grade 9, where the 40th percentile on Maze was used as the criterion.

Benchmarks and cut points for risk were determined by finding the scores on Acadience Reading 7–8 measures that corresponded to the above criteria across two data sets. The goal was to select a benchmark and cut point for risk for each measure so that students who were in the At or Above Benchmark category had a high probability of meeting later benchmarks. Students in the Below Benchmark category had about a 50-50 likelihood of reaching later benchmarks, and students who were in the Well Below Benchmark category were unlikely to meet later benchmarks. In addition, logistic regression curves for predicting whether or not students would meet later benchmarks were constructed. Logistic regression allows us to examine point estimates of the probabilities of meeting later benchmarks. Benchmarks were chosen so that a student who scored exactly at the benchmark had approximately a 60% probability or likelihood of meeting later benchmarks. The cut point for risk was chosen so that students who scored exactly at the cut point had approximately a 40% probability or likelihood of meeting later benchmarks. The final consideration for selecting benchmarks and cut points for risk concerned the marginal percentages. Ideally, a student is described as performing in a benchmark category as a result of reading skill, not artifacts of the test. To this end, benchmarks were chosen so that approximately the same proportion of students were described as At or Above Benchmark at the beginning and end of each time period. For example, if 60% of students were At or Above Benchmark at the end of year, we aimed for 60% of students to be At or Above Benchmark at the middle of year.

One sample utilized the SAT10 Total Reading score as the criterion of interest, and the other sample utilized performance on later Acadience Reading 7–8 measures as the criterion. Data in the first sample were collected in a study conducted during the 2017–2018 school year. Participating students were administered Acadience Reading 7–8 during all three benchmark periods (i.e., beginning of year, middle of year, and end of year) in addition to the SAT10 at the end of the school year. Participants in this study were 150 students across grades 7 and 8 from four schools in four states representing the Pacific, West North Central, and East North Central census regions. The study included students across different levels of reading skill. The data in the second sample were exported from Acadience Data Management and included 84,442 students from 399 schools, within 259 districts, in 42 US States representing every US census region. Additionally, data were collected from 11 districts outside the United States in Canada, Australia, and the United Kingdom. Data were collected and entered into Acadience Data Management by school personnel at three benchmark assessment time points (i.e., beginning of year, middle of year, and end of year) during the 2015–2016, 2016–2017, 2017–2018, 2018–2019, and 2019–2020 school years.

**Discussion.** We chose benchmarks and cut points for risk that adhered to a balance of the above standards. In some cases, the new benchmarks are higher than the previous, preliminary benchmarks for Acadience Reading 7–8. The increase was necessary for a valid interpretation of the benchmarks and cut points for risk. A benchmark that is set too low means that students who are At or Above Benchmark will have a lower probability of meeting later benchmarks than is necessary to say a student is on track. Raising the benchmarks ensures that the students who meet this criterion are on track to meet later outcomes.

Ensuring that benchmarks and cut points for risk maintain their desired interpretation also meant that occasionally later benchmarks and cut points for risk were set lower than earlier benchmark assessments. One potential reason for this result is that reading skills tend to plateau in upper grades. As this happens, performance on assessments tends to level off. Without linear growth in reading skills, benchmarks and cut points for risk will also tend to not display linear increases over time. Maintaining the interpretation of each benchmark category was the first priority in setting the benchmarks and cut points for risk, and this interpretation sometimes necessitated setting benchmarks that decreased from earlier to later time points.

## Gate Scores and Gating Procedures

Benchmark assessment with Acadience Reading 7–8 is conducted within a multiple-gating system. This system allows students to be assessed three times per year so that students who may be at risk can be identified throughout the school year. At the same time, the multiple-gating process minimizes assessment time and reduces the number of students who are assessed individually.

Students' gate scores are calculated based upon the triad total scores from each administered measure. Triad scores are based on a science, social studies, and prose passage. First, the total scores are equated to have approximately the same standard deviation as Oral Reading Total Words Correct (i.e., the triad total). Then, a gate score is computed as the average of the equated scores across measures, enabling an equally weighted average of measures.

An overview of the gating procedures is provided below and illustrated in *Figure 1*. The gating procedures with a specific student example are shown in *Figure 2*. Additional information about gating procedures can be found in the *Acadience Reading 7–8 Assessment Manual*. Acadience Data Management ([www.acadiencelearning.net](http://www.acadiencelearning.net)) will automatically calculate the gate scores for you. Worksheets for calculating students' gate scores by hand are available at the end of this document.

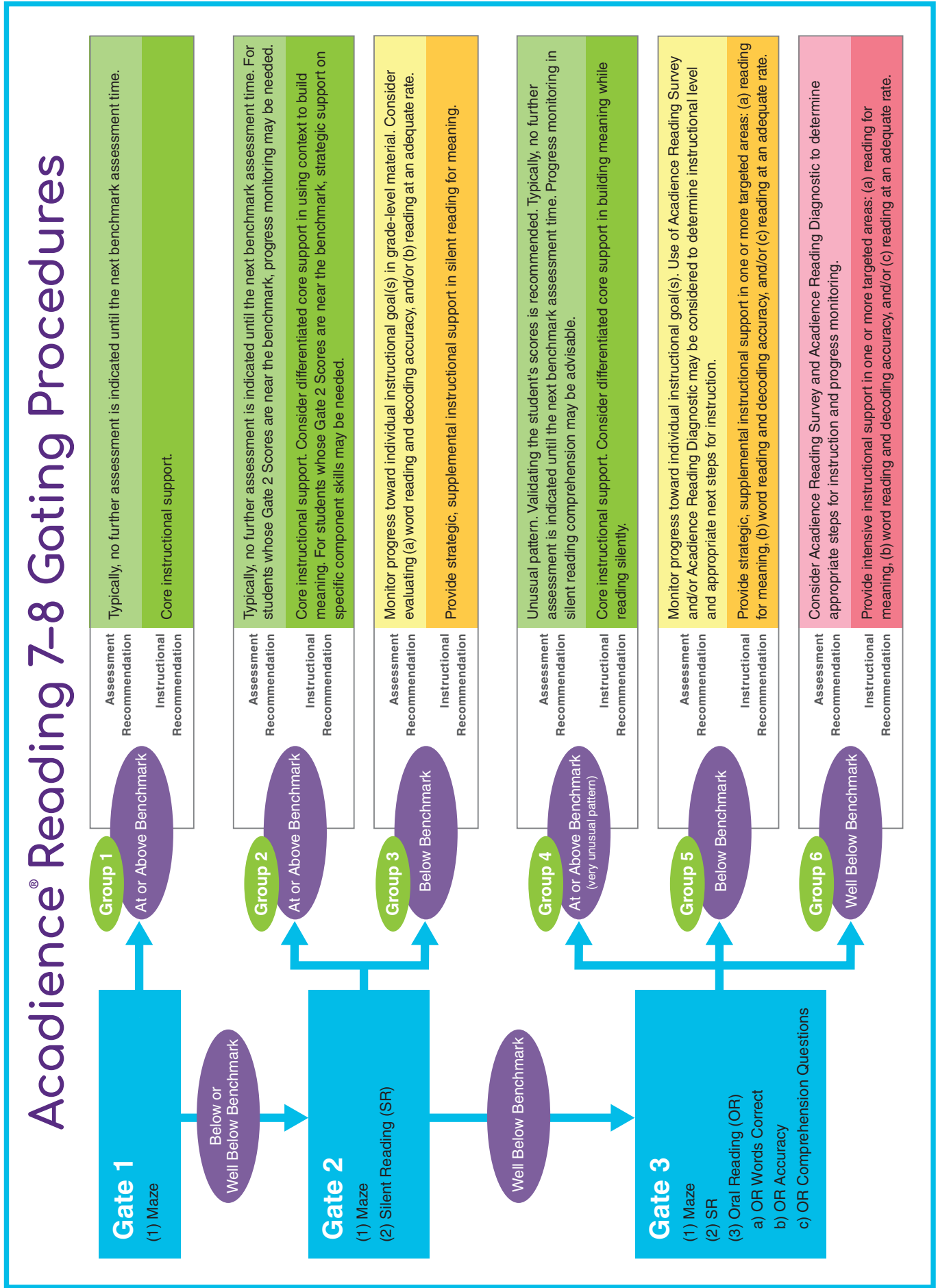
**Gate 1.** In Gate 1, Maze is administered to all students. The Maze Total Adjusted Score is equated and used as the Gate 1 Score. Typically, students whose Gate 1 Scores are At or Above Benchmark are not assessed until the next scheduled benchmark. Students whose Gate 1 Scores are Below Benchmark or Well Below Benchmark enter Gate 2 and are assessed with the group-administered Silent Reading measure.

**Gate 2.** Students who enter Gate 2 are administered Silent Reading. Their Maze and Silent Reading equated scores are averaged to create a Gate 2 Score. Typically, students who score At or Above Benchmark at Gate 2 are not assessed until the next scheduled benchmark. Core support, with differentiation as needed, is recommended. For students whose gate scores are near the benchmark, strategic support on specific component skills and progress monitoring may be needed. The instructional recommendation for students who are Below Benchmark at Gate 2 is strategic support. A progress monitoring schedule can be set up if needed as described in the *Acadience Reading 7–8 Assessment Manual*. Students whose Gate 2 Scores are Well Below Benchmark enter Gate 3 and are assessed individually with the Oral Reading measure.

**Gate 3.** Students who move to Gate 3 are administered Oral Reading. Although Oral Reading is administered individually and requires the most time to administer, it provides important additional information about the student's reading fluency, accuracy, and comprehension skills. The student's Oral Reading scores are equated and averaged with the Maze and Silent Reading equated scores to calculate the Gate 3 Score. Students who score At or Above Benchmark at Gate 3 may not need any additional assessment and core support is recommended. Note, it would be unusual for a student to score At or Above Benchmark at Gate 3 because they have already demonstrated difficulty in Gates 1 and 2. In fact, this would be such an unusual pattern that we recommend validating the student's Maze, Silent Reading, and Oral Reading scores. For students whose Gate 3 Scores are Below Benchmark, strategic, targeted support is recommended. Further evaluation with Acadience Reading Survey to determine instructional level can be considered, and additional information from Acadience Reading Diagnostic may be helpful in guiding appropriate next steps for instruction. For students who score Well Below Benchmark on the Gate 3 Score, intensive instructional support is recommended. Additionally, information from Acadience Reading Survey and Acadience Reading Diagnostic may be helpful in guiding appropriate steps for instruction and progress monitoring.

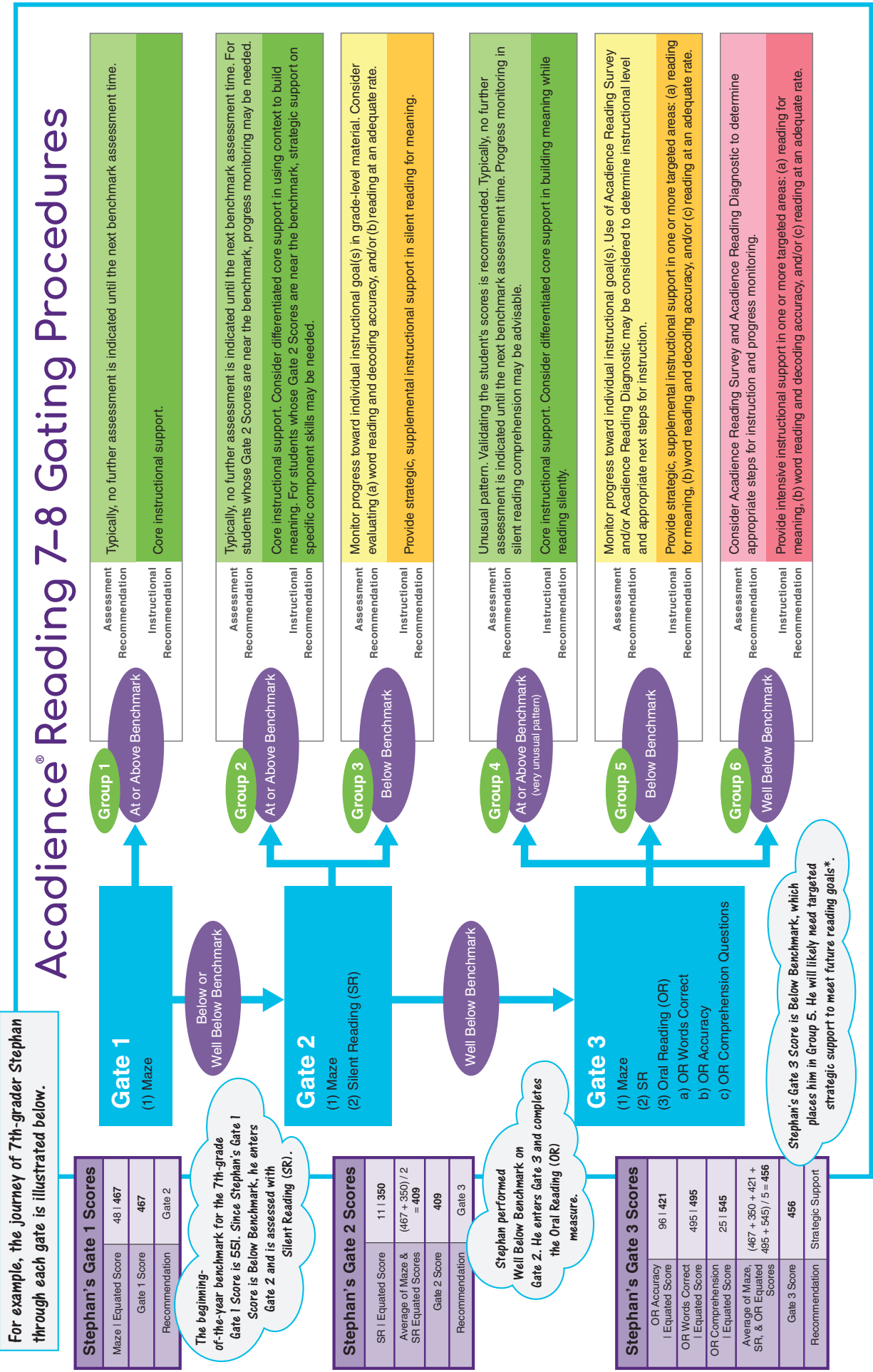
One effect of the gating system is that students who enter Gates 2 and/or 3 and are assessed with Silent Reading and perhaps Oral Reading tend to have lower levels of reading skills. In order to develop benchmarks consistent with the logic described above, it was necessary to account for the non-randomness of the observed data. Cases were post-stratified to give more weight to higher achieving students, since they would be underrepresented in Gates 2 and 3. Without this weighting, conditional probabilities would represent the odds of achieving later reading benchmarks given Below Benchmark scores on Gate 1. With weighting, the benchmarks more accurately reflect the probabilities of achieving later reading outcomes based on a given measure.

Figure 1. Acadience Reading 7–8 Gating Procedures



Note. Additional information about groups is provided in the Acadience Reading 7–8 Assessment Manual.

Figure 2. Acadience Reading 7–8 Gating Procedures with Student Example



**\* Instructional Recommendation:** Stephan's OK scores are all in the Below Benchmark range. Poor performance on the Maze and SR measures could be due to speed of reading. An intervention to increase oral reading fluency could be beneficial. As Stephan's reading rate and fluency improve, progress monitoring with Maze and SR should be considered. In addition, Stephan should be provided with opportunities to practice a variety of comprehension skills, including answering comprehension questions in different formats.

Note: Additional information about groups is provided in the Acadience Reading 7–8 Assessment Manual.

## Seventh Grade Benchmarks and Cut Points for Risk

Measure or Gate	Benchmark Status	Likely Need for Support or Gate	Beginning of Year	Middle of Year	End of Year
Maze	At or Above Benchmark	Core	<b>62 +</b>	<b>64 +</b>	<b>70 +</b>
	Below Benchmark	Strategic	45 - 61	45 - 63	50 - 69
	Well Below Benchmark	Intensive	0 - 44	0 - 44	0 - 49
Silent Reading	At or Above Benchmark	Core	<b>19 +</b>	<b>21 +</b>	<b>20 +</b>
	Below Benchmark	Strategic	14 - 18	17 - 20	16 - 19
	Well Below Benchmark	Intensive	0 - 13	0 - 16	0 - 15
Oral Reading Words Correct	At or Above Benchmark	Core	<b>525 +</b>	<b>571 +</b>	<b>591 +</b>
	Below Benchmark	Strategic	407 - 524	469 - 570	497 - 590
	Well Below Benchmark	Intensive	0 - 406	0 - 468	0 - 496
Oral Reading Accuracy	At or Above Benchmark	Core	<b>97 +</b>	<b>98 +</b>	<b>98 +</b>
	Below Benchmark	Strategic	96	97	97
	Well Below Benchmark	Intensive	0 - 95	0 - 96	0 - 96
Oral Reading Comprehension	At or Above Benchmark	Core	<b>27 +</b>	<b>32 +</b>	<b>32 +</b>
	Below Benchmark	Strategic	17 - 26	23 - 31	23 - 31
	Well Below Benchmark	Intensive	0 - 16	0 - 22	0 - 22
Gate 1	At or Above Benchmark	Core	<b>551 +</b>	<b>563 +</b>	<b>599 +</b>
	Below Benchmark	Gate 2	449 - 550	449 - 562	479 - 598
	Well Below Benchmark	Gate 2	0 - 448	0 - 448	0 - 478
Gate 2	At or Above Benchmark	Core	<b>562 +</b>	<b>597 +</b>	<b>601 +</b>
	Below Benchmark	Strategic	441 - 561	483 - 596	485 - 600
	Well Below Benchmark	Gate 3	0 - 440	0 - 482	0 - 484
Gate 3	At or Above Benchmark	Core*	<b>557 +</b>	<b>598 +</b>	<b>602 +</b>
	Below Benchmark	Strategic	429 - 556	489 - 597	496 - 601
	Well Below Benchmark	Intensive**	0 - 428	0 - 488	0 - 495

The benchmark is the number that is **bold**. The cut point for risk is the number that is *italicized*. Benchmarks for the measures are applied to the triad total.

\*Unusual pattern. Validate the student's scores.

\*\*Consider Acadience Reading Survey and/or Acadience Reading Diagnostic.

## Eighth Grade Benchmarks and Cut Points for Risk

Measure or Gate	Benchmark Status	Likely Need for Support or Gate	Beginning of Year	Middle of Year	End of Year
Maze	At or Above Benchmark	Core	<b>70 +</b>	<b>79 +</b>	<b>85 +</b>
	Below Benchmark	Strategic	<i>51 - 69</i>	<i>59 - 78</i>	<i>70 - 84</i>
	Well Below Benchmark	Intensive	<i>0 - 50</i>	<i>0 - 58</i>	<i>0 - 69</i>
Silent Reading	At or Above Benchmark	Core	<b>21 +</b>	<b>21 +</b>	<b>19 +</b>
	Below Benchmark	Strategic	<i>16 - 20</i>	<i>17 - 20</i>	<i>15 - 18</i>
	Well Below Benchmark	Intensive	<i>0 - 15</i>	<i>0 - 16</i>	<i>0 - 14</i>
Oral Reading Words Correct	At or Above Benchmark	Core	<b>579 +</b>	<b>601 +</b>	<b>630 +</b>
	Below Benchmark	Strategic	<i>483 - 578</i>	<i>504 - 600</i>	<i>512 - 629</i>
	Well Below Benchmark	Intensive	<i>0 - 482</i>	<i>0 - 503</i>	<i>0 - 511</i>
Oral Reading Accuracy	At or Above Benchmark	Core	<b>98 +</b>	<b>98 +</b>	<b>99 +</b>
	Below Benchmark	Strategic	<i>97</i>	<i>97</i>	<i>98</i>
	Well Below Benchmark	Intensive	<i>0 - 96</i>	<i>0 - 96</i>	<i>0 - 97</i>
Oral Reading Comprehension	At or Above Benchmark	Core	<b>28 +</b>	<b>29 +</b>	<b>30 +</b>
	Below Benchmark	Strategic	<i>20 - 27</i>	<i>21 - 28</i>	<i>23 - 29</i>
	Well Below Benchmark	Intensive	<i>0 - 19</i>	<i>0 - 20</i>	<i>0 - 22</i>
Gate 1	At or Above Benchmark	Core	<b>569 +</b>	<b>614 +</b>	<b>644 +</b>
	Below Benchmark	Gate 2	<i>474 - 568</i>	<i>514 - 613</i>	<i>569 - 663</i>
	Well Below Benchmark	Gate 2	<i>0 - 473</i>	<i>0 - 513</i>	<i>0 - 568</i>
Gate 2	At or Above Benchmark	Core	<b>591 +</b>	<b>614 +</b>	<b>623 +</b>
	Below Benchmark	Strategic	<i>484 - 590</i>	<i>518 - 613</i>	<i>517 - 622</i>
	Well Below Benchmark	Gate 3	<i>0 - 483</i>	<i>0 - 517</i>	<i>0 - 516</i>
Gate 3	At or Above Benchmark	Core*	<b>591 +</b>	<b>607 +</b>	<b>643 +</b>
	Below Benchmark	Strategic	<i>484 - 590</i>	<i>505 - 606</i>	<i>533 - 642</i>
	Well Below Benchmark	Intensive**	<i>0 - 483</i>	<i>0 - 504</i>	<i>0 - 532</i>

The benchmark is the number that is **bold**. The cut point for risk is the number that is *italicized*. Benchmarks for the measures are applied to the triad total.

\*Unusual pattern. Validate the student's scores.

\*\*Consider Acadience Reading Survey and/or Acadience Reading Diagnostic.



## Seventh Grade Percentage of Students Who Meet Later Outcomes on Gate 1 Based on Benchmark Status on Individual Acadience Reading 7–8 Measures and Gates

Measure or Gate	Benchmark Status	Percentage of Students At or Above Benchmark on Middle-of-Year Gate 1 Score Based on Beginning-of-Year Status	Percentage of Students At or Above Benchmark on End-of-Year Gate 1 Score Based on Beginning-of-Year Status
Maze	At or Above Benchmark	88%	86%
	Below Benchmark	33%	36%
	Well Below Benchmark	5%	3%
Silent Reading	At or Above Benchmark	80%	83%
	Below Benchmark	36%	38%
	Well Below Benchmark	11%	9%
Oral Reading Words Correct	At or Above Benchmark	77%	75%
	Below Benchmark	24%	34%
	Well Below Benchmark	9%	15%
Oral Reading Accuracy	At or Above Benchmark	63%	69%
	Below Benchmark	32%	36%
	Well Below Benchmark	22%	13%
Oral Reading Comprehension	At or Above Benchmark	70%	74%
	Below Benchmark	32%	31%
	Well Below Benchmark	13%	12%
Gate 1	At or Above Benchmark	88%	86%
	Below Benchmark	33%	36%
	Well Below Benchmark	5%	3%
Gate 2	At or Above Benchmark	86%	84%
	Below Benchmark	30%	28%
	Well Below Benchmark	6%	2%
Gate 3	At or Above Benchmark	89%	83%
	Below Benchmark	39%	29%
	Well Below Benchmark	9%	3%

Note. This table shows the percent of students that are on track at Gate 1 at the middle and end of the year based on the student's Acadience Reading 7–8 score at the beginning and middle of the year. N = 37,007 students who had Acadience Reading 7–8 data for the 2015–2016, 2016–2017, 2017–2018, 2018–2019, and/or 2019–2020 school years. Data exported from Acadience Data Management.

## Eighth Grade Percentage of Students Who Meet Later Outcomes on Gate 1 Based on Benchmark Status on Individual Acadience Reading 7–8 Measures and Gates

Measure or Gate	Benchmark Status	Percentage of Students At or Above Benchmark on Middle-of-Year Gate 1 Score Based on Beginning-of-Year Status	Percentage of Students At or Above Benchmark on End-of-Year Gate 1 Score Based on Beginning-of-Year Status
Maze	At or Above Benchmark	89%	88%
	Below Benchmark	34%	28%
	Well Below Benchmark	5%	4%
Silent Reading	At or Above Benchmark	79%	76%
	Below Benchmark	43%	39%
	Well Below Benchmark	14%	13%
Oral Reading Words Correct	At or Above Benchmark	76%	75%
	Below Benchmark	35%	36%
	Well Below Benchmark	10%	15%
Oral Reading Accuracy	At or Above Benchmark	67%	65%
	Below Benchmark	31%	34%
	Well Below Benchmark	20%	19%
Oral Reading Comprehension	At or Above Benchmark	70%	73%
	Below Benchmark	39%	43%
	Well Below Benchmark	21%	18%
Gate 1	At or Above Benchmark	89%	88%
	Below Benchmark	34%	28%
	Well Below Benchmark	5%	4%
Gate 2	At or Above Benchmark	85%	83%
	Below Benchmark	34%	30%
	Well Below Benchmark	7%	5%
Gate 3	At or Above Benchmark	85%	80%
	Below Benchmark	36%	35%
	Well Below Benchmark	5%	4%

Note. This table shows the percent of students that are on track at Gate 1 at the middle and end of the year based on the student's Acadience Reading 7–8 score at the beginning and middle of the year. N = 30,701 students who had Acadience Reading 7–8 data for the 2015–2016, 2016–2017, 2017–2018, 2018–2019, and/or 2019–2020 school years. Data exported from Acadience Data Management.

## Seventh Grade Percentage of Students Who Meet Later Outcomes on the SAT10 Reading Score Based on Benchmark Status on Individual Acadience Reading 7–8 Measures and Gate Scores

Measure or Gate	Benchmark Status	Percentage of Students Showing Adequate Skill on SAT10 Reading Score Based on Beginning-of-Year Status	Percentage of Students Showing Adequate Skill on SAT10 Reading Score Based on Middle-of-Year Status	Percentage of Students Showing Adequate Skill on SAT10 Reading Score Based on End-of-Year Status
Maze	At or Above Benchmark	86%	91%	92%
	Below Benchmark	50%	35%	36%
	Well Below Benchmark	6%	15%	5%
Silent Reading	At or Above Benchmark			85%
	Below Benchmark			30%
	Well Below Benchmark			5%
Oral Reading Words Correct	At or Above Benchmark			81%
	Below Benchmark			30%
	Well Below Benchmark			16%
Oral Reading Accuracy	At or Above Benchmark			81%
	Below Benchmark			24%
	Well Below Benchmark			13%
Oral Reading Comprehension	At or Above Benchmark			84%
	Below Benchmark			50%
	Well Below Benchmark			6%
Gate 1	At or Above Benchmark	86%	91%	92%
	Below Benchmark	50%	35%	36%
	Well Below Benchmark	6%	15%	5%
Gate 2	At or Above Benchmark			88%
	Below Benchmark			40%
	Well Below Benchmark			5%
Gate 3	At or Above Benchmark			90%
	Below Benchmark			25%
	Well Below Benchmark			0%

*Note.* This table shows the likelihood of being on track on the SAT10 assessment at the end of the year, based on the student's individual beginning-, middle-, and end-of-year Acadience Reading 7–8 benchmark status. The 40th percentile for the SAT10 assessment was used to indicate whether the student was on track. N = 76 students. The SAT10 data were collected during the 2017–2018 school year. Silent and Oral Reading were not examined at the beginning and middle of year due to an insufficient sample size.

## Eighth Grade Percentage of Students Who Meet Later Outcomes on the SAT10 Reading Score Based on Benchmark Status on Individual Acadience Reading 7–8 Measures and Gate Scores

Measure or Gate	Benchmark Status	Percentage of Students Showing Adequate Skill on SAT10 Reading Score Based on Beginning-of-Year Status	Percentage of Students Showing Adequate Skill on SAT10 Reading Score Based on Middle-of-Year Status	Percentage of Students Showing Adequate Skill on SAT10 Reading Score Based on End-of-Year Status
Maze	At or Above Benchmark	78%	83%	81%
	Below Benchmark	54%	50%	54%
	Well Below Benchmark	14%	31%	30%
Silent Reading	At or Above Benchmark			88%
	Below Benchmark			30%
	Well Below Benchmark			27%
Oral Reading Words Correct	At or Above Benchmark			80%
	Below Benchmark			67%
	Well Below Benchmark			11%
Oral Reading Accuracy	At or Above Benchmark			80%
	Below Benchmark			62%
	Well Below Benchmark			11%
Oral Reading Comprehension	At or Above Benchmark			95%
	Below Benchmark			33%
	Well Below Benchmark			28%
Gate 1	At or Above Benchmark	78%	83%	81%
	Below Benchmark	54%	50%	54%
	Well Below Benchmark	14%	31%	30%
Gate 2	At or Above Benchmark			92%
	Below Benchmark			47%
	Well Below Benchmark			20%
Gate 3	At or Above Benchmark			89%
	Below Benchmark			53%
	Well Below Benchmark			15%

*Note.* This table shows the likelihood of being on track on the SAT10 assessment at the end of the year, based on the student's individual beginning-, middle-, and end-of-year Acadience Reading 7–8 benchmark status. The 40th percentile for the SAT10 assessment was used to indicate whether the student was on track. N = 74 students. The SAT10 data were collected during the 2017–2018 school year. Silent and Oral Reading were not examined at the beginning and middle of year due to an insufficient sample size.

## Percentage of Students Who Met Outcomes at the Beginning of the Following Year

Measure or Gate	End-of-Year Benchmark Status	Likelihood of Begin on Track at Gate 1 at Beginning of Following Year	
		Grade 7	Grade 8
Maze	At or Above Benchmark	88%	85%
	Below Benchmark	30%	30%
	Well Below Benchmark	3%	8%
Silent Reading	At or Above Benchmark	79%	92%
	Below Benchmark	37%	46%
	Well Below Benchmark	12%	8%
Oral Reading Words Correct	At or Above Benchmark	80%	82%
	Below Benchmark	34%	31%
	Well Below Benchmark	8%	6%
Oral Reading Accuracy	At or Above Benchmark	94%	74%
	Below Benchmark	64%	39%
	Well Below Benchmark	25%	18%
Oral Reading Comprehension	At or Above Benchmark	77%	77%
	Below Benchmark	46%	39%
	Well Below Benchmark	18%	13%
Gate 1	At or Above Benchmark	88%	85%
	Below Benchmark	30%	30%
	Well Below Benchmark	3%	8%
Gate 2	At or Above Benchmark	87%	87%
	Below Benchmark	32%	32%
	Well Below Benchmark	5%	8%
Gate 3	At or Above Benchmark	86%	84%
	Below Benchmark	24%	42%
	Well Below Benchmark	2%	8%

*Note.* This table shows the percent of students that meet or exceed the 40th percentile on the Maze assessment at the beginning of the following school year based on their end-of-year benchmark status. Sample sizes for cross-year cohorts as follows. End of seventh grade to beginning of eighth grade: 12,767; end of eighth grade to beginning of ninth grade: 2,079. Acadience Reading 7–8 and ninth-grade data were exported from Acadience Data Management for the 2015–2016, 2016–2017, 2017–2018, 2018–2019, and 2019–2020 school years.

# Seventh Grade Gate Score Worksheet

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Gate scores are used to interpret results for Acadience Reading 7–8 and to guide the gating procedures. Acadience Data Management will calculate the gate scores for you. If you do not use Acadience Data Management, you can use this worksheet to calculate the gate scores.

Name: \_\_\_\_\_

Class: \_\_\_\_\_

Oral Reading Accuracy Equated Score Table	
OR Total Accuracy	Equated Score
0–63%	101
64–69%	102
70–71%	103
72–73%	104
74%	105
75%	106
76%	107
77%	108
78%	110
79%	112
80%	114
81%	117
82%	120
83%	125
84%	130
85%	136
86%	144
87%	154
88%	166
89%	180
90%	197
91%	219
92%	245
93%	277
94%	315
95%	363
96%	421
97%	492
98%	578
99%	684
100%	813

## Gate 1 Score

$$(\text{Maze Total Adjusted Score} \times 6) + 179 = \underline{\hspace{2cm}} \quad [1]$$

$$\text{Gate 1 Score} = \text{Value 1} = \boxed{\hspace{2cm}}$$

At or Above Benchmark ⇨ No further benchmark assessment until next benchmark period.

Below Benchmark ⇨ Proceed to Gate 2.

Well Below Benchmark ⇨ Proceed to Gate 2.

## Gate 2 Score

$$(\text{Maze Total Adjusted Score} \times 6) + 179 = \underline{\hspace{2cm}} \quad [1]$$

$$(\text{Silent Reading Total Score} \times 28) + 42 = \underline{\hspace{2cm}} \quad [2]$$

$$\text{Gate 2 Score} = (\text{Value 1} + \text{Value 2}) \div 2 = \boxed{\hspace{2cm}}$$

At or Above Benchmark ⇨ No further benchmark assessment until next benchmark period.

Below Benchmark ⇨ No further benchmark assessment until next benchmark period. Strategic support recommended.

Well Below Benchmark ⇨ Proceed to Gate 3.

## Gate 3 Score

$$(\text{Maze Total Adjusted Score} \times 6) + 179 = \underline{\hspace{2cm}} \quad [1]$$

$$(\text{Silent Reading Total Score} \times 28) + 42 = \underline{\hspace{2cm}} \quad [2]$$

$$\text{Oral Reading Total Words Correct} = \underline{\hspace{2cm}} \quad [3]$$

Oral Reading Total Accuracy: \_\_\_\_\_

$$\text{Oral Reading Total Accuracy Equated Score From Table} = \underline{\hspace{2cm}} \quad [4]$$

$$(\text{Oral Reading Total Comprehension} \times 14) + 195 = \underline{\hspace{2cm}} \quad [5]$$

$$\text{Gate 3 Score} = (\text{Value 1} + \text{Value 2} + \text{Value 3} + \text{Value 4} + \text{Value 5}) \div 5 = \boxed{\hspace{2cm}}$$

At or Above Benchmark ⇨ Unusual pattern. Validate Maze and Silent Reading scores. May not need further assessment. Core support recommended.

Below Benchmark ⇨ Strategic, targeted support recommended. Consider assessing with Acadience Reading Survey to determine instructional level.

Well Below Benchmark ⇨ Intensive support recommended. Acadience Reading Survey and/or Acadience Reading Diagnostic may be helpful in guiding appropriate steps for instruction.

# Eighth Grade Gate Score Worksheet

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Gate scores are used to interpret results for Acadience Reading 7–8 and to guide the gating procedures. Acadience Data Management will calculate the gate scores for you. If you do not use Acadience Data Management, you can use this worksheet to calculate the gate scores.

Name: \_\_\_\_\_

Class: \_\_\_\_\_

Oral Reading Accuracy Equated Score Table	
OR Total Accuracy	Equated Score
0–63%	62
64–68%	63
69–71%	64
72–73%	65
74%	66
75%	67
76%	68
77%	70
78%	71
79%	74
80%	76
81%	79
82%	83
83%	88
84%	93
85%	100
86%	109
87%	119
88%	132
89%	147
90%	166
91%	189
92%	217
93%	251
94%	293
95%	344
96%	407
97%	483
98%	577
99%	691
100%	830

## Gate 1 Score

$$(\text{Maze Total Adjusted Score} \times 5) + 219 = \underline{\hspace{2cm}} \quad [1]$$

$$\text{Gate 1 Score} = \text{Value 1} = \boxed{\hspace{2cm}}$$

At or Above Benchmark ⇨ No further benchmark assessment until next benchmark period.

Below Benchmark ⇨ Proceed to Gate 2.

Well Below Benchmark ⇨ Proceed to Gate 2.

## Gate 2 Score

$$(\text{Maze Total Adjusted Score} \times 5) + 219 = \underline{\hspace{2cm}} \quad [1]$$

$$(\text{Silent Reading Total Score} \times 30) + 13 = \underline{\hspace{2cm}} \quad [2]$$

$$\text{Gate 2 Score} = (\text{Value 1} + \text{Value 2}) \div 2 = \boxed{\hspace{2cm}}$$

At or Above Benchmark ⇨ No further benchmark assessment until next benchmark period.

Below Benchmark ⇨ No further benchmark assessment until next benchmark period. Strategic support recommended.

Well Below Benchmark ⇨ Proceed to Gate 3.

## Gate 3 Score

$$(\text{Maze Total Adjusted Score} \times 5) + 219 = \underline{\hspace{2cm}} \quad [1]$$

$$(\text{Silent Reading Total Score} \times 30) + 13 = \underline{\hspace{2cm}} \quad [2]$$

$$\text{Oral Reading Total Words Correct} = \underline{\hspace{2cm}} \quad [3]$$

Oral Reading Total Accuracy: \_\_\_\_\_

$$\text{Oral Reading Total Accuracy Equated Score From Table} = \underline{\hspace{2cm}} \quad [4]$$

$$(\text{Oral Reading Total Comprehension} \times 16) + 170 = \underline{\hspace{2cm}} \quad [5]$$

$$\text{Gate 3 Score} = (\text{Value 1} + \text{Value 2} + \text{Value 3} + \text{Value 4} + \text{Value 5}) \div 5 = \boxed{\hspace{2cm}}$$

At or Above Benchmark ⇨ Unusual pattern. Validate Maze and Silent Reading scores. May not need further assessment. Core support recommended.

Below Benchmark ⇨ Strategic, targeted support recommended. Consider assessing with Acadience Reading Survey to determine instructional level.

Well Below Benchmark ⇨ Intensive support recommended. Acadience Reading Survey and/or Acadience Reading Diagnostic may be helpful in guiding appropriate steps for instruction.