

End-of Course Assessment

Understanding EoC Assessment
Results

Finding End-of-Course Assessment Scores

Scores for the current year are available in two ways:

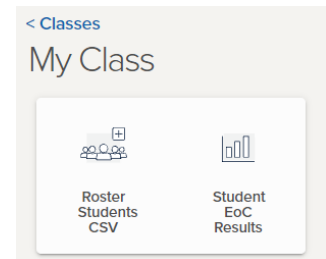
- Download PDF files for individual students.
- Download an aggregated list of student results in CSV format.

Scores will be available in [myPLTW](#) accounts within 24 hours of the test. Students must submit both End-of-Course (EoC) Assessment sections before scoring can begin.

Current School Year Results

To view results from the current school year on your [myPLTW](#) home page:

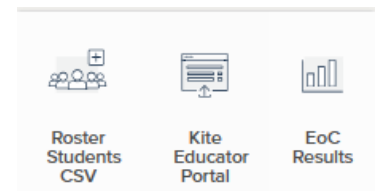
1. Enter **My Sites** by selecting the tab located at the top left of the home page.
2. Select your school from the displayed list of PLTW program schools in your district.
3. Move to the **My Class** page by selecting your class roster.
4. Click **Student EoC Results**.
5. Select the school year and file format.
6. Click **Submit**.



Historical Results

Historical results can be downloaded in an aggregate report format from the home page of your account in [myPLTW](#):

1. Enter **My Sites** by selecting the tab located at the top left of the home page.
2. Select your school from the displayed list of PLTW program schools in your district.
3. Select **EoC Assessment Results** from the box at the top left of the screen.
4. Select the school year from the drop-down box at the lower right of the screen and click **Download**.
5. Students may access their scores by clicking on the **Assessments** tab in the student's [myPLTW](#) account.



Overview

The PLTW EoC Assessment development is guided by a Test Advisory Council (TAC), respected leaders from industry, higher education, and experienced PLTW teachers. The following overview of score reporting supports a greater understanding of PLTW EoC Assessment results.

Use and Interpretation of EoC Assessment Scores

PLTW EoC Assessments are standardized summative measures of the key knowledge and skills in PLTW courses congruent with this assessment design. EoC Assessment items are developed and selected to align with the course content outlined in Test Blueprints (Appendix A). EoC Assessment scores are high-level indicators of student course achievement. The overall assessment results are reported in the scale score, ranging from 100 to 600, incremented by units of 10. Using a scale to assign scores allows for valid comparisons of student results within and across years - a sample score report for each course is in Appendix B.

Achievement level descriptors (ALDs) describe student achievement within a range of EoC Assessment scale scores. Student score reports highlight student placement in the broad achievement level bands of Novice, Practiced, Accomplished, or Distinguished (Table 1). ALD cut scores were evaluated by PLTW teachers, industry leaders, and representatives from higher education. As a result, the precise cut scores for each ALD vary from course to course based on assessment characteristics (Table 2).

Skill cluster reporting provides information on a specific grouping of skills. Skill cluster scores range from 1 to 6, highlighting areas of strength for each student. Aggregating skill cluster scores may not accurately represent the overall scale score due to weighing across topics. Since skill cluster scores are based on fewer items, they are less statistically reliable than the overall scale score. The Test Blueprint provides an alignment between the course framework and the EoC skill clusters (see Appendix A).

PLTW does not specify a passing score or passing ALD for EoC Assessments. Individuals or organizations wishing to use EoC Assessment results to compare, grade, or otherwise judge students based on EoC Assessment results are encouraged to use the resources available to them to determine the extent to which specific EoC results meet their performance criteria. Examples of available resources include (a) course frameworks, (b) test blueprints, and (c) technical exam specifications, etc. EoC Assessment scores have not been validated explicitly as tools for evaluating instructors. If schools or other organizations plan to use scores for any purpose outside of PLTW's intended purpose, the users must validate scores for that specific use.

Specific colleges and universities offer opportunities and information based on students' completion of PLTW courses and performance on the EoC Assessments. These opportunities may include admissions preferences, receipt of course credit, and/or special communications about opportunities within an institution of higher education. Each college and university sets the qualifying criteria for these opportunities and coordinates with PLTW on the appropriate use of EoC Assessment results as part of their evaluative process. Several student opportunities are listed on the [PLTW Student Opportunities](#) page.

Table 1

ALD	Description
Novice	Students may show some evidence of understanding routine procedures and concrete concepts in the PLTW Pathways. Novice students may be able to ask questions about simple problems.
Practiced	Students use routine procedures and concrete concepts in the PLTW Pathways. Practiced students use creative, critical, and logical reasoning to solve simple problems.
Accomplished	Students apply integrated procedural knowledge and conceptual understanding to routine real-world problems in the PLTW Pathways. Accomplished students use creative, critical, and logical reasoning to solve real-world problems.
Distinguished	Students routinely apply integrated procedural knowledge and conceptual understanding to resolve complex and novel real-world problems. Distinguished students consistently use creative, critical, and logical reasoning to synthesize their understandings in complex, real-world scenarios.

Table 2

Achievement Level Descriptor (ALD) Score Ranges					
Pathway	Course	Novice	Practiced	Accomplished	Distinguished
Biomedical Sciences	Principles of Biomedical Science	100-210	220-320	330-430	440-600
	Human Body Systems	100-230	240-340	350-460	470-600
	Medical Interventions	100-280	290-380	390-480	490-600
Computer Science	Computer Science Essentials	100-240	250-350	360-460	470-600
	Computer Science Principles	100-240	250-350	360-460	470-600
	Computer Science A	100-240	250-360	370-480	490-600
	Cyber Security	100-250	260-360	370-460	470-600

Table 2 (continued)

Achievement Level Descriptor (ALD) Score Ranges					
Pathway	Course	Novice	Practiced	Accomplished	Distinguished
Engineering	Introduction to Engineering Design	100-220	230-340	350-450	460-600
	Digital Engineering	100-210	220-340	350-470	480-600
	Principles of Engineering	100-170	180-310	320-460	470-600
	Aerospace Engineering	100-150	160-300	310-460	470-600
	Environmental Sustainability	100-200	210-320	330-440	450-600
	Civil Engineering and Architecture	100-250	260-360	370-460	470-600
	Computer Integrated Manufacturing	100-190	200-320	330-460	470-600
	Engineering Essentials	100-250	260-320	330-440	450-600

Using Scores to Inform Future Instruction

PLTW encourages educators to review EoC Assessment scores longitudinally across classes and years of instruction to evaluate teaching strategies. We recognize and appreciate the individual approaches each instructor brings to their classroom. The EoC Assessment contains real-world scenarios that allow students to apply knowledge and skills addressed throughout the curriculum. Links between skill clusters and course objectives are found in the test blueprint. Most objectives listed in the test blueprints will be discussed across multiple lessons in the curriculum. Skill cluster scores are grouped to provide enough test items in each area for reporting purposes. Educators may consider reviewing lessons and activities associated with skill clusters if student performance indicates gaps in understanding.

National Score Comparisons

The EoC Assessments are criterion-referenced assessments that score student responses against a set of criteria without reference to the achievement of others. However, some schools, districts, and states want to compare their students' performance to their peers nationwide. The percentile rank chart in Appendix C shows where a particular EoC Assessment scale score falls within the national distribution of scores.

Each row of a percentile rank table represents an EoC Assessment scale score. Percentile ranks are listed for each course by column. Each cell in a course column indicates the percentage of students who scored at or below the score for that row. The shading of each cell corresponds to the achievement level descriptor assigned to that scale score.

Questions or Concerns

Don't hesitate to contact the PLTW Solution Center with any questions or concerns. The PLTW Solution Center is available 24 hours a day, seven days a week at 877.335.7589 or solutioncenter@pltw.org.

Appendix A: Test Blueprints

Engineering	Biomedical Science	Computer Science
Aerospace Engineering	Human Body Systems	Computer Science A
Civil Engineering and Architecture	Medical Interventions	Computer Science Essentials
Computer Integrated Manufacturing	Principles of Biomedical Science	Computer Science Principles
Digital Electronics		Cybersecurity
Engineering Essentials		
Environmental Sustainability		
Introduction to Engineering Design		
Principles of Engineering		

Appendix B: Sample Score Reports

Engineering	Biomedical Science	Computer Science
Aerospace Engineering	Human Body Systems	Computer Science A
Civil Engineering and Architecture	Medical Interventions	Computer Science Essentials
Computer Integrated Manufacturing	Principles of Biomedical Science	Computer Science Principles
Digital Electronics		Cybersecurity
Engineering Essentials		
Environmental Sustainability		
Introduction to Engineering Design		
Principles of Engineering		

Appendix C: Percentile Rank Chart – Biomedical Science Pathway

Scale Score	Human Body Systems	Medical Interventions	Principles of Biomedical Science
100	<1	<1	<1
110	<1	<1	<1
120	<1	1	1
130	1	1	1
140	1	1	1
150	1	1	1
160	1	1	1
170	2	2	2
180	2	2	2
190	3	2	2
200	3	3	3
210	4	3	3
220	6	4	4
230	7	4	5
240	9	5	6
250	11	6	7
260	13	7	8
270	16	9	10
280	19	10	11
290	23	12	14
300	27	15	16
310	32	17	19
320	37	21	22
330	43	26	26
340	48	31	30
350	54	37	35
360	59	43	41
370	65	50	46
380	69	57	51
390	73	62	57
400	78	68	62
410	81	72	66
420	84	77	70
430	87	81	74
440	89	84	77
450	91	88	80
460	93	90	83
470	94	92	86
480	95	94	88
490	96	95	90
500	97	96	91
510	98	97	92
520	98	97	94
530	98	98	95
540	99	99	95
550	99	99	97
560	99	99	97
570	99	99	97
580	99	100	98
590	99	100	98
600	100	100	100

Novice

Novice

Novice

Practiced

Practiced

Practiced

Accomplished

Accomplished

Accomplished

Distinguished

Distinguished

Distinguished

Appendix C: Percentile Rank Chart – Computer Science Pathway

Scale Score	Computer Science A	Computer Science Essentials	Computer Science Principles	Cybersecurity
100	<1	<1	1	<1
110	<1	<1	1	<1
120	<1	1	1	<1
130	1	1	1	<1
140	1	1	2	<1
150	1	1	2	1
160	1	1	2	1
170	2	2	3	1
180	2	2	4	1
190	3	2	5	1
200	3	3	6	2
210	4	3	7	2
220	5	4	8	3
230	7	5	9	4
240	8	6	11	4
250	10	8	12	6
260	13	10	14	7
270	16	12	16	9
280	19	14	18	12
290	22	17	20	15
300	26	20	23	19
310	30	24	26	25
320	35	28	29	32
330	39	32	32	39
340	43	37	36	46
350	46	42	40	54
360	51	48	44	61
370	54	53	47	67
380	58	59	51	73
390	61	64	56	77
400	65	69	60	81
410	69	74	64	84
420	72	78	68	87
430	76	81	71	89
440	79	85	75	91
450	82	88	77	93
460	85	90	81	94
470	87	91	84	95
480	90	93	86	96
490	92	95	88	97
500	94	96	90	98
510	96	96	92	98
520	97	97	93	99
530	98	98	94	99
540	98	98	95	99
550	99	99	96	99
560	99	99	97	100
570	99	99	97	100
580	100	99	98	100
590	100	100	98	100
600	100	100	100	100

Appendix C: Percentile Rank Chart – Engineering Pathway

Scale Score	Aerospace Engineering	Civil Engineering and Architecture	Computer Integrated Manufacturing	Digital Electronics
100	1	1	1	<1
110	1	1	1	<1
120	1	1	1	<1
130	1	1	1	<1
140	1	1	1	<1
150	2	1	2	1
160	2	2	2	1
170	2	2	2	1
180	3	3	3	2
190	3	4	3	2
200	4	5	4	3
210	5	6	5	4
220	5	8	6	5
230	7	9	7	6
240	8	12	8	7
250	9	14	9	9
260	11	17	11	10
270	12	20	12	12
280	14	24	14	14
290	17	28	17	17
300	19	33	20	20
310	21	38	23	24
320	25	42	27	28
330	28	47	31	33
340	32	51	37	39
350	36	55	43	45
360	40	59	49	51
370	45	63	55	57
380	49	67	61	62
390	54	71	66	67
400	59	74	71	71
410	64	77	75	75
420	69	80	79	79
430	73	82	83	82
440	77	85	86	85
450	81	87	88	87
460	84	89	90	89
470	87	90	92	91
480	89	92	94	93
490	91	93	95	94
500	92	94	96	95
510	94	95	97	96
520	95	96	97	97
530	96	97	98	97
540	97	97	98	98
550	97	98	99	98
560	98	98	99	99
570	98	99	99	99
580	98	99	99	99
590	99	99	99	99
600	100	100	100	100

Appendix C: Percentile Rank Chart – Engineering Pathway

Scale Score	Engineering Essentials	Environmental Sustainability	Introduction to Engineering Design	Principles of Engineering
100	<1	1	1	1
110	<1	1	1	1
120	<1	1	1	1
130	<1	1	1	1
140	<1	2	2	1
150	<1	2	2	2
160	<1	2	2	2
170	<1	3	3	2
180	1	3	4	3
190	1	4	5	3
200	1	5	6	4
210	1	6	7	5
220	2	7	8	6
230	4	8	10	7
240	6	9	12	9
250	10	11	14	11
260	15	13	16	13
270	21	15	18	16
280	27	18	20	19
290	33	20	23	22
300	40	23	26	27
310	48	26	30	31
320	55	30	34	36
330	62	35	38	42
340	68	40	43	47
350	73	45	48	53
360	78	50	53	58
370	83	55	58	63
380	86	60	63	68
390	89	65	67	72
400	91	70	72	76
410	93	74	76	80
420	95	78	80	83
430	96	82	84	85
440	97	85	87	88
450	98	88	90	90
460	98	92	92	92
470	99	93	94	93
480	99	95	96	95
490	99	96	97	96
500	99	97	98	97
510	100	98	98	97
520	100	98	99	98
530	100	99	99	98
540	100	99	99	99
550	100	100	100	99
560	100	100	100	99
570	100	100	100	100
580	100	100	100	100
590	100	100	100	100
600	100	100	100	100