

# Utah Curriculum Matrix Summary

## English Language Arts

The Utah State Core Curriculum in English language arts includes the standards, objectives, and indicators assessed by the Criterion Referenced Tests (CRT) in the Utah Performance Assessment Systems for Standards (U-PASS).

### Testing Priority Designation

Information necessary to make priority designations relative to assessments was obtained from the Utah State Department of Education Web Site. Blueprints for each Criterion Referenced Test (CRT) can be accessed at this site. Each blueprint reveals the level of representation given on the test to each Utah State Core Curriculum objective and indicator. The number of test items per objective at each grade level was averaged. Standard deviations (STD) were calculated for each grade level and subtracted from the mean. This number established the cut-off point between Medium (M) priority designations and High (H) priority designations. Objectives not tested were assigned a Low (L) priority designation. The results can be found in Table 1 below.

**Table 1: English Language Arts Priority Designation Data.**

Grade	Mean	STD	Mean – STD	Designations		
				L = Low	M = Medium	H = High
3	7.30	2.10	5.20 = 5	0	1-5	>5
4	6.60	1.36	5.24 = 5	0	1-5	>5
5	7.90	2.84	5.06 = 5	0	1-5	>5
6	7.90	2.84	5.06 = 5	0	1-5	>5
7	12.40	3.86	8.54 = 9	0	1-9	>9
8	12.80	3.80	9.00	0	1-9	>9
9	12.80	3.80	9.00	0	1-9	>9
10	13.60	3.5	10.10 = 10	0	1-10	>10
11	13.60	3.5	10.10 = 10	0	1-10	>10

English language arts summary data are presented in Table 2 below.

**Table 2. English Language Arts CRT Summary Data.**

Subject/Grades	Standards	Objectives	CRT			NESS*		
			H	M	L	H 1-19	M 20-38	L 39-50
English Language Arts								
Grade 3	8	20	5	4	10	16	2	2
Grade 4	8	20	6	4	10	16	2	2
Grade 5	8	20	5	5	10	16	2	2
Grade 6	8	20	5	5	10	16	2	2
Grade 7	3	9	3	2	4	6	2	1
Grade 8	3	9	3	2	4	8	1	0
Grade 9	3	9	3	2	4	5	3	1
Grade 10	3	9	3	2	4	6	3	0
Grade 11	3	9	3	2	4	6	3	0
<b>Totals</b>	47	125	36	28	60	95	20	10

## Mathematics

The Utah State Core Curriculum in mathematics includes the standards, objectives, and indicators assessed by the Criterion Referenced Tests in the Utah Performance Assessment Systems for Standards (U-PASS).

### Testing Priority Designation

Information necessary to make priority designations relative to assessments was obtained from the Utah State Department of Education Web Site. Blueprints for each Criterion Referenced Test (CRT) can be accessed at this site. Each blueprint reveals the level of representation given on the test to each Utah State Core Curriculum objective and indicator. The number of test items per objective at each grade level grade level was averaged. Standard deviations (STD) were calculated for each grade level and subtracted from the mean. This number established the cut-off point between Medium (M) priority designations and High (H) priority designations. Objectives not tested were assigned a Low (L) priority designation. The results can be found in Table 3 below.

**Table 3: Mathematics Priority Designation Data.**

Grade	Mean	STD	Mean – STD	Designations		
				L = Low	M = Medium	H = High
<b>3</b>	5.00	0.56	4.40 = 4	0	1-4	>4
<b>4</b>	4.64	0.61	4.03 = 4	0	1-4	>4
<b>5</b>	5.00	0.52	4.48 = 4	0	1-4	>4
<b>6</b>	5.00	0.52	4.48 = 4	0	1-4	>4
<b>7</b>	5.38	0.47	4.91 = 5	0	1-5	>5
<b>Pre Algebra</b>	5.38	0.47	4.91 = 5	0	1-5	>5
<b>Algebra I</b>	5.83	0.36	5.47 = 5	0	1-5	>5
<b>Geometry</b>	5.82	1.82	4.00	0	1-4	>4
<b>Algebra 2</b>	5.38	.47	4.91 = 6	0	1-5	>5

Mathematics summary data are presented in Table 4 below.

**Table 4. Mathematics CRT Summary Data.**

Subject/Grades	Standards	Objectives	CRT			NESS*		
			H	M	L	H 1-16	M 17-42	L 43-70
<b>Mathematics</b>			<b>H</b>	<b>M</b>	<b>L</b>	<b>H 1-16</b>	<b>M 17-42</b>	<b>L 43-70</b>
<b>Grade 3</b>	5	12	10	2	0	8	3	1
<b>Grade 4</b>	5	14	8	6	0	11	3	0
<b>Grade 5</b>	5	14	12	2	0	12	2	0
<b>Grade 6</b>	5	14	12	2	0	9	5	0
<b>Grade 7</b>	5	13	5	8	0	10	3	0
<b>Pre-Algebra</b>	5	13	5	8	0	11	2	0
<b>Algebra 1</b>	4	12	10	2	0	6	4	2
<b>Geometry</b>	4	12	11	0	1	7	4	1
<b>Algebra 2</b>	4	13	5	8	0	3	6	4
<b>Totals</b>	42	117	78	38	1	77	32	8

## Science

The Utah State Core Curriculum in science includes the standards, objectives, and indicators assessed by the Criterion Referenced Tests in the Utah Performance Assessment Systems for Standards (U-PASS).

### Testing Priority Designation

Information necessary to make priority designations relative to assessments was obtained from the Utah State Department of Education Web Site. Blueprints for each Criterion Referenced Test (CRT) can be accessed at this site. Each blueprint reveals the level of representation given on the test to each Utah State Core Curriculum objective and indicator. The number of test items per objective at each grade level grade level was averaged. Standard deviations (STD) were calculated for each grade level and subtracted from the mean. This number established the cut-off point between Medium (M) priority designations and High (H) priority designations. Objectives not tested were assigned a Low (L) priority designation. The results can be found in Table 5 below.

**Table 5: Science Priority Designation Data.**

Grade/Subject	Mean	STD	Mean – STD	Designations		
				L = Low	M = Medium	H = High
<b>4</b>	14.00	3.42	10.58 = 10	0	1-10	>10
<b>5</b>	5.86	0.36	5.47 = 5	0	1-5	>5
<b>6</b>	12.50	2.32	10.18 = 10	0	1-10	>10
<b>7</b>	12.00	2.27	9.73 = 10	0	1-10	>10
<b>8</b>	18.75	1.94	16.81 = 17	0	1-17	>17
<b>Biology</b>	13.80	1.77	12.03 = 12	0	1-12	>12
<b>Earth Systems</b>	12.50	1.91	10.59 = 11	0	1-11	>11
<b>Chemistry</b>	12.50	2.32	10.18 = 10	0	1-10	>10
<b>Physics</b>	14.00	3.42	10.58 = 10	0	1-10	>10

Science summary data are presented in Table 6 below.

**Table 6. Science CRT Summary Data.**

Grades/Subject	Standards	Objectives	Indicators	CRT			NESS*		
				H	M	L	H 1-32	M 33-50	L 51-85
<b>Science</b>				<b>H</b>	<b>M</b>	<b>L</b>	<b>H 1-32</b>	<b>M 33-50</b>	<b>L 51-85</b>
<b>Grade 4</b>	5	14	58	42	16	0	31	9	18
<b>Grade 5</b>	5	12	50	41	9	0	40	3	7
<b>Grade 6</b>	6	15	63	39	24	0	28	18	17
<b>Grade 7</b>	5	12	54	28	26	0	42	6	6
<b>Grade 8</b>	4	15	67	56	11	0	46	6	15
<b>Biology</b>	5	14	62	52	10	0	44	15	3
<b>Earth Systems</b>	6	13	62	48	14	0	44	15	3
<b>Chemistry</b>	5	15	66	38	28	0	16	4	46
<b>Physics</b>	5	14	59	39	20	0	12	13	34
<b>Totals</b>	46	124	541	383	158	0	303	89	149

## Totals for U-PASS Tested English Language Arts, Mathematics, and Science

Table 7 below presents the number of Criterion Referenced Test objectives compared to the number of Criterion Referenced Test objectives tested. Using this data, the percentage of Criterion Referenced Test objectives tested was calculated.

**Table 7. Total Percentage for all CRT Grade Levels in English Language Arts, Mathematics, and Science.**

	<b>Objectives/Science Indicators</b>	<b>Objectives/Science Indicators Tested</b>	<b>% Objectives/Science Indicators Tested</b>
<b>English LA</b>	125	64	51
<b>Mathematics</b>	117	116	99
<b>Science</b>	541	541	100
<b>TOTAL</b>	783	721	92

## References

### Utah State Office of Education

<http://www.usoe.k12.ut.us/>

### Utah Core Curriculum

<http://www.uen.org/core/>

### English Language Arts Blueprints

[http://www.schools.utah.gov/assessment/info\\_ela.aspx](http://www.schools.utah.gov/assessment/info_ela.aspx)

### Mathematics Blueprints

[http://www.schools.utah.gov/assessment/info\\_math.aspx](http://www.schools.utah.gov/assessment/info_math.aspx)

### Science Blueprints

[http://www.schools.utah.gov/assessment/info\\_science.aspx](http://www.schools.utah.gov/assessment/info_science.aspx)

\***NESS (National Essential Skills Study)** in the preceding subject summary charts refers to the *International Center for Leadership in Education's* 2007 national survey, a forced-ranking by approximately 13,000 adults of the proficiencies deemed most important for high school graduates in each of English Language Arts, Math, and Science.

- **English Language Arts** proficiencies ranked 1-19 were assigned a High (H) rating; items ranked 20-38 were assigned a Medium (M) rating; and items ranked 39-50 were assigned a Low (L) rating.
- **Math** proficiencies ranked 1-16 were assigned a High (H) rating; items ranked 17-42 were assigned a Medium (M) rating; and items ranked 43-70 were assigned a Low (L) rating.
- **Science** proficiencies ranked 1-32 were assigned a High (H) rating; items marked 33-50 were assigned a Medium (M) rating; and items ranked 51-85 were assigned a Low (L) rating.

Where English Language Arts, Math, and Science proficiencies overlapped across indicators in other subjects (for example an English Language Arts proficiency within a Science indicator), the rating of H, M, or L was designated to the proficiency in the subject of focus. A complete description of the *National Essential Skills Study* is provided elsewhere in this resource kit.

