

KENAI PENINSULA BOROUGH SCHOOL DISTRICT

Sam Stewart, Assistant Superintendent

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Memorandum

TO: Members, Board of Education

FR: Sam Stewart, Assistant Superintendent

Date: May 21, 2007

RE: KPBSD Student Performance Standards

This year in preparation for opening a performance high school in the central peninsula (Peninsula Optional High School) and Homer Flex changing to a performance model, a group of teachers and administrators have been working diligently with C.J. Stiegele on developing the performance standards necessary to use the model appropriately.

The product of this effort is presented for your review and approval. It is anticipated that this document may need to be reviewed and revised regularly and will serve as the foundation for other schools or programs that may adopt a standards-based instructional model in the future.

The administration recommends approval of the 2007-2008 Kenai Peninsula Borough School District Student Performance Standards as presented.

Kenai Peninsula Borough School District

Student Performance Standards

2007-2008

KENAI PENINSULA BOROUGH SCHOOL DISTRICT Curriculum Map

credit equivelency											graduatio	on level(s)			
Performance Levels	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
LA - Reading	0	0	0	0	0	0	0	0	0.5	0.5	0.5	0.5	0.5		
indicates placement testing								Reading & Literature	Reading & Literature	Reading & Literature	Reading & Literature	Reading & Literature	Reading & Literature		
LA - Writing	0	0	0	0	0	0	0	0	0.5	0.5	0.5	0.5	0.5		
indicates placement testing											Written & Oral Communication		Written & Oral Communication		
Mathematics	0	0	0	0	0	0	0	0	1.0	1.0	1.0	1.0	1.0	1.0	
indicates placement testing							Math 1	Math 2	Math 3	Pre-Algebía	Algebra	Geometry	Algebra 2	Math Anallysis	
Social Environments	0	0	0	0	0	0	0	0	0	1.0	1.0	0.5	0.5	1.0	
								Geography	Social Science Survey	World History	US History	Alaska Studies	Government	Economics	
Science	0	0	0	0	0	0	0	0	0	1.0	1.0	1.0	1.0	1.0	
							Intro to Physical Sciences	Exploratory Science	Exploratory Science	Life Science	Earth Science	Environmental Science	Physics & Chemestry	Advanced Sciences	
Technology	0	0	0	0	0	0	0	1.0	1.0	1.0	1.0	1.0	1.0		
indicates placement testing	Technology 1	Technology 1	Technology 2	Technology 3	Technology 4	Technology Ethics & Application	Technology Ethics & Application	Technology Skills for Education	Technology Integration in Education	Technology Application in Education	Technology Skills for the Workplace	Technology Application in the Workplace	Advanced Technology Career Cert		
Personal & Community	0	0	0	0	0	0	0	0.5	0.5	1.0	1.0	1.0	1.0		
	Personal Social	Personal Social	Personal Social Community	Personal Social Community	Personal Social Community	Personal Social Community	Personal Service Learning	Service Learning in School	Service Learning & Society	Community Service Learning	Service Learning Leadership	Teaching Service Learning	Global Service Leadership		
Careers	0	0	0	0	0	0	0	0.5	0.5	1.0	1.0	1.0			
	Home & School Jobs	Home & School Jobs	Community Career Survey	Career Survey	Career Survey	Career Survey	Career Exploration	Career Exploration	Career Prep Shadowship	Career Prep Internship	Career Skills Application	Teaching Workplace Skills			

updated 05/07 2007-2008

KENAI PENINSULA BOROUGH SCHOOL DISTRICT Differentiated Diploma Requirements

						Diploma **	Cum Laude	Magna Cum Laude	
Reading		7	8	9	10	11	12	12	
Writing	7	8	9	10	11	12	12		
Math	6	7	8	9	10	11	12	13	
Science	6	7	8	9	10	11	12	13	
Social Studies	7	8	9	10	11	12	13	13	
Careers	6	6	7	8	9	10	11		
Personal Connections		6	7	8	9	10		12	
Technology		5	6	7	8	9	10		12

^{**} Meets State's Mimumum Requirements for Passing the HSQEE

Credit Equivelant Courses

updated 05/07 2007-2008

LANGUAGE ARTS - READING

Students will comprehend a variety of printed materials when reading for pleasure and/or information.

Key Elements: Reading & Literature

Standards

Recognize, pronounce, and know the meaning of words encountered in text (decoding).	SCS	English - B1
Demonstrate literal, inferential, and evaluative comprehension of printed material.	SCS	English D1
Reflect, analyze, and evaluate a variety of oral, written, and visual information and experiences, including discussions, lectures, art, movies, television, technical materials, and literature.	SCS	English B2
Evaluate the validity, objectivity, reliability, and quality of information read, heard, and seen.	SCS	English D2
Construct meaning from text (utilizing metacognition, prior knowledge, vocabulary development, literal & critical (inferential) thinking and text structure).	SCS	English B2

^{**} SCS : State Content Standards

LEVEL 7 LANGUAGE ARTS - READING

Performance Standards	scs	State GLE's	Trait	Standard Description
Reading Accu	racy			
RL.AC.07.01.01	R3.1	GLE[7&8]3.1.1, 3.1.4		Demonstrates mastery of phonemic awareness and decoding skills.
RL.AC.07.02.01	R3.1	GLE[7&8]3.1.1, 3.1.2		Uses context clues to identify meaning of words.
Reading Strate	gies			
RL.RS.07.01.01	R3.7	GLE[7&8]3.7.1		Applies pre-reading strategies to the text (set a purpose, focus attention, predict using title, etc.).
RL.RS.07.02.01	R3.3	GLE[7&8]3.3.3		Makes connections from prior knowledge to the text.
RL.RS.07.03.01	R3.3, R3.4, R3.7	GLE[7&8]3.3.1, 3.4.2, 3.7.3		During a retelling, includes properties of narrative text (characters, setting and problem/plot/conflict) in simple stories.
RL.RS.07.04.01	R3.1	GLE[7&8]3.1.2		Uses reference tools to locate and clarify meaning.
Reading Litera	ry Skills		·	
RL.LS.07.01.01	R3.4	GLE[7&8]3.4.1		Identifies main idea.
RL.LS.07.02.01	R3.8	GLE[7&8]3.8.1		Demonstrates ability to distinguish between facts and opinions.
RL.LS.07.03.01	R3.6	GLE[7&8]3.6.1		Analyzes the characteristics and the effect on the reader of non-fiction and the four structural genres: poetry, novel, drama, short story.
RL.LS.07.04.01	R3.9	GLE[7&8]3.9.1, 3.9.2, 3.9.3		Understands themes in a selection.
RL.LS.07.05.01	R3.6	GLE[7&8]3.6.2		Analyzes the use of literary devices appropriate to the genre (dialog, simile, metaphor, personification, foreshadowing, time sequence, imagery or repetition) to analyze literary works and non-fiction.
RL.LS.07.06.01	R3.10	GLE[7&8]3.10.1		Compares and contrasts cultural events, ideas, settings, and influences in one story or text across other similar stories or texts in other cultures.
Reading Appli	cation		•	
RL.AP.07.01.01	R3.5	GLE[7&8]3.5.1, 3.5.2		Demonstrates ability to follow simple instructions from text.
RL.AP.07.02.01				Reads independently for a sustained period of time (20 to 30 minutes).
RL.AP.07.03.01	R3.1	GLE[7&8]3.1.4		Recognizes the importance of vocabulary in comprehension.
Reading Fluen	су			
RL.FL.07.01.01				Understands and demonstrates what fluency is and why it is important for comprehension.

LEVEL 8 LANGUAGE ARTS - READING

Performance Standards	SCS	State GLE's	Trait	Standard Description
Reading Accu	racy			
RL.AC.08.01.01	R3.1	GLE [7&8]3.1.1, 3.1.2, 3.1.3, 3.1.4		Identifies words using structural, syntactic, and semantic analysis (ways to read new words).
RL.AC.08.02.01	R3.1	GLE [7&8]3.1.3		Demonstrates ability to understand antonym and synonyms.
Reading Strate	gies	•		
RL.RS.08.01.01	R3.1	GLE [7&8]3.1.5		Uses self-monitoring and self-correcting to clear up confusing parts of a text (rereads the text, consults another source, asks for help).
RL.RS.08.02.01				Demonstrates expanding skill of visualization.
RL.RS.08.03.01	R3.3, R3.4	GLE[7&8]3,3,1, 3.3.2, 3.3.3, 3.4.4		Explains connections among main ideas/concepts (text to self, text to text, text to world).
RL.RS.08.04.01	R3.3	GLE[7&8]3.3.2		Draws conclusions by making inferences (predicting).
RL.RS.08.05.01	R3.9	GLE[7&8]3.9.2		Demonstrates the ability to respond to a story, article, etc. (gives an opinion about or asks questions about a text).
RL.RS.08.06.01	R3.1	GLE[7&8]3.1.5		Self-monitors and self-corrects while reading, consults resources, questions, flexible note taking/mapping, scans and skims.
RL.RS.08.07.01	R3.5	GLE[7&8]3.5.1, 3.5.2		Able to sequence events in chronological order in a given passage.
Reading Litera	ry Skills	_		
RL.LS.08.01.01	R3.4	GLE[7&8]3.4.1, 3.4.3		Compares/contrasts the main ideas or concepts between related texts.
RL.LS.08.02.01	R3.8	GLE[7&8]3.8.1, 3.8.2		States an author's purpose and audience.
RL.LS.08.03.01	R3.6	GLE[7&8]3.6.2		Recognizes rhythm, rhyme, alliteration, and onomatopoeia.
RL.LS.08.04.01	R3.9	GLE[7&8]3.9.1, 3.9.2, 3.9.3		Analyzes and evaluates themes across a variety of selections (one theme throughout Young Adult literature).
RL.LS.08.05.01	R3.10	GLE[7&8]3.10.2		Analyzes the effects of historical or cultural influences/events on texts.
Reading Appli	cation	•	•	
RL.AP.08.01.01				Reads independently for a sustained period of time.
RL.AP.08.02.01	R3.1	GLE[7&8]3.1.1, 3.1.2, 3.1.3, 3.1.4		Recognizes the importance of vocabulary when building comprehension.
RL.AP.08.03.01	R3.5	GLE[7&8]3.5.1, 3.5.2		Demonstrates ability to follow multiple instructions from a text or other printed technical material.
Reading Fluen	су			
RL.FL.08.01.01	R3.2	GLE[7&8]3.2.1, 3.2.2		Demonstrates fluency skills (pausing, phrasing, appropriate emphasis and intonation and expression).
	•		-	

LEVEL 9 LANGUAGE ARTS - READING

Performance Standards	scs	State GLE's	Trait	Standard Description
Reading Accu	racy			
RL.AC.09.01.01	R4.1	GLE 7&8]4.1.1, 4.1.2, 4.1.3, 4.1.4		Utilizes structural, syntactic and semantic analysis to make meaning in text (root words and combining forms).
RL.AC.09.02.01	R4.1	GLE[9]4.1.1, 4.1.2, 4.1.5		Demonstrates automatic decoding skills when reading unfamiliar words.
Reading Strate	gies			
RL.RS.09.01.01	R4.1	GLE[9]4.1.5		Uses self-monitoring and self-correcting to clear up confusing parts of a text (rereads the text, consults another source, asks for help).
RL.RS.09.02.01	R4.2, R4.6	GLE[9]4.2.2, 4.6.1		Demonstrates ability to draw conclusions using inference, predictions and cause and effect.
RL.RS.09.03.01	R4.3, R4.8	GLE[9]4.3.4, [9&10]4.8.3		Responds to literature through visualization, discussion, writing, drawing, story telling and/or performance.
Reading Litera	ry Skills			
RL.LS.09.01.01	R4.5	GLE[9&10]4.5.2		Understands literary tools simile/metaphor, idioms and personification.
RL.LS.09.02.01	R4.6	GLE[9]4.6.1,]4.6.3		Identifies author's story components (theme/moral, rising action, climax and resolution) within any given story.
RL.LS.09.03.01	R4.5	GLE[9&10]4.5.1		Analyzes the characteristics and the effect on the reader of non-fiction and the four major structural genres: poetry, drama, novel, short story.
RL.LS.09.04.01	R4.3, R4.6	GLE[9]4.3.2, 4.3.5, 4.6.3, 4.6.4		Locates evidence in text and from related experiences to support understanding of theme.
RL.LS.09.05.01	R4.7, R4.9	GLE[9&10]4.7.1, 4.9.1		Uses text evidence to identify bias and propaganda and analyze author's purpose.
Reading Appli	cation			
RL.AP.09.01.01	R4.2	GLE[9]4.2.1		Summarizes information or ideas from text orally as well as in written form.
RL.AP.09.02.01	R4.4	GLE[9]4.4.1, 4.4.2		Demonstrates ability to follow complex instructions from a text or other printed technical material.
RL.AP.09.03.01				Reads independently for a variety of purposes exploring new genres (biographies, folk tales, mythology, etc.).
RL.AP.09.04.01	R4.1	GLE[9]4.1.1		Builds comprehension with vocabulary.
RL.AP.09.05.01	R4.3, R4.9	GLE[9&10]4.9.1, 4.3.4		Connects and identifies cultural influences/events in literature.
Reading Fluen	су			
RL.FL.09.01.01	R2.3	GLE[9&10]3.2.1		Reads and performs poetry or plays.

LEVEL 10 LANGUAGE ARTS - READING

Performance Standards	SCS	State GLE's	Trait	Standard Description
Reading Accur	асу			
RL.AC.10.01.01	R4.1	GLE[10]4.1.1		Shows understanding of Latin and Greek root words (ject = to throw) and is able to apply this to determine meaning.
RL.AC.10.02.01	R4.1	GLE[9&10]4.1.3		Understands complex analogies (villain:hero::protagonist:).
Reading Strate	gies			
RL.RS.10.01.01	R4.2	GLE[10]4.2.2, 4.3.4		Connects the conclusion to another situation.
RL.RS.10.02.01	R4.1	GLE[10]4.1.5		Uses reference materials for clarifying meaning.
Reading Literar	y Skills			
RL.LS.10.01.01	R4.6	GLE[10]4.6.1, 4.6.3, 4.6.4		Understands the author's craft: point of view, mood, and perspective.
RL.LS.10.02.01	R4.2, R4.5	GLE[9&10]4.2.2, 4.5.3		Evaluates the intended effects of the author's use of conventions and techniques of genres on the reader (making inferences and judgments about ironic and hyperbolic statements, identify impact of rich imagery, identifies multiple levels of meaning).
Reading Applic	ation			
RL.AP.10.01.01	R4.2, R4.3	GLE[10]4.2.1, 4.3.1		Summarizes information or ideas from a text using an outline format.
RL.AP.10.02.01	R4.4	GLE[10]4.4.1, 4.4.2		Demonstrates proficiency in reading technical writings (computer program, technical manual, etc.).
RL.AP.10.03.01	R4.3	GLE[10]4.3.2, 4.3.5, 4.3.6		Responds to literature by making and supporting assertions with evidence from texts.
RL.AP.10.04.01	R4.1	GLE[10]4.1.5		Self-directs reading to gain knowledge and to understand relevant issues.
RL.AP.10.05.01	R4.1	GLE[10]4.1.1, 4.1.2, 4.1.3, 4.1.4		Builds comprehension with vocabulary.
RL.AP.10.06.01	R4.5	GLE[10]4.5.1		Recognizes and reads various types of literature including fiction (modern & historical), poetry, drama and informative essays.
RL.AP.10.07.01	R4.3, R4.8	GLE[10]4.3.5, 4.3.6, 4.8.1		Discerns between relevant and irrelevant evidence supporting a theme or main idea.
RL.AP.10.08.01	R4.9	GLE[9&10]4.9.2		Connects and identifies cultural influences/events in literature.
RL.AP.10.09.01	R4.3, R4.6, R4.9	GLE[9&10]4.3.3, 4.3.4, 4.6.2, 4.9.1		Compares/contrasts the main ideas or concepts between related texts and cultural texts, as well as literary elements.
Reading Fluenc				
RL.FL.10.01.01	R3.2	GLE[10]3.2.1, 3.2.2		Reads and performs poetry, plays and short stories orally with appropriate expression.

LEVEL 11 LANGUAGE ARTS - READING

Performance Standards	scs	State GLE's	Trait	Standard Description
Reading Accur	асу		•	
RL.AC.11.01.01	R4.1			Demonstrates understanding of root words and other language influences (syntax and semantics) and is able to apply this to determine meaning.
Reading Skills			•	
RL.RS.11.01.01	R4.8			Analyzes an author's purpose and style.
RL.RS.11.02.01	R4.5			Analyzes a variety of literary genres (short stories, dramas, novels, and poems) and the use of specific literary techniques.
Reading Applic	ation			
RL.AP.11.01.01	R4.9			Extends comprehension of text materials to include links to personal experiences, other texts, and the community.
RL.AP.11.02.01	R4.2 R4.3			Rephrases and summarizes text (paraphrase).
RL.AP.11.03.01	R4.1			Self-directs reading to gain knowledge and enjoyment.
RL.AP.11.04.01	R4.1			Follows multitask instructions from a technical manual successfully.
RL.AP.11.05.01	R4.4			Creates a visual representation to teach more complex story components.
RL.AP.11.06.01	R4.6			Analyzes and evaluates themes across a variety of selections.
RL.AP.11.07.01	R4.8			Compares and contrasts stories and expository texts from the perspective, attitudes, and values of the time period in which they were written.
Reading Fluenc	у	-		
RL.FL.11.01.01	R3.3			Presents stories and plays for entertainment.

LEVEL 12 LANGUAGE ARTS - READING

Performance Standards	scs	State GLE's	Trait	Standard Description
Reading Applic	ation			
RL.AP.12.01.01	R4.6, R4.7			Demonstrates response to literature (e.g., point of view).
RL.AP.12.02.01	R4.3, R4.5			Interprets longer, more complex passages in text — both fiction and nonfiction.
RL.AP.12.03.01	R4.1			Recognizes the importance of vocabulary when building comprehension.
RL.AP.12.04.01	R4.4			Reads and applies multi-step directions to perform complex procedures and tasks.
RL.AP.12.05.01	R4.6, R4.8			Identifies in-depth elements of narrative and expository texts in outline or graph form.
RL.AP.12.06.01	R4.8			Organizes literary themes across different societies and eras.
RL.AP.12.07.01	R4.5			Determines figurative, idiomatic, and technical meaning of terms through context.
RL.AP.12.08.01	R4.3			Critiques the power, logic, reasonableness, and audience appeal of arguments advanced in public documents (editorials).
RL.AP.12.09.01	R4.3, R4.7			Identifies specific devices an author is using to persuade readers.
RL.AP.12.10.01				Creates a student reader's response portfolio using self-directed and assigned reading that demonstrates met cognitive awareness.
Reading Fluenc	у			
RL.FL.12.01.01	R3.2			Performs for an audience while teaching a genre of choice (non-fiction, poetry, play, short stories).

LANGUAGE ARTS - WRITING

Students will listen, speak, and write effectively for a variety of purposes and audiences.

Key Elements: Written & Oral Communication	Standard	ls:
Demonstrate control of content with clear, focused idea, supporting detail, organization, vocabulary, and sentence fluency.	SCS	English A1
Use correct conventions of spelling, grammar, sentence construction, paragraph structure, punctuation, capitalization, and penmanship.	SCS	English A2
Use a variety of formats (i.e. outlining, poetry, and informal and formal letter writing, etc.) to express ideas and communicate effectively.	SCS	English A4, A7
Revise, publish, edit, cite references, and give credit appropriately.	SCS	English A5, D3
Use effective listening strategies to improve communication.	SCS	English A8
Use effective speaking strategies related to eye contact, enunciation, rate, volume, vocal energy, non-verbal techniques, and fluency.	SCS	English A3
Adapt speaking style in a variety of settings.	SCS	English A6

LEVEL 7 LANGUAGE ARTS - WRITING

Performance Standards	SCS	State GLE's	Trait	Standard Description
Writing Skills &	Conten	i		
CL.WR.07.01.01	W3.1, W3.2, W3.4	[7&8]3.1.2, 3.2.1, 3.2.4, 3.4.1, 3.4.4	I	IDEAS: Writes compositions that include personal examples and adequate details which provide a clear picture for the reader. Uses diagrams, charts or illustrations with captions or labels to elaborate.
CL.WR.07.02.01	W3.1, W3.4	[7&8]3.1.1, 3.1.2, 3.1.3, 3.1.4, 3.2.1, 3.2.2, 3.4.4		ORGANIZATION: Writes stories and simple essays that include appropriate paragraphing within a minimum of three paragraphs, including a topic sentence with details and evidence presented in a logical order. Writes sentences that follow a common theme.
CL.WR.07.03.01	W3.2, W3.4	[7&8]3.2.3, 3.4.5	٧	VOICE: Writes compositions with a definite sense of purpose (narrative, descriptive, informative, persuasive) and audience (friend, business, adult) with consistent tone and personality.
CL.WR.07.04.01	W3.2, W3.3, W3.4, W3.6	[7&8]3.2.3,3.3.5, 3.4.5, 3.4.3, 3.4.5, 3.6.2	WC	WORD CHOICE: Writes with enhanced vocabulary and creates a picture with words using a variety of figurative techniques (metaphor, sound devices) to engage the reader. Identifies and uses descriptive nouns and verbs.
CL.WR.07.05.01	W3.3, W3.4	[7&8]3.3.1, 3.4.3	SF	SENTENCE FLUENCY: Writes clear, complete sentences. Experiments to vary beginnings, lengths, and patterns of sentences for flow and effect.
CL.WR.07.06.01	W3.3, W3.6	[7&8]3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.3.5, 3.6.1	С	CONVENTIONS: Writes correctly using more complex grammar principles (sentence structure, verb tense, subject/verb agreement), punctuation (quotations, apostrophes, commas, ending marks) and accurate spelling using available resources. Reads and spells appropriate sight and phonetic vocabulary words including homophones and irregular plurals.
CL.WR.07.07.01			С	Spells words correctly from generated or personal spelling and vocabulary lists.
CL.WR.07.08.01			С	Develops simple parts of speech in text (noun and verbs).
CL.WR.07.09.01	W3.6	[7&8]3.6.3	L	LAYOUT: Shows conformity to appropriate size, formation and spacing in both manuscript and cursive writing in a word processing document.
CL.WR.07.10.01	W3.2	[7]3.2.3		Writes expressively when producing or responding to texts (poetry, journals, reflective essays).
CL.WR.07.11.01	W3.2	[7]3.2.3		Uses a variety of prewriting strategies to generate ideas (brainstorming, note taking, discussion, interviews) and to organize information (graphic organizers).
CL.WR.07.12.01	W3.4, W3.6	[7&8]3.4.1, 3.4.2, 3.4.3, 3.4.4, 3.4.5, 3.6.1, 3.6.2		Uses the writing process (prewriting, fast write, revisions, edit and final draft).
CL.WR.07.13.01	W3.4	[7&8]3.4.2		Analyzes strengths and weaknesses in writing through peer response and edit.
CL.WR.07.14.01	W3.4, W3.6	[7&8]3.4.6, 3.6.2		Demonstrates ability to access reference materials to improve writing (articles, dictionary, thesaurus).
CL.WR.07.15.01	W3.4b			Applies note taking strategies in a variety of situations (lecture, text response/annotation, online research).
CL.WR.07.16.01	W3.5	[7&8]3.5.1		Documents source material in bibliography and gives credit to others.
CL.WR.07.17.01	W3.2	[7&8]3.2.1, 3.2.2		Completes a variety of writing samples in a variety of formats to explore narrative, creative, descriptive and expository genres.
Oral Communi	cation	_		
CL.OC.07.01.01	W3.4	[7&8]3.4.2		Uses active listening strategies (eye contact, body language, posture) to communicate effectively in a variety of social settings.
CL.OC.07.02.01	W3.4	[7&8]3.4.5	_	Practices giving organized speeches to an audience.

LEVEL 8 LANGUAGE ARTS - WRITING

Performance Standards	SCS	State GLE's	Trait	Standard Description
Writing Skills &	Content			
CL.WR.08.01.01	W3.1, W3.2, W3.4	[7&8]3.1.2, 3.2.1, 3.2.4,3.4.1, 3.4.4	I	IDEAS: Writes focused compositions that include personal examples and adequate detail which provides a clear picture for the reader.
CL.WR.08.02.01	W3.1, W3.4	[7&8]3.1.1, 3.1.2, 3.1.3, 3.1.4, 3.2.1, 3.2.2, 3.4.4	0	ORGANIZATION: Writes compositions that are a minimum of five paragraphs which includes a topic sentence, well-developed, detailed paragraphs in logical order and a conclusion. Attempts are made for smooth transitions between paragraphs.
CL.WR.08.03.01	W3.2, W3.4	[7&8]3.2.3, 3.4.5	V	VOICE: Writes to show personality with controlled tone/mood for a purpose (narrative, descriptive, informative, persuasive) and audience (friend, business, adult).
CL.WR.08.04.01	W3.2, W3.3, W3.4, W3.6	[7&8]3.2.3, 3.3.5, 3.4.5, 3.4.3, 3.4.5, 3.6.2	WC	WORD CHOICE: Uses an enhanced and expanded vocabulary with figurative language (metaphor, simile, personification) to engage the reader. Uses colorful, accurate nouns, verbs, adjectives and adverbs.
CL.WR.08.05.01	W3.3, W3.4	[7&8]3.3.1, 3.4.3	SF	SENTENCE FLUENCY: Writes compositions that use complete sentences, as well as increasingly varied sentence lengths and structures for effect.
CL.WR.08.06.01	W3.4	[7&8]3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.3.5, 3.6.1	С	CONVENTIONS: Writes correctly using more complex grammar principles (clauses, parts of speech), punctuation (colons, semicolons, commas, etc.) and accurate spelling (sight and phonetic) after self-editing with the use of appropriate resources.
CL.WR.08.07.01			С	Spells words correctly from generated or personal spelling and vocabulary lists.
CL.WR.08.08.01			С	Continues to develop parts of speech in text such as nouns, verbs, adjectives, adverbs and prepositional phrases.
CL.WR.08.09.01	W3.6	[7&8] 3.6.3	L	LAYOUT: Uses formatting features in software programs (font, size, spacing, alignment, bullets, numbering). Integrates digital illustrations (charts, graphs, maps, tables, etc.).
CL.WR.08.10.01	W3.2	[7]3.2.3		Writes expressively when producing or responding to texts (poetry, journals, reflective essays).
CL.WR.08.11.01	W3.2	[7]3.2.3		Uses a variety of prewriting strategies to generate ideas (brainstorming, note taking, discussion, interviews) and to organize information (graphic organizers).
CL.WR.08.12.01	W3.4, W3.6,	[7&8]3.4.1, 3.4.2, 3.4.3, 3.4.4, 3.4.5, 3.6.1, 3.6.2		Uses the entire writing process consistently (prewriting, organizing, drafting, revising, and editing).
CL.WR.08.13.01	W3.4	[7&8]3.4.2		Analyzes strengths and weaknesses in writing through peer response and edit.
CL.WR.08.14.01	W3.4, W3.6	[7&8]3.4.6, 3.6.2		Demonstrates ability to access reference materials to improve writing offline (articles, dictionary, thesaurus) and online (searches for websites).
CL.WR.08.15.01	W3.4b	[7]3.2.3		Applies note taking strategies in a variety of situations (lecture, text response/annotation, online research).
CL.WR.08.16.01	W3.5	[8]3.5.1		Documents source material in a bibliography using the correct format.
CL.WR.08.17.01	W3.2	[8]3.2.1, 3.2.4, [7&8]3.2.2		Completes a variety of writing samples in a variety of formats both fiction and non-fiction (narrative, creative, expository, essay, autobiographical, research, technical, etc.) for a variety of purposes.
Oral Communi	cation	T		
CL.OC.08.01.01	W3.4	[8]3.4.2		Uses active listening strategies (eye contact, body language, posture, etc.) in a variety of social settings.
CL.OC.08.02.01	W3.4	[8]3.4.5		Uses appropriate vocabulary and speaking style to communicate ideas and information orally in an organized, concise manner.

LEVEL 9 LANGUAGE ARTS - WRITING

Performance Standards	SCS	State GLE's	Trait	Standard Description
Writing Skills &	Conten			
CL.WR.09.01.01	W4.1, W.4.4	[9]4.1.1, 4.1.2, 4.4.1, 4.4.4	I	IDEAS: Determines appropriateness of information and ideas for a particular writing situation. Writes about more complex themes.
CL.WR.09.02.01	W4,1, W4.2, W4.4	[9]4.1.1, 4.1.2, 4.1.3, 4.1.4, 4.2.1, 4.4.1	0	ORGANIZATION: Writes well-organized compositions around a theme that are of assigned length and include a strong lead, well-developed paragraphs, and a conclusion which provides closure. Writes with smooth transitions between paragraphs.
CL.WR.09.03.01	W4.2, W4.4	[9]4.2.1, 4.4.3, 4.4.4, 4.4.5	V	VOICE: Displays ability to write with a consistent tone/mood that is appropriate for specialized prompts (reports, persuasive essays, scientific reports) and audience.
CL.WR.09.04.01	W3.6, W4.3, W4.4	[9]4.3.5, 4.4.3, 4.4.4, 4.4.5	WC	WORD CHOICE: Displays consistent control over written language and writes to engage the reader. Shows increasing master of literary techniques (foreshadowing, flashback, hyperbole, idioms, irony). Continues to develop use of all parts of speech in text.
CL.WR.09.05.01	W4.3, W4.4	[9]4.3.1, 4.4.3	SF	SENTENCE FLUENCY: Writes sentences that display clarity and allow the reader to move through the text with a minimum of confusion while varying sentence lengths and structures for effect.
CL.WR.09.06.01	W3.6, W4.3	[9]4.3.2, 4.3.3, 4.3.4, 4.3.5	С	CONVENTIONS: Writes correctly applying increasingly complex grammar principles, punctuation (commas, quotations, colons, semicolons, parentheses, dashes) and accurate spelling after self-editing with the use of a dictionary, thesaurus, or available software programs.
CL.WR.09.07.01			С	Spells words correctly from personal spelling and vocabulary lists.
CL.WR.09.08.01			С	Uses more advanced parts of speech (adverbs, adjectives, prepositions, and conjunctions) in text.
CL.WR.09.09.01				LAYOUT: Uses formatting features in software programs (font, size, spacing, paging, alignment, bullets, numbering, margins). Effectively integrates digital illustrations (charts, graphs, maps, tables, etc.). Writes using technical or business formats (online applications, business letters).
CL.WR.09.10.01	W3.6	[8]3.6.3	L	Writes expressively when producing or responding to texts (poetry, journals, reflective essays).
CL.WR.09.11.01	W4.2	[9]4.2.3		Uses a variety of prewriting strategies to generate ideas (brainstorming, note taking, discussion, interviews) and to organize information (graphic organizers).
CL.WR.09.12.01	W4.2	[9]4.2.3		Applies the writing process independently (prewriting, organization, drafting, revising and editing).
CL.WR.09.13.01	W3.6, W4.2, W4.4	[9]4.2.3, 4.4.1, 4.4.2, 4.4.3, 4.4.4, 4.4.5, 4.4.6		Analyzes strengths and weaknesses in writings of peers. Practices self-reflection to improve quality and style of writing.
CL.WR.09.14.01	W4.4	[9]4.4.2		Accesses reference materials to improve writing offline (articles, dictionary, thesaurus) and online (searches for websites).
CL.WR.09.15.01	W3.6, W4.2, W4.4	[9]4.2.4, 4.4.6		Applies note taking strategies in a variety of situations (lecture, text, online research).
CL.WR.09.16.01	W3.4b			Uses in-text citations and a bibliography in correct formats when writing a research paper.
CL.WR.09.17.01	W4.4, W4.5	[9]4.4.6, 4.5.1		Completes a variety of writing samples each using a different format (narrative, descriptive, creative, persuasive essay, poetry, or research paper) for a variety of purposes.
CL.WR.09.18.01	W4.2, W4.5	[9]4.2.1, 4.2.2, 4.2.4, 4.5.1, [9&10]4.2.3		Writes using technical or business formats (online, formal email, business letters).

CL.WR.09.19.01			Describes literary tools (simile, metaphor, idioms, personification) and can give examples of each in text.
CL.WR.09.20.01			Demonstrates knowledge of verb tenses (present, past, and irregular) and can use them with correct subject-verb agreement.
CL.WR.09.21.01	Uses writing to enhance learning in other content areas.		
Oral Communi	cation		
CL.OC.09.01.01	W4.2	[9]3.2.1, 3.2.2	Designs and gives presentations to an appropriate audience.
CL.OC.09.02.01		[9]3.2.1, 3.2.2	Adapts content and formality of language to audience, occasion, and purpose.

LEVEL 10 LANGUAGE ARTS - WRITING

SCS	State GLE's	Trait	Standard Description
Conter	nt		
W4.1, W.4.4	[10]4.1.1, 4.1.2, 4.4.1, 4.4.4	I	IDEAS: Determines appropriateness of information and ideas for a particular writing situation using increasingly complex themes.
W4,1, W4.2, W4.4	[10]4.1.1, 4.1.2, 4.1.3, 4.1.4, 4.2.1, 4.4.1	0	ORGANIZATION: Writes coherent compositions with well-developed paragraphs that include a thesis statement when needed, supporting evidence, and a conclusion.
W4.2, W4.4	[10]4.2.1, 4.4.3, 4.4.4, 4.4.5	٧	VOICE: Experiments with tone and style while retaining overall control of voice.
W3.6, W4.3, W4.4	(10]4.3.5, 4.4.3, 4.4.4, 4.4.5	WC	WORD CHOICE: Displays consistent control over written language and writes to engage the reader.
W4.3, W4.4	[10]4.3.1, 4.4.3	SF	SENTENCE FLUENCY: Writes sentences that display clarity and allow the reader to move through the text with a minimum of confusion. Controls pace of writing, using varying sentence structure and length. Demonstrates facility with more complex parts of speech (direct objects, indirect objects, phrases, and clauses).
W3.6, W4.3	[10]4.3.2, 4.3.3, 4.3.4, 4.3.5	С	CONVENTIONS: Demonstrates correct grammar, punctuation, and spelling which is free of errors after using available resources.
		С	Spells words correctly from generated or personal spelling and vocabulary lists.
W3.6		L	LAYOUT: Demonstrates consistent control when using software programs. Includes title page, in-text citations, and bibliography using correct format.
W3.6, W4.2, W4.4	[10]4.2.3, 4.4.1, 4.4.2, 4.4.3, 4.4.4, 4.4.5, 4.4.6		Directs the writing process through a variety of sources with increased sophistication.
W4.4	[10]4.4.2		Offers specific feedback on others' writing (including recommendations for revisions) with regard to ideas, organization, voice, word choice, sentence fluency, and conventions.
W3.6, W4.2, W4.4	[10]4.2.4, 4.4.6		Researches, writes, and organizes information (including sources) to be presented in publications.
W4.2, W4.5	[10]4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.5.1		Completes a variety of writing samples (respond or produce) each using a different format, both fiction and non-fiction (narrative, creative, descriptive, persuasive, argumentative, expository, summaries, research papers, editorials, etc.).
			Writes using technical or business formats (resume, business letters, job applications).
			Uses writing to enhance learning in other content areas.
ication	•	•	
W4.4	[10]4.2.1, 4.2.2		Designs and gives presentations to an appropriate audience.
W4.2	[10]4.2.1, 4.2.2		Uses formal speaking techniques in the areas of voice projection, eye contact, posture, pace and expression.
W4.2, W4.4	[10]4.2.1, 4.2.2		Explores debate formats within classroom setting (discussions, persuasive arguments).
	Conter W4.1, W4.4 W4.1, W4.2, W4.4 W3.6, W4.3, W4.4 W3.6, W4.3 W4.4 W3.6, W4.5 Cation W4.4 W4.2, W4.4 W4.2, W4.4	Content W4.1, [10]4.1.1, 4.1.2, W4.4, 4.4.1, 4.4.4 W4.1, [10]4.1.1, 4.1.2, W4.2, 4.1.3, 4.1.4, 4.2.1, W4.4, 4.4.5 W3.6, W4.3, W4.4, 4.4.4, 4.4.5 W3.6, [10]4.3.1, 4.4.3 W4.3, W4.4, 4.4.5 W3.6, [10]4.3.2, 4.3.3, W4.3 W4.4, 4.4.4, 4.4.5 W3.6, [10]4.2.3, 4.4.1, W4.2, W4.4, 4.4.5, 4.4.6 W4.4, [10]4.2.4, 4.4.6 W4.4, [10]4.2.4, 4.4.6 W4.2, W4.4, [10]4.2.1, 4.2.2, W4.5 Cation W4.4, [10]4.2.1, 4.2.2 W4.2, [10]4.2.1, 4.2.2 W4.2, [10]4.2.1, 4.2.2 W4.2, [10]4.2.1, 4.2.2	Content W4.1, W4.1, W4.1, W4.1, W4.2, W4.2, W4.2, W4.4 W4.3, W4.4 W4.3, W4.4 W4.3, W4.4 W4.3, W4.4 W4.4 W4.3, W4.4 W4.4 W4.5 W3.6, W4.3 W4.4 W4.2, W4.4 W4.5 W3.6, W4.3 W4.4 W4.5 W3.6, W4.3 W4.4 W4.5 W3.6, W4.3 W4.4 W4.5 W3.6 W4.5 W3.6 W4.6 W4.7 W4.8 W4.9 W4.9 W4.1, [10]4.2.1, 4.2.2 W4.9 W4.1, [10]4.2.1, 4.2.2 W4.1 W4.2 [10]4.2.1, 4.2.2 W4.2 W4.2 W4.2 [10]4.2.1, 4.2.2 W4.2 W4.2 [10]4.2.1, 4.2.2

LEVEL 11 LANGUAGE ARTS - WRITING

Performance Standards	SCS	State GLE's	Trait	Standard Description
Writing Skills &	Content			
CL.WR.11.01.01	W4.1, W.4.4		I	IDEAS: Writes to complex themes that employ appropriate awareness of information and unique ideas for a particular writing situation.
CL.WR.11.02.01	W4,1, W4.2, W4.4		0	ORGANIZATION: Writes coherent compositions with well-developed paragraphs that include a thesis statement, supporting evidence and a conclusion.
CL.WR.11.03.01	W4.2, W4.4		٧	VOICE: Utilizes style to create a specific tone or voice for a piece of writing.
CL.WR.11.04.01	W3.6, W4.3, W4.4		WC	WORD CHOICE: Displays consistent control over written language and writes to engage the reader.
CL.WR.11.05.01	W4.3, W4.4		SF	SENTENCE FLUENCY: Writes clear, concise sentences that allow the reader to move through the text with a minimum of confusion. Demonstrates ability to exert control over pace and power of compositions using sentence structure and length.
CL.WR.11.06.01	W3.6, W4.3		С	CONVENTIONS: Demonstrates correct use of all grammar conventions including usage and mechanics.
CL.WR.11.07.01	W4.3		С	Spells words correctly from generated or personal spelling and vocabulary lists.
CL.WR.11.08.01				Recognizes complex parts of speech such as gerunds, participles, infinitives, and parallel structure.
CL.WR.11.09.01	W3.6		L	LAYOUT: Demonstrates consistent control when using software programs. Includes title page, in-text citations, and bibliography using correct format.
CL.WR.11.10.01	W3.6, W4.2, W4.4			Directs the writing process with sophistication, writing with consistently high quality across the content areas using six traits writing process (rough draft to final draft).
CL.WR.11.11.01	W4.4			Offers specific feedback on others' writing with regards to the six writing traits and is able to give reasoning to support feedback.
CL.WR.11.12.01	W3.6, W4.2, W4.4 Researches, writes and organizes two formal research papers with in-text citations and appropriate source pages.			
CL.WR.11.13.01	W4.2, W4.5			Completes a variety of writing samples using different formats, both fiction and non-fiction (such as narrative, creative, descriptive, persuasive, expository, summaries, research papers, scientific reports, literary analysis, etc.).
CL.WR.11.14.01	W4.2			Demonstrates understanding of elements of discourse (purpose, speaker, audience, form) when completing (expressive, creative, narrative, descriptive, persuasive, research-based, informational, analytic) writing assignments.
CL.WR.11.15.01	W4.1, W4.2, W4.5			Writes increasingly complex, organized persuasive essays using elaboration strategies (quotes, rhetorical questions, analogies, personal experience, examples, statistics) and a variety of forms (cause-effect reasoning, problem-solution, comparison-contrast reasoning) which clarify both sides of an argument while giving concrete evidence to support one's own position.
CL.WR.11.16.01	W4.2, W4.4, W4.5			Writes a literary critique or analysis (interpreting passages and relating to the whole, comparing and contrasting different pieces of literature as they relate to literary themes) that includes in-text citations and appropriate sources.
CL.WR.11.17.01				Produces writings in accordance with a career selection that includes how the skills of writing are important for that career selection, after researching and studying a breadth of career options (business plans, technical manuals, patent documents).

Oral Communication			
CL.OC.11.01.01	W4.4	Creates, designs and presents a dramatic presentation (ex. pantomime, charades, dramatic reading, readers theatre, play, or memorization).	
CL.OC.11.02.01	W4.2	Uses completed writings to give formal presentations to appropriate audiences (venture capitalists, investors).	
CL.OC.11.03.01	W4.2, W4.4	Demonstrates increased comfort and sophistication with debate formats (discussions, persuasive arguments).	

LEVEL 12 LANGUAGE ARTS - WRITING

Performance Standards	SCS	State GLE's	Trait	Standard Description
Writing Skills &	Content			
CL.WR.12.01.01			I	IDEAS: Writes to complex themes that employ appropriate awareness of information and unique ideas for a particular writing situation.
CL.WR.12.02.01			0	ORGANIZATION: Presents a clear thesis statement. Includes well-developed paragraphs with clear examples that support the thesis and topic sentence. Body paragraphs and details consistently support the thesis. Transitions between paragraphs are present and effective. Conclusion restates the thesis and summarizes key points.
CL.WR.12.03.01			٧	VOICE: Writings are honest, personal, engaging and makes the reader think and react to the author's ideas and point of view. Maintains consistent voice throughout the composition and speaks directly to the reader in a way that is individual, compelling, and engaging.
CL.WR.12.04.01			WC	WORD CHOICE: Uses of vocabulary are effective and consistent. Selects words that relate to the tone and purpose of the paper and adds depth to the work.
CL.WR.12.05.01			SF	SENTENCE FLUENCY: Uses complex sentence formation with purposeful and varied sentence beginnings. Writing has rhythm and/or cadence. Words chosen for sound as well as meaning.
CL.WR.12.06.01			С	CONVENTIONS: Punctuates dialogue correctly in a variety of situations. Composition is free of spelling, grammar, and punctuation errors.
CL.WR.12.07.01			L	LAYOUT: Demonstrates consistent control when using software programs.
CL.WR.12.08.01				Teaches the writing process to a group of peers providing specific feedback and revision recommendations regarding the six traits writing process.
CL.WR.12.09.01				Writes complex compositions on in-depth topics that employ specific strategies (appealing to logic and emotion, personal anecdotes, etc.) and using a variety of methods [cause-effect reasoning, compare/contrast reasoning, problem-solution (argumentative or persuasive)].
CL.WR.12.10.01				Writes a complex literary analysis (interpreting passages and relating to the whole, comparing and contrasting different pieces of literature as the relate to literary themes and techniques, exploring an author's body of work, etc).
CL.WR.12.11.01				Writes a personal essay which reflects, with consistent control and confidence, high school achievement as well as post-graduate life goals that may include college, skilled trades, development of hobbies, and other opportunities.
CL.WR.12.12.01				Submits at least two pieces of writing for publication in recognized forums.
Oral Communi	cation			
CL.OC.12.01.01				Makes informed and organized formal presentations to the class that adjust to the audience.
CL.OC.12.02.01				Makes explicit use of various techniques for effective presentations (inflection, tempo, enunciation, physical gestures, etc.) and demonstrates poise and self-control while presenting.
CL.OC.12.03.01				Participates in formal advanced oratorical situations that may include competitive debates.
CL.OC.12.04.01				Gives an oral presentation that reviews past technical writings (business plan, business letters, job applications, etc.) including an updated resume and career outlooks for the future.

MATHEMATICS

Students will identify and understand mathematic facts, concepts, principles, and theories, applying them in problem situations within and outside the school setting.

Key Elements: Mathematics Standards:

Compute with whole numbers, fractions, decimals, integers, and rational numbers using mental arithmetic, paper and pencil, calculators, and computers.	SCS	Mathematics A3
Use estimation to solve problems and to check the accuracy of the solution.	SCS	Mathematics A2
Apply appropriate units (metric, US customary and other systems) and tools of measurement within a required degree of accuracy.	SCS	Mathematics A2
Determine perimeter, area, volume, angle, measure, capacity, weight, and mass.	SCS	Mathematics A1
Construct, draw inferences, and make predictions from charts, tables, and graphs.	SCS	Mathematics A1
Test hypothesis using appropriate statistics.	SCS	Mathematics B1-8, C1-4
Apply algebraic formulas to solve problems.	SCS	Mathematics A3
Apply geometric procedures and properties of figures to solve problems.	SCS	Mathematics A5
Solve the problem and verify the solution.	SCS	Mathematics A1
Represent, analyze, and use mathematical patterns, relations, and functions using methods such as tables, equations and graphs.	SCS	Mathematics A4
Collect, organize, analyze, interpret, represent, and formulate questions about data and make reasonable and useful predictions about the certainty, uncertainty, or impossibility of an event.	SCS	Mathematics C1-4, E1-3
Use logic and reason to analyze situations, verify conclusions, judge the validity of arguments, recognize patterns, and form mathematical propositions.	SCS	Mathematics D1-5

SCS - State Content Standards SCANS - Secretary's Commission on Achieving Necessary Skills AES - Alaska Employability Standards

LEVEL 6 MATHEMATICS 1

Performance Standards	State GLE's	Standard Description
Numeration	•	
NL.NU.06.01.01	[6]N-2	Models, orders, reads, and writes positive whole numbers to 1,000,000.
NL.NU.06.02.01	[5]N-8, [6]N-4	Uses, models, and identifies place value positions from 0.01.01 to 100,000.
NL.NU.06.03.01	[5]N-6	Models and explains the process of multiplication and division.
NL.NU.06.04.01	[6]N-5, [5]N-7	Converts between simple fractions, decimals, and percents.
NL.NU.06.05.01	[6]N-7	Finds sums and differences of simple fractions and decimals using manipulative.
NL.NU.06.06.01	[6]N-9, [5]N-10	Identifies and describe factors and multiples.
Measurement		
NL.ME.06.01.01	[5]MEA-1, [6]MEA-1	Measures line segments to the nearest 1/2-inch and millimeter.
NL.ME.06.02.01	[5]MEA-2, [6]MEA-2, [5]MEA-3	Measures to the nearest pound or kilogram.
NL.ME.06.03.01	[5]MEA-5	Identifies and use equivalent measurements of time.
NL.ME.06.04.01	[6]MEA-3	Measures the dimensions of a geometric figure.
NL.ME.06.05.01	[5]MEA-5	Tells time to the minute using an analog clock and identify A.M. and P.M.
NL.ME.06.06.01	[6]MEA-4 [5]MEA-5	Finds elapsed time to the half-hour.
NL.ME.06.07.01	[5]MEA-6	Counts assorted bills and coins to equal a given amount.
NL.ME.06.08.01	[5]MEA-6	Calculates change by counting up from the amount of purchase to \$100.
Estimation and	Computation	
NL.EC.06.01.01	[5]E&C-4	Multiplies by powers of ten.
NL.EC.06.02.01	[5]E&C-1 [6]E&C-1	Estimates solutions to check reasonableness of results.
NL.EC.06.03.01	[5]E&C-2	Memorizes basic multiplication and division facts to 144.
NL.EC.06.04.01	[5]E&C-4	Calculates the product of numbers with two digit multipliers.
NL.EC.06.05.01	[6]E&C-4	Multiplies decimals that represent money by whole numbers.
NL.EC.06.06.01	[6]E&C-4	Uses a long-division method to find the quotient of multi-digit dividend and a one-digit divisor.
NL.EC.06.07.01	[6]E&C-3	Calculates equivalent fractions.
NL.EC.06.08.01	[6]MEA-3	Creates a scale drawing.
Functions and R	elationships	
NL.FR.06.01.01	[5]F&R-1	Identifies and extends a multiplication pattern and explain its rule.
NL.FR.06.02.01	[5]F&R-2	Analyzes patterns using lists and tables.
NL.FR.06.03.01	[5]F&R-5 [5]F&R-3	Evaluates formula by substituting values for variables.
Geometry		
NL.GE.06.01.01	[7]G-1	Identifies and describes properties of polygons (i.e. number of sides and angles, names).
NL.GE.06.02.01	[6]G-11	Draws and measures angles using a protractor.
NL.GE.06.03.01	[5]G-2	Identifies vertices, edges, and the number of faces on a solid figure.
NL.GE.06.04.01	[6]G-5	Models geometric figures that are congruent and similar.
NL.GE.06.05.01	G6-8	Determines the perimeter of regular and irregular shapes, including circle.
NL.GE.06.06.01	[5]G-6	Determines the area and perimeter of rectangles.
NL.GE.06.07.01	[7]G-8	Plots ordered pairs on a rectangular coordinate grid, identify the quadrants, and connect the points.
NL.GE.06.08.01	[5]G-8 [6]G-10 [5]G-9	Draws and names midpoints, intersections, parallel, and perpendicular lines.

Statistics & Prob	pability	
NL.SP.06.01.01	[5]\$&P-1 [6]\$&P-1 [5]\$&P-2 [6]\$&P-2	Collects and organizes data; use it to construct a chart, table, or graph.
NL.SP.06.02.01	[5]\$&P-3 [6]\$&P-3	Determines the mean, mode, median, and range of a set of data.
NL.SP.06.03.01	[5]\$&P-4 [5]\$&P-5	Solves probability problems about chance occurrences that are expressed as simple fractions.
NL.SP.06.04.01	[7]\$&P-4 [7]\$&P-5 [7]\$&P-6, [9]\$&P-7, [10]\$&P-7	In an experiment using given criteria, makes predictions, performs experiment, records results, and compares predicted outcome with actual results.
Problem Solvin	g	
NL.PS.06.01.01	[5]PS-2 [5]PS-3	Reads and summarizes problems using mathematical terms and symbols.
NL.PS.06.02.01	[6]PS-2	Verifies solutions to problems by working backwards.
Communicatio	n & Reasoning	
NL.CR.06.01.01	[5]PS-3	Writes and verbalizes essential parts of a problem using appropriate mathematical vocabulary.
NL.CR.06.02.01	[5]PS-2 [5]PS-3	Writes and verbalizes explanations of strategies used to solve problems.
NL.CR.06.03.01	[5]PS-1	Illustrates practical mathematical situations using concrete, pictorial, and symbolic representation.
NL.CR.06.04.01	[5]PS-5	Maintains a math journal that expresses goals, successes, and areas for improvement and explains mathematical ideas, solutions, and methods.
Connections	•	•
NL.CN.06.01.01	[5]PS-5	Applies math skills and processes to a personal interest (i.e. music, architecture, sports).

LEVEL 7 MATHEMATICS 2

Performance Standards	State GLE's	Standard Description
Numeration	•	
NL.NU.07.01.01	[5]N-2, [6]N-2	Reads, models and writes positive and negative whole numbers to 1,000,000.
NL.NU.07.02.01	[6]N-1	Uses, models, and identifies place value positions from 0.001 to 1,000,000.
NL.NU.07.03.01	[5]N-6, [6]N-6	Describes and demonstrates the relationships among the four basic operations.
NL.NU.07.04.01	[5]N-7, [6]N-7 [6]N-3	Converts between mixed numbers, fractions, decimals expanded and standard form.
NL.NU.07.05.01	[5]N-7	Models and explains the process of adding and subtracting fractions with common denominators.
NL.NU.07.06.01	[6]N-9	Identifies and describes factors and multiples of a number pair, including greatest common factor and lowest common multiple (GCF and LCM).
NL.NU.07.07.01	[6]N-8, [5]N-9	Demonstrates the commutative and identity properties of multiplication.
Measurement		
NL.ME.07.01.01	[5]MEA-1, [6]MEA-1 [5]MEA-8 [4]MEA-4	Measures weights, lengths, and temperature to the nearest unit using metric and standard systems (1/4 inch).
NL.ME.07.02.01	[5]MEA-2, [6]MEA-2, [5]MEA-3	Identifies and uses equivalent measurements in different units.
NL.ME.07.03.01	[6]MEA-7	Uses a variety of measuring tools and tells what they measure.
NL.ME.07.04.01	[6]MEA-3 [5]E&C-1 [6]E&C-1	Estimates and measures the dimensions of a geometric figure.
NL.ME.07.05.01	[5]MEA-5 [6]MEA-4	Determines elapsed time to the minute.
Estimation and		
NL.EC.07.01.01	[5]E&C-1 [6]E&C-1	Describes and uses a front-end estimation.
NL.EC.07.02.01	[5]E&C-3 [6]E&C-2	Performs addition and subtraction of fractions with like denominators and decimal numbers (including money).
NL.EC.07.03.01	[6]E&C-3	Converts improper fractions to whole or mixed numbers and identifies equivalent fractions.
NL.EC.07.04.01	[6]E&C-3	Recognizes fractional forms of common decimals (e.g. 1/4=. 25).
NL.EC.07.05.01	[6]E&C-3	Calculates sums and differences of fractions, decimals, and mixed numbers.
NL.EC.07.06.01	[6]E&C-4	Multiplies decimals that represent money by whole numbers.
NL.EC.07.07.01	[5]E&C-1 [6]E&C-1	Rounds numbers to appropriate place value to estimate and solve a variety of problems.
NL.EC.07.08.01		Uses an alternative number operation to check solutions.
NL.EC.07.09.01	[7]MEA-1 [6]G-9	Estimates volume, length, width and temperature using metric and standard measurement.
NL.EC.07.10.01	[6]E&C-5	Develops and interprets scales and scale models.
Functions and I	Relationships	
NL.FR.07.01.01	[6]F&R-1	Identifies and continues number sequences and geometric patterns.
NL.FR.07.02.01	[6]F&R-2	Describes patterns formed by multiples, factors, perfect squares, powers of ten.
NL.FR.07.03.01	[6]F&R-4 [5]F&R-4	Uses a calculator to find a missing item in a number sequence.
NL.FR.07.04.01	[6]F&R-3	Uses words, lists, and tables to represent and analyze patterns.
NL.FR.07.05.01	[6]F&R-5	Writes, solves and explains number sentences that contain a variable.

Geometry		
NL.GE.07.01.01	[6]G-7 [5]G-7	Determines area and perimeter of regular and irregular figures using a variety of methods.
NL.GE.07.02.01	[5]G-1	Classifies and compares various triangles and quadrilaterals according to their sides and/or angles.
NL.GE.07.03.01	[7]G-1	Classifies angles as right, obtuse, acute or straight.
NL.GE.07.04.01	[7]G-8	Locates and describes objects in terms of their position with compass direction .
NL.GE.07.05.01	[5]G-3 [7]G-4	Identifies and models transformations of geometric figures as translations, reflections, or rotations.
Statistics and Prol	oability	
NL.SP.07.01.01	[7]S&P-3	Creates a data set, given the maximum and minimum values and the mean.
NL.SP.07.02.01	[6]\$&P-5	Computes the probability of multiple independent events.
NL.SP.07.03.01	[6]PS-1 [5]PS-1	Selects and applies appropriate strategies to solve a two-step word problems involving fractions, decimals, and the 4 basic operations.
NL.SP.07.04.01	[6]PS-3	Writes and verbalizes essential parts of a problem using appropriate mathematical vocabulary.
Communication (and Reasoning	
NL.CR.07.01.01	[5]PS-2 [5]PS-3	Translates and successfully solves problems between everyday language and mathematical symbols.
NL.CR.07.02.01	[5]PS-4	Draws logical conclusions about mathematical situations.
NL.CR.07.03.01	[6]PS-5	Maintains a math journal that expresses goals, successes, and areas for improvement and explains mathematical ideas, solutions, and methods.
Connection		
NL.CO.07.01.01	[6]PS-5	Demonstrates ability for handling money and how it relates to everyday life.
NL.CO.07.02.01	[6]PS-5	Applies math skills and processes to a personal interest (i.e. music, architecture, sports).

LEVEL 8 MATHEMATICS 3

Performance Standards	State GLE's	Standard Description
Numeration	l	
NL.NU.08.01.01	[9]N-3, [10]N-4	Defines and demonstrates the effects of arithmetic operations on real numbers and identity properties of zero and one.
NL.NU.08.02.01	[7]N-1, [7]N-2B, [8]N-1,	Compares and orders whole numbers, fractions, decimals, and integers using inequalities and equalities.
NL.NU.08.03.01	[6]N-9	Identifies and describes factors and multiples of a number set, including greatest common factor and lowest common multiple (GCF and LCM).
NL.NU.08.04.01	[7]N-3?	Demonstrates, models and identifies place value positions from millionths to hundred trillion.
NL.NU.08.05.01	[7]N-5, [8]N-6, [8]N-7, [9]N-4	Describes and demonstrates the relationship among the four basic operations, including inverse operations.
NL.NU.08.06.01	[7]N-7	Describes and demonstrates rules of divisibility to determine if one number is a factor or a multiple of another.
NL.NU.08.07.01	[7]N-4, [8]N-4 [8]N-5, [8]E&C-4	Converts between fractions, mixed numbers, decimals, and percents.
NL.NU.08.08.01	[7]N-5	Given a scenario, selects the more appropriate form when using percents, decimals, and fractions.
NL.NU.08.09.01	[7]N-4	Describes and models the relationships between fractions, decimals and percents.
NL.NU.08.10.01	[10]N-6	Demonstrates numeration in a different base system using manipulative.
NL.NU.08.11.01	[7]N-5	Compares and orders fractions using models, pictures, symbols and words.
Measurement	•	
NL.ME.08.01.01	[7]MEA-6, [6]MEA- 4, [6]MEA-5	Solves time problems using information about time zones, daylight savings, and elapsed time.
NL.ME.08.02.01	[7]MEA-2, [8]MEA-1	Converts between inches, feet, and yards.
NL.ME.08.03.01	[6]MEA-6 [8]MEA-1	Converts between millimeters, centimeters, and meters.
NL.ME.08.04.01	[7]MEA-4 [7]G-5 [6]G-9	Measures length, weight, mass, area, and volume using an appropriate tool in metric and in standard units.
NL.ME.08.05.01	,	Writes and solves rate problems and use appropriate units for the solutions.
NL.ME.08.06.01	[7]MEA-4	Measures the circumference of a circle.
Estimation and	Computation	
NL.EC.08.01.01	[8]E&C-3	Solves percent problems greater than 100%.
NL.EC.08.02.01	[7]E&C-3	Writes and solves practical addition and subtraction problems that use fractions, decimals and percents.
NL.EC.08.03.01	[7]E&C-4	Determines the sums, differences, products, and quotients involving fractions, decimals and mixed numbers.
NL.EC.08.04.01	[7]E&C-6	Solves ratio and proportion problems.
NL.EC.08.05.01	[7]E&C-1 [7]E&C-3	Estimates solutions to problems involving fractions, decimals and percents.
NL.EC.08.06.01	[7]E&C-5	Converts between fractions, decimals, and percents.
NL.EC.08.07.01	[7]N-8	Defines and demonstrates use of prime and composite numbers.
NL.EC.08.08.01	[7]E&C-3	Calculates the percent of a number.
NL.EC.08.09.01	[7]E&C-5	Simplifies complex fractions.
NL.EC.08.10.01	[7]N-6 [7]N-9, [6]N-10	Identifies and demonstrates identity, commutative, associative, and distributive properties for addition and multiplication.
NL.EC.08.11.01	[7]N-7	Identifies and demonstrate common divisibility rules.

Functions and Relationships		
NL.FR.08.01.01	[7]F&R-3	Writes, solves, and explains number sentences that contain multiple occurrences of a single variable.
NL.FR.08.02.01	[7]F&R-1	Analyzes patterns using words, lists and tables to represent data.
NL.FR.08.03.01	[7]F&R-2, [8]F&R-3	Explains the patterns found in tables, graphs, rules and formulas.
NL.FR.08.04.01	[7]PS-3	Translates and solves word problems using symbolic expressions, equations, or inequalities.
NL.FR.08.05.01	[7]F&R-5	Evaluates an expression, equation, or inequality by substituting values for a variable.
NL.FR.08.06.01	[6]F&R-5	Finds unknown terms in an arithmetic or geometric number pattern.
NL.FR.08.07.01	[7]F&R-5	Solves problems using a provided formula.
Geometry	•	
NL.GE.08.01.01	[8]G-1 [6]G-11 [5]G-5 [6]G-6	Designs a shape that will tessellate and use it to cover a surface.
NL.GE.08.02.01	[8]G-1	Draws a polygon that will not tessellate and explain why.
NL.GE.08.03.01	[8]G-1	Models, identifies, draws, and describes common three-dimensional figures.
NL.GE.08.04.01	[7]G-9	Constructs a circle with a given diameter or radius.
NL.GE.08.05.01	[7]MEA-5	Estimates, measures, and adds angles with a protractor.
NL.GE.08.06.01	[9]G-2	Identifies and describes congruent and similar figures.
NL.GE.08.07.01	[8]G-1	Identifies, classifies, compares and sketch regular and irregular polygons.
NL.GE.08.08.01	[7]G-7 [6]G-8	Calculates circumferences and areas of circles.
NL.GE.08.09.01	[8]PS-5	Writes and verbalizes essential parts of a problem using appropriate mathematical vocabulary.
Statistics and F	Probability	
NL.SP.08.01.01	[7]S&P-1	Illustrates practical mathematical situations using concrete, pictorial, and symbolic representation.
NL.SP.08.02.01	[7]S&P-3	Creates a data set, given the maximum and minimum values and the mean.
NL.SP.08.03.01	[7]S&P-1	Analyzes data from tables, charts and graphs to predict an outcome and check for validity and misrepresentation.
NL.SP.08.04.01	[7]S&P-6	Collects and displays data in circle graphs, histograms, and scatter plots with and without technology.
NL.SP.08.05.01	[9]S&P-6, [10]S&P-	Designs and conducts a probability experiment and compare the theoretical to the experimental results.
NL.SP.08.06.01	[8]S&P-3	Justifies the type of data representation to convey an idea (i.e. line graph shows growth, pie graph shows budget).

Problem Solving	g	
NL.PS.08.01.01	[7]PS-1 [7]PS-2	Summarizes the problem solving process using known and unknown information.
NL.PS.08.02.01	[6]PS-4 [7]PS-4	Draws logical conclusions using deductive reasoning in abstract and concrete contexts.
NL.PS.08.03.01	[7]PS-3	Strategically solves problems using various graphs and Venn diagrams.
NL.PS.08.04.01	[7]PS-1 [7]PS-2	Evaluates results for appropriateness.
NL.PS.08.05.01	[7]PS-1 [7]PS-2, [8]PS-2, [10]PS-2	Verifies accuracy of solutions by using alternative strategies to solve.
NL.PS.08.06.01	[7]E&C-1 [7]E&C-3	Applies, explains, and assesses the appropriateness of a variety of estimation strategies.
Communicatio	n and Reasoning	
NL.CR.08.01.01	[8]PS-3	Uses math vocabulary, symbols and notation to represent information in the problem.
NL.CR.08.02.01	[8]PS-4	Explains the methods and results of various mathematical efforts, orally and in writing.
NL.CR.08.03.01	[9]PS-4	Identifies counter examples to disprove statements.
NL.CR.08.04.01	[8]PS-3 [9]PS-3	Defends conclusions with examples and applies to new situation.
NL.CR.08.05.01	[8]PS-5	Maintains a math journal that expresses goals, successes, and areas for improvement and explains mathematical ideas, solutions, and methods.
Connection		
NL.CO.08.01.01	[7]PS-5 [8]PS-5 [9]PS-5 [10]PS-5	Applies math skills and processes to real world or content strands (i.e. careers, music, architecture, sports).
NL.CO.08.02.01		Describes and demonstrates the basic functions of a checking account (deposits, withdrawals, balance, reconcile).
NL.CO.08.03.01		Calculates end of year federal income tax using short form.
NL.CO.08.04.01		Calculates gross pay and net pay.
NL.CO.08.05.01		Describes and demonstrates basic functions of a loan and credit card.

LEVEL 9 PRE-ALGEBRA

Performance Standards	State GLE's	Standard Description
Numeration		•
NL.NU.09.01.01	[8]N-8	Uses, explains, and defines order of operations and apply to rational numbers.
NL.NU.09.02.01	[8]N-9, [10]N-8	Writes the prime factorization of a number using exponents.
NL.NU.09.03.01	[10]N-6	Examines and explains numeration in a different base system.
NL.NU.09.04.01	[9]E&C-4	Describes and models ratios and proportions.
NL.NU.09.05.01	[8]N-10 [10]N-5 [10]N-7	Solves problems with variables using inverse functions, identity, commutative, associative and distributive properties.
NL.NU.09.06.01	[10]N-1	Defines, writes, orders, and identifies the Real Number System and its subsets.
Measurement		
NL.ME.09.01.01	[7]N-5, [7]G-3	Writes and solves rate problems and apply appropriate units for the solution.
NL.ME.09.02.01	[8]MEA-1 [8]MEA-3 [9]MEA-1 [10]MEA-1	Uses, compares, and converts between units in the metric and standard systems for length, mass, weight, area, and volume.
NL.ME.09.03.01		Converts between units of time.
NL.ME.09.04.01	[9]G-6, [10]G-8	Uses a variety of methods and tools to formally construct and compare 2D figures.
NL.ME.09.05.01		Describes and applies relationships between geometric figures to solve problems.
NL.ME.09.06.01	[8]E&C-5	Explains what happens to ratios when changes are made to one or more dimensions of a figure.
Estimation and	Computation	
NL.ME.09.01.01	[8]E&C-1	Explains when an estimate is appropriate and when an exact answer is needed.
NL.ME.09.02.01	[9]F&R-1	Simplifies expressions involving absolute value of real numbers.
NL.ME.09.03.01	[8]PS-2	Estimates solutions to evaluate reasonableness of results, state whether the estimation is greater than or less than the exact answer.
NL.ME.09.04.01	[8]E&C-1	Uses estimation to check calculator or computer accuracy.
NL.ME.09.05.01	[9]F&R-7	Solves problems with variables using equivalent fractions, decimals, or percents.
NL.ME.09.06.01	[9]E&C-4	Solves rate, ratio and proportion problems using unit multipliers and conversions (i.e. speed, unit pricing, etc.).
NL.ME.09.07.01	[8]E&C-2 [9]E&C-3	Multiplies and divides rational numbers which include fractions, decimals or percents, and exponents.
NL.ME.09.08.01	[8]E&C-5	Solves scaling problems that contain whole numbers, fractions, decimals, and percents using proportions.
NL.ME.09.09.01	[10]N-2	Analyzes and solves problems involving exponential forms of numbers.
NL.ME.09.10.01	[8]F&R-6	Solves one and two step equations with and without variables.
NL.ME.09.11.01		Defines and calculates simple and compound interest.

NL.FR.09.01.01	[9]N-5	Writes and solves order of operation problems.
NL.FR.09.02.01	[8]F&R-1 [10]F&R-1	Creates a formula to calculate the n th term in sequential patterns.
NL.FR.09.03.01	[8]F&R-2	Predicts an outcome using a pattern from a table or graph.
NL.FR.09.04.01	[9]F&R-1 [8]G-9	Translates and uses tables of ordered pairs, graphs on coordinate planes, and linear equations to represent patterns.
NL.FR.09.05.01		Explains the patterns found in tables, graphs, rules, and formulas using math terminology.
NL.FR.09.06.01	[9]F&R-2 [7]F&R-4, [7]F&R-4	Finds a missing item in an arithmetic and geometric sequence with and without a calculator; predict the graph of each function.
NL.FR.09.07.01	[10]F&R-2 [9]G-5	Graphs equalities and inequalities on a coordinate plane.
NL.FR.09.08.01	[9]F&R-6, [9]F&R-6	Translates multiple step word problems into symbolic expressions, equations or inequalities and solves for unknowns.
NL.FR.09.09.01	[9]F&R-6, [9]F&R-6	Solves one-step and two-step variable equations using inverse operations then check the solutions.
NL.FR.09.10.01	[10]N-2	Combines like terms to simplify expressions.
Geometry		
NL.GE.09.01.01	[9]F&R-7 [7]F&R-6	Substitutes values into a linear equation to make a table of ordered pairs and graphs the points on a coordinate plane.
NL.GE.09.02.01	[9]F&R-8	Calculates the sum of the angles in any convex polygon.
NL.GE.09.03.01	[9]F&R-9	Calculates an angle in a regular polygon.
NL.GE.09.04.01	[8]G-10, [9]G-6 [8]G-2	Constructs or draws geometric figures in three dimensions (i.e. cylinder, cone, sphere, prism, etc.)
NL.GE.09.05.01	[8]G-4,[9]G-2	Applies the properties of equality and proportionality to solve problems involving congruent or similar shapes.
NL.GE.09.06.01	[8]G-6,[8]G-7,[8]G- 8, [9]G-4, [10]G-5	Estimates and determines volume and surface area of solid figures using manipulative and formulas (i.e. cylinder, cone, sphere, prism, etc.).
NL.GE.09.07.01	[9]G-4	Calculates the perimeter, volume and surface area of various complex shapes.
NL.GE.09.08.01	[8]G-5, [9]G-3	Identifies and graphs reflections, rotations and translations on the coordinate plane and describe these transformations in words.
NL.GE.09.09.01	[6]G-11 [8]G-1	Draws and measures geometric figures including polygons with given dimensions.
NL.GE.09.10.01	[10]PS-5	Writes and verbalizes essential parts of a problem using appropriate mathematical vocabulary.
NL.GE.09.11.01	[9]G-1	Calculates an angle indirectly by measuring the supplementary or complimentary angles.

Statistics and Pr	obability	
NL.SP.09.01.01	[9]S&P-1, [8]S&P-1	Collects, displays, and analyzes data in a variety of visual displays including frequency distributions, box and whisker plots, stem and leaf plots with and without technology.
NL.SP.09.02.01	[7]S&P-2, S&P-2, [9]S&P2, [10]S&P-2	Interprets and analyzes statistical information found in newspapers, magazines, and graphical displays.
NL.SP.09.03.01	[9]S&P-3	Computes the mean, median, mode, and range for a given set of data and identify the strengths and weaknesses of each.
NL.SP.09.04.01	[9]S&P-3, [10]S&P-3	Justifies which measure of central tendency best represents a given data set.
NL.SP.09.05.01	[9]S&P-4, [9]S&P-6	Makes predictions based on available statistical data.
NL.SP.09.06.01	[9]S&P-1,	Evaluates whether or not inferences can be made given the parameters of the data.
NL.SP.09.07.01	[8]S&P-4, [8]S&P-5,	Calculates the probability of a simple event.
NL.SP.09.08.01	[8]PS-1	Creates tree diagrams and sample spaces to determine theoretical probabilities about independent events.
NL.SP.09.09.01	[8]S&P-6	Designs and conducts a statistical study and communicate the results.
Problem Solving	9	
NL.PS.09.01.01	[9]F&R-3 [10]F&R-3	Analyzes a problem using the relationship between the known and unknown variables and discusses whether or not enough information is provided to solve.
NL.PS.09.02.01	[8]PS-4	Uses inductive reasoning to solve problems .
NL.PS.09.03.01	[8]PS-3, [9]PS-1	Selects, modifies and applies a variety of problem solving strategies to the same problem and justifies the most appropriate strategy.
NL.PS.09.04.01	[10]PS-2	Supports a problem solving strategy using spreadsheets with technology.
Communication	n and Reasoning	
NL.CR.09.01.01	[9]PS-1, [9]PS-2	Communicates and explains strategies used to solve multi-step word problems in written form.
NL.CR.09.02.01	[10]PS-2	Creates a flow chart that illustrates strategies used to solve multi-step word problems.
NL.CR.09.03.01	[10]PS-2	Represents a problem numerically, graphically, and symbolically.
NL.CR.09.04.01	[8]PS-2	Uses math vocabulary, symbols, and notations to explain, justify, and defend mathematical solutions and ideas (proofs).
NL.CR.09.05.01	[9]PS-1	Labels solutions to application problems with appropriate units.
NL.CR.09.06.01	[10]PS-5	Maintains a math journal that expresses goals, successes, and areas for improvement and explains mathematical ideas, solutions, and methods.
Connections		
NL.CN.09.01.01	[8]PS-5 [9]PS-5 [10]PS-5	Applies mathematical skills to a science discipline of choice.
NL.CN.09.02.01	[101PS-5 [8]PS-5 [9]PS-5 [101PS-5	Applies mathematical skills to a humanities discipline of choice.
NL.CN.09.03.01	[10]PS-5 [8]PS-5 [9]PS-5 [10]PS-5	Applies mathematical skills and processes to situations with peers and community.
NL.CN.09.04.01	110113-3	Calculates unit pricing, percent discounts, and sales tax to analyze a purchase.

LEVEL 10 ALGEBRA

Performance Standards	State GLE's	Standard Description
Numeration		
NL.NU.10.01.01	[8]N-2 [9]N-1	Expresses numbers using powers of ten and scientific notation.
NL.NU.10.02.01	[9]N-2 [8]N-3 [10]N-2 [10]N-3	Translates between equivalent representations of the same number (i.e. fractions, decimals, percents, exponents, and scientific notation).
NL.NU.10.03.01	[9]N-6	Uses and explains inverse functions, identity, commutative, associative and distributive properties with multiple variables.
NL.NU.10.04.01	[9]N-5	Applies the order of operations with negative numbers.
NL.NU.10.05.01	[10]N-6	Performs simple operations in other number systems (i.e. adding in base 3).
Measurement		
NL.ME.10.01.01	[7]MEA-3 [8]MEA-2 [7]G-3	Solves practical problems involving proportion and scale.
NL.ME.10.02.01	[9]E&C-4	Solves practical problems involving rate, time, and distance. Use appropriate units to label solutions.
NL.ME.10.03.01	[9]G-4 [7]G-6	Uses multiple strategies, including formulas and manipulative, to find rates, volume and surface area using correct units.
NL.ME.10.04.01	[9]MEA-2	Uses a formula to calculate unknown dimensions of a geometric figure (i.e. Pythagorean theorem).
Estimation and	Computation	
NL.EC.10.01.01	[9]E&C-1, [8]PS-2	Estimates solutions to problems to check reasonableness of results.
NL.EC.10.02.01	[9]E&C-1	Explains when an estimate is appropriate and when an exact answer is needed.
NL.EC.10.03.01	[10]E&C-2, [9]E&C-2 [9]E&C-5	Performs the proper order of operations with signed numbers and with scientific notations.
NL.EC.10.04.01	[9]E&C-4	Sets up and solves rates, ratio, and proportion problems using unit multipliers and conversions.
NL.EC.10.05.01	[10]G-5	Calculates volumes of simple geometric solids (cylinder, cone, sphere).
NL.EC.10.06.01	[10]G-5	Calculates the area of complex figures and converge units of area of multiple figures.
NL.EC.10.07.01	[9]F&R-1	Simplifies expressions involving absolute value of real numbers.
NL.EC.10.08.01	[10]E&C-3	Solves complex percentage problems.
NL.EC.10.09.01	[10]E&C-2	Estimates products, quotients and square roots.
NL.EC.10.10.01	[10]E&C-3	Solves problems using percent of increase and decrease.
NL.EC.10.11.01	[10]E&C-1	Applies and defends a variety of estimation strategies for a given situation.
NL.EC.10.12.01	[10]E&C-2	Adds, subtracts, multiplies and divides rational and common irrational numbers forms (fraction, decimals, and percents).

Functions and R	elationships	
NL.FR.10.01.01	[10]S&P-4	Evaluates linear data with tables, graphs, and lines of best fit.
NL.FR.10.02.01		Performs and manages basic financial operations (i.e. income and expenditures, taxes, etc.) using a calculator or computer.
NL.FR.10.03.01	[10]S&P-1	Selects appropriate scales or graphing ranges for graphing data.
NL.FR.10.04.01	[8]F&R-5	Translates word problems into symbolic expressions, equations, or inequalities and solves for unknowns (including linear and quadratic).
NL.FR.10.05.01	[10]F&R-1	Creates formulas to model numeric patterns and graphs.
NL.FR.10.06.01	[10]F&R-2	Analyzes patterns using tables of ordered pairs, graphs, and linear equations.
NL.FR.10.07.01	[10]F&R-2	Identifies and predicts the graphs of families of functions (linear, absolute value, quadratic, exponential).
Geometry		
NL.GO.10.01.01	[8]G-5, [9]G-3, [10]G-4	Draws and describe the results of transformations including translations, rotations, reflections, and dilations.
NL.GO.10.02.01	[10]G-1	Calculates the angle in a regular convex polygon.
NL.GO.10.03.01	[10]G-3	Applies the properties of equality and proportionality to solve problems involving congruent, similar, or symmetrical shapes.
NL.GO.10.04.01	[10]F&R-2	Uses coordinate geometry to graph linear equations, determine slopes of lines and intercepts.
NL.GO.10.05.01	[10]G-1	Uses coordinate geometry to identify parallel, perpendicular, and oblique lines.
NL.GO.10.06.01	[10]F&R-7	Uses coordinate geometry to find possible solutions to sets of equations or inequalities.
NL.GO.10.07.01	[8]G-3	Creates three-dimensional models from two-dimensional views.
NL.GO.10.08.01	[10]G-1	Solves problems using the relationships of angles formed by parallel, perpendicular and intersecting lines.
NL.GO.10.09.01	[9]MEA-2	Uses the Pythagorean theorem to determine the length of a side of a right triangle.
NL.GO.10.10.01	[9]MEA-2	Identifies and use patterns from right triangles to solve application problems.
NL.GO.10.11.01	[10]G-2	Classifies, compares, and sketches regular, irregular polygons and uses isometric drawings to create 2-dimensional drawings of 3-dimensional objects.
NL.GO.10.12.01	[10]G-5	Estimates and calculate volume and surface area of complex solids.
NL.GO.10.13.01	[10]G-1	Draws geometric lines using tools and label with proper notations (midpoint, angle bisector, parallel and perpendicular lines, $A \perp B$, $S \parallel T$).
NL.GO.10.14.01	[10]G-1	Applies geometric formulas to a variety of situations (i.e. distance, midpoint, slope, area, and volume).

Statistics and Probability			
NL.SP.10.01.01	[10]PS-3	Writes and verbalize essential parts of a problem using appropriate mathematical vocabulary.	
NL.SP.10.02.01	[10]S&P-3	Explains how statistics are manipulated to influence decisions.	
NL.SP.10.03.01	[10]S&P-7	Illustrates practical mathematical situations using concrete, pictorial, and symbolic representation.	
NL.SP.10.04.01	[10]S&P-3	Determines the percentile rank of a data point.	
NL.SP.10.05.01	[10]S&P-1 [9]S&P-5	Calculates the theoretical probabilities of simple and independent events.	
NL.SP.10.07.01	[10]S&P-5	Explains the difference between experimental probability and theoretical probability.	
NL.SP.10.08.01	[10]S&P-6	Evaluates whether or not inferences can be made given the parameters of the data.	
Problem Solving	9		
NL.PS.10.02.01		Enters and runs a simple program using a graphing calculator or computer.	
NL.PS.10.03.01		Creates a spreadsheet (such as a table of function values) to display and evaluate information.	
NL.PS.10.04.01	[8]PS-2, 10 PS-2	Verifies accuracy of solutions by using alternative strategies to solve.	
Communication	n and Reasoning		
NL.CR.10.01.01	[10]PS-3	Represents the information and ideas in a problem using appropriate graphs and sketches.	
NL.CR.10.02.01	[10]PS-1	Uses appropriate vocabulary for effective communication in mathematics.	
NL.CR.10.03.01	[10]PS-5	Maintains a math journal that expresses goals, successes, and areas for improvement and explains mathematical ideas, solutions, and methods.	
NL.CR.10.04.01	[10]PS-4	Follows the logic and reasoning of an argument.	
NL.CR.10.05.01	[10]PS-4	Applies patterns as a strategy for solving problems.	
Connections			
NL.CO.10.01.01	[9]PS-5 [10]PS-5	Uses math skills in science related applications and issues.	
NL.CO.10.02.01	[9]PS-5 [10]PS-5	Describes math skills required for various science related careers.	
NL.CO.10.03.01	[8]PS-5	Describes math skills required for various careers of interest.	
NL.CO.10.04.01	[9]PS-5 [10]PS-5	Applies mathematical skills to a science discipline of choice.	
NL.CO.10.05.01	[9]PS-5 [10]PS-5	Applies mathematical skills to a humanities discipline of choice.	
NL.CO.10.06.01	[9]PS-5 [10]PS-5	Applies mathematical skills and processes to situations with peers and community.	

LEVEL 11 GEOMETRY

Performance Standards	State GLE's	Standard Description	
Numeration			
NL.NU.11.01.01		Identifies and classifies subsets of the real number system as natural, whole, integer, rational, irrational, real, or imaginary.	
NL.NU.11.02.01		Applies basic operations with different base systems.	
Measurement			
NL.ME.11.01.01		Uses, compares, and converts between units in the metric system for length, mass, area, volume and temperature between units in the metric and standard system.	
NL.ME.11.02.01		Selects and applies appropriate measurement system to gather data solving problems.	
NL.ME.11.03.01		Uses a variety of methods and tools to construct and compare 3D figures.	
NL.ME.11.04.01		Applies indirect methods, including the Pythagorean theorem to find missing dimensions.	
Estimation and (Computation		
NL.EC.11.01.01		Adds, subtracts, multiplies, and divides in various forms including scientific notation, powers and roots.	
NL.EC.11.02.01		Translates between equivalent representations of algebraic expressions (to include expressions with fractional and negative exponents).	
NL.EC.11.03.01		Estimates an equation for a line or curve which model the scatter plot for a given set of data .	
NL.EC.11.04.01	[8]PS-2, [9]PS2	Estimates solutions to evaluate reasonableness of results from multi-step problems.	
NL.EC.11.05.01		Adds and subtracts common irrational number forms.	
NL.EC.11.06.01		Multiplies and divides common irrational number forms.	
NL.EC.11.07.01		Converts from exact to decimal representations of irrational numbers.	
NL.EC.11.08.01	[10]G-6	Evaluates formulas including, distance formula, slope and midpoint formulas.	
NL.EC.11.09.01		Uses unit analysis with standard and metric systems.	
Functions and R	elationships		
NL.FR.11.01.01		Uses equation derived from use of CBL and graphing calculator to predict future event.	
NL.FR.11.02.01	[10]F&R-4	Creates and solves systems of second degree equations, algebraically and graphically, using a graphing calculator.	
NL.FR.11.03.01		Uses CBL and graphing calculator to monitor a physical event and develop an equation that describes that behavior.	
NL.FR.11.04.01		Identifies the dimensions of a matrix.	
NL.FR.11.05.01		Translates multiple step word problems into symbolic expressions, equations, or inequalities and solves for unknowns.	
NL.FR.11.06.01	[10]F&R-4 [9]F&R-4	Identifies, graphs, and describes the graphs of basic families of functions including linear, absolute value, quadratic and exponential using a graphing calculator.	
NL.FR.11.07.01		Illustrates how polar coordinates are used to graph two- and three-dimensional space.	
NL.FR.11.08.01		Adds, subtracts, multiplies, divides and simplify rational expressions: add, subtract, and multiply polynomials.	
NL.FR.11.09.01		Uses discreet structures such as networks, matrices, sequences and iterations as tools to analyze patterns, expressions and equations.	
NL.FR.11.10.01	[10]F&R-5 [10]G-7	Creates and solves systems of linear equations, algebraically and graphically, using a graphing calculator.	

Geometry		
NL.GE.11.01.01	[10]G-1	Identifies and labels angles, segments, and lines as they relate to circles, and use the properties to solve problems.
NL.GE.11.02.01		Identifies and describes patterns that emerge from two- dimensional and three-dimensional geometric figures.
NL.GE.11.03.01		Draws and labels triangles illustrating the congruency relationships of SSS, SAS, ASA, AAS, and HL.
NL.GE.11.04.01		Draws and labels similar figures showing the correct relationship between corresponding parts.
NL.GE.11.05.01		Identifies, explains, and transforms geometric figures using reflections, rotations, and translations on geometric figures.
NL.GE.11.06.01		Determines if the coordinates of a point satisfy the equation of a graph.
NL.GE.11.07.01		Finds the distance between two points on a coordinate plane.
NL.GE.11.08.01		Explains how the graph of a line changes when the slope or y-intercept changes.
NL.GE.11.09.01		Constructs scaled drawings of geometric figures in two-dimensions and three-dimensions.
NL.GE.11.10.01	[10]G-1	Explains the difference among alternate interior angles, alternate exterior angles, corresponding angles, supplementary angles, and vertical angles.
NL.GE.11.11.01		Determines the slope of a line given the graph or two points on the graph.
NL.GE.11.12.01		Understands the relationship between parallel, perpendicular, and oblique lines used in geometrical congruence.
NL.GE.11.13.01		Solves real world problems involving the Pythagorean Theorem.
NL.GE.11.14.01	[10]G-3	Uses similarity and congruence to solve problems (prove two triangles are congruent).
NL.GE.11.15.01		Graphs linear equations, determines slope, identifies parallel, and perpendicular lines, and finds solution sets using coordinate geometry.
NL.GE.11.16.01		Constructs geometric models, transformations, and scale drawings using a variety of methods (paper folding, compass, straight edge, protractor, or technology).
Statistics and Pr	obability	•
NL.SP.11.01.01		Computes the range of a set of data.
NL.SP.11.02.01		Writes and verbalizes essential parts of a problem using appropriate mathematical vocabulary.
NL.SP.11.03.01		Analyzes data from multiple events and predict theoretical probability.
NL.SP.11.04.01		Illustrates practical mathematical situations using concrete, pictorial, and symbolic representation.
NL.SP.11.05.01		Creates graphical displays from collected data with and without technology.
NL.SP.11.06.01		Identifies central tendencies and distribution patterns form a set of data.
NL.SP.11.07.01		Uses technology and a spread sheet or data table to create a graph.
NL.SP.11.08.01		Explains the difference between experimental probability and theoretical probability.
NL.SP.11.09.01		Calculates probability of independent and compound events.
NL.SP.11.10.01		Analyzes validity of statistical conclusions.
NL.SP.11.11.01	[10]S&P-2	Interprets and analyzes information found in point and graphical displays.
Problem Solving	<u> </u>	
NL.PS.11.01.01	[9]PS-1, [10]PS-1	Applies multi-step integrated mathematical problem solving strategies to solve problems.
NL.PS.11.02.01		Writes equations and Inequalities to represent word problems.
NL.PS.11.03.01	[9]PS-2	Verifies accuracy of solutions by using alternative strategies to solve.

Communication and Re	easoning
NL.CR.11.01.01	Uses appropriate technology, math vocabulary, symbols and notation to defend mathematical ideas, solutions and methods to various audiences.
NL.CR.11.02.01	Recognizes and applies inductive and deductive reasoning.
NL.CR.11.03.01	Makes tests and proves mathematical conjectures.
NL.CR.11.04.01	Uses appropriate visual aids for effective communication in mathematics.
NL.CR.11.05.01	Explains, justifies, and defends mathematical ideas, solutions, and methods using multimedia presentations.
NL.CR.11.06.01	Explains orally and in writing the logic and reasoning of an argument.
NL.CR.11.07.01	Uses methods of proofs including direct, indirect, and counterexamples, to develop conjectures.
Connections	
NL.CO.11.01.01	Applies practical skills in problem solving using typical business, consumer and real world problems.
NL.CO.11.02.01	Uses mathematical skills and processes in business, industry and consumer applications and issues.

LEVEL 12 ALGEBRA 2

Performance Standards	State GLE's	Standard Description	
Numeration	1		
NL.ME.12.01.01		Uses area and volume to calculate construction costs.	
Estimation and C	Computation		
NL.EC.12.01.01		Performs all operations using fractions, decimals and percents.	
NL.EC.12.02.01		Calculates cost of goods sold, sales and excise tax.	
NL.EC.12.03.01		Calculates net pay vs. gross pay.	
NL.EC.12.04.01		Calculates the cost and returns of stocks and bonds.	
NL.EC.12.05.01		Computes property tax, assessment and depreciation.	
NL.EC.12.06.01		Performs and manages basic financial operations (e.g., using checking and saving account and repayment schedules for installment loans).	
NL.EC.12.07.01		Estimates solutions to check reasonableness.	
NL.EC.12.08.01		Calculates insurance rates, promissory notes, interest, discounts, commission sales, and markups.	
NL.EC.12.09.01	[10]F&R-7	Evaluates multi-step word problems involving equal and proportional groups, averages, and rates in business applications.	
NL.EC.12.10.01		Calculates end of year federal income tax using long form.	
Functions and Re	elationships		
NL.FR.12.01.01		Uses calculator or computer to perform and manage basic financial operations.	
NL.FR.12.02.01		Uses formulas to compute investments using compound interest.	
NL.FR.12.03.01		Solves real-world problems involving constant rates, roots and exponents, vectors and nonlinear mathematical models.	
NL.FR.12.04.01	[10]MEA-2	Uses right triangle trigonometry (sine, cosine, and tangent) to determine length and angle measure.	
NL.FR.12.05.01		Determines maximum and minimum points.	
NL.FR.12.06.01	[10]F&R-6	Solves quadratic equations by applying various methods, including factoring, taking square roots, and completing the square and the quadratic formula.	
NL.FR.12.07.01		Demonstrates understanding of the concept of inequalities and the basic characteristics of vectors.	
NL.FR.12.08.01	[10]G-7	Solves systems of linear equations by various methods, including graphing, substitution, linear combination and determinants.	
NL.FR.12.09.01		Solves fractional equations and equations containing radicals.	
Statistics and Pro	bability		
NL.SP.12.01.01		Identifies and analyzes linear and nonlinear patterns in data using line graphs.	
NL.SP.12.02.01		Fits lines and curves to a set of points.	
NL.SP.12.03.01		Reads and constructs circle graphs.	
Problem Solving			
NL.PS.12.01.01		Classifies problem solving strategies or problem types by underlying general characteristics.	
NL.PS.12.02.01		Applies various problem-solving strategies to solve problems aligned to this level.	
Communication	and Reasoning		
NL.CR.12.01.01		Defends conclusions with examples and applies to new situations.	
NL.CR.12.02.01		Defends conclusions with examples and applies to new situations.	
Connections			
NL.CO.12.01.01		Applies math in various careers including banking and investment careers.	
NL.CO.12.02.01		Applies math skills and processes to other disciplines, investments, and corporate strategies.	

LEVEL 13 MATH ANALYSIS

Measurement	
NL.ME.13.01.01	Demonstrates understanding of the concepts of velocity and acceleration and how they are measured.
Functions and Relations	hips
NL.FR.13.01.01	Implements the basic trigonometric functions.
NL.FR.13.02.01	Makes up and writes simple algorithms for solving problems that take several steps and involve data matrices.
NL.FR.13.03.01	Calculates complex areas.
Geometry	•
NL.GE.13.01.01	Uses mathematical induction and constructs proofs.
NL.GE.13.02.01	Understands and uses matrices and determinants.
NL.GE.13.03.01	Evaluates series and geometric arithmetic.
NL.GE.13.04.01	Solves problems involving conic sections.
NL.GE.13.05.01	Determines roots and higher-order polynomial equations.
NL.GE.13.06.01	Applies concepts to surveying problems.
Statistics and Probabilit	у
NL.SP.13.01.01	Demonstrates understanding of the basic features of statistics (including standard normal distribution, standard deviation, and variance) and their use.
Communication and Re	easoning .
NL.CR.13.01.01	Defends conclusions with examples and applies to new situations.
Connections	·
NL.CO.13.01.01	Applies math skills and processes to other disciplines and everyday life.

SCIENCES

Students will understand and apply major concepts and processes, which are common to all sciences.

Key Elements: Science Standards:

Identify scientific facts, concepts, principles, and theories and use unifying concepts of cycle, change, equilibrium, model, systems, and order.	SCS	Science A1
Use the major processes of scientific inquiry including observation, hypothesizing, measuring, and classifying in scientific investigations.	SCS	Science B1-B6
Identify the structures and properties of matter including atoms, bonding, elements, and compounds.	SCS	Science A2
Describe chemical and physical changes.	SCS	Science A10-A11
Explain the changes and interaction of energy and matter, forces of nature and energy transformations.	SCS	Science A8-A9
Describe the structure and function of cells and their components at the molecular level.	SCS	Science A10-A11
Explain the behavior and interdependence of organisms in their natural environments through diversity, natural selection and heredity.	SCS	Science A12-A14
Identify the structure and properties of earth and space.	SCS	Science A3-A7
Explain the processes that change the earth and the solar system over time.	SCS	Science A16
Apply scientific knowledge and skills to understand global issues and environmental events.	SCS	Science D1, A15
Describe how scientific innovations may affect our economy, safety, environment, health, and society in terms of time, impact, and resources.	SCS	Science D2
Participate in reasoned discussions of public policy related to scientific innovations and proposed technological solutions to problems; recommend solutions to global and environmental problems by applying scientific knowledge and skills; and act upon reasoned decisions and evaluate the effectiveness of the action.	SCS	Science D3-D6

SCS - State Content Standards

SCANS - Secretary's Commission on Achieving Necessary Skills

AES - Alaska Employability Standards

LEVEL 6 INTRODUCTION TO PHYSICAL SCIENCES

Performance Standards	State GLE's	Standard Description	
SCIENTIFIC PROG	CESS - Students	must complete all process standards with each group of content standards completed.	
SC.PR.06.01.01	[8] SA1.1	Asks testable questions that will lead to information about a complex question on own and other students' work.	
SC.PR.06.02.01	[8] SA1.1	Develops a hypothesis based on student's own question.	
SC.PR.06.03.01	[8] SA1.2	Designs and conducts repeatable investigations to answer complex questions using the scientific method.	
SC.PR.06.04.01	[8] SA1.2	Collects and records accurate data for a scientifically valid number of trials, using appropriate tools and safety methods.	
SC.PR.06.05.01	[8] SA1.2	Uses various graphic organizers and methods, organize data into readable, informative formats for presentation to others.	
SC.PR.06.06.01	[8] SA1.2	Uses appropriate models to summarize data and construct conclusions based on observations and findings.	
SC.PR.06.07.01	[8] SA1.2	Communicates investigation methods and results (supported by reasoned evidence) to an audience.	
SC.PR.06.08.01	[8] SA2.1	Defends conclusions based on evidence (including cause and effect relationships, data trends, and researched evidence). Reflect and revise conclusions as necessary from new evidence.	
SC.PR.06.09.01		Demonstrates proper care and usage of laboratory equipment.	
CONTENT - Stud	ents must comp	olete all standards from each content group.	
Building Blocks	of Matter		
SC.PS.06.01.01	[8] SB3.1, [7] SB3.1	Identifies the properties of matter, including the arrangement and movement of molecules in the three (3) states of matter.	
SC.PS.06.02.01		Explains the structure of the atom.	
SC.PS.06.03.01		Uses the periodic table to obtain information about an element (symbol, atomic number, atomic mass, state, valence electrons).	
SC.PS.06.04.01		Describes the organization of the periodic table in terms of families, periods and groups.	
SC.PS.06.05.01		Defines the different types of chemical bonds.	
SC.PS.06.06.01	[8] SB1.1, [7] SB1.1	Compares the differences between compounds, mixtures, and solutions.	
SC.PS.06.07.01		Identifies properties of acids, bases, and salts and their reactions with each other.	
SC.PS.06.08.01		Describes properties of physical change.	
Force and Motio	on		
SC.PS.06.09.01	[8] SB4.1	Explains the meaning of force, friction, buoyancy, mass and gravity and demonstrate how they relate to motion and each other.	
SC.PS.06.10.01		Describe Newton's laws of motion and create a model or drawing for each.	
SC.PS.06.11.01	[8] SB2.1, [7]SB2.1	Analyzes changes in kinetic and potential energy in common activities.	
Electricity, Mag	1	T	
SC.PS.06.12.01	[7] SB4.2	Lists the properties of magnetism.	
SC.PS.06.13.01	[7] SB4.2, [8] SB4.2	Explains the difference between static and current electricity.	
SC.PS.06.14.01		Identifies differences between open and closed circuits, parallel and series circuits, and their affect on the flow of electricity.	
SC.PS.06.15.01		Shows interactions between magnetism and electricity.	

Simple Machines	Simple Machines		
SC.PS.06.16.01	Identifies the characteristics and uses of the inclined plane and wedge.		
SC.PS.06.17.01	Identifies the characteristics and uses of the screw, pulley, lever, and wheel and axle.		
Light, Color and So	ound		
SC.PS.06.18.01	Explains how reflection, refraction, absorption, and transmission of light affect an object's appearance.		
SC.PS.06.19.01	Explains how concave and convex lenses and mirrors affect light.		
SC.PS.06.20.01	Identifies and explains simplified spectrum of white light and color addition and subtraction as it applies to light.		
SC.PS.06.21.01	Explains the difference between light waves and sound waves in speed and travel.		
SC.PS.06.22.01	Explains volume, pitch, frequency, absorption and reflection in sound and demonstrate how changes affect perceived sound and sound graphs (visualizations).		

LEVEL 7 EXPLORATORY SCIENCE

Performance Standards	State GLE's	Standard Description	
SCIENTIFIC PRO	CESS - Students	must complete all process standards with each group of content standards completed.	
SC.PR.07.01.01	[7] SA1.1, [7] SA3.1	Recognizes and asks testable questions that will lead to information about a complex question.	
SC.PR.07.02.01	[7] SA1.1	Develops a hypothesis based on a testable question.	
SC.PR.07.03.01	[7] SA1.2	Designs and conducts investigations using the scientific method.	
SC.PR.07.04.01	[7] SA1.2	Collects and records data for a scientifically valid number of trials using appropriate tools and safety methods.	
SC.PR.07.05.01	[7] SA1.2	Organizes data into readable, informative formats for presentation to others.	
SC.PR.07.06.01	[7] SA1.2	Constructs conclusions based on observations and findings.	
SC.PR.07.07.01	[7] SA1.2	Communicates investigation methods and results to an audience.	
SC.PR.07.08.01	[7] SA2.1, [7] SG1.2, [7] SG3.1, [8] SG3.1	Revises personal ideas and defends conclusions based on evidence (including cause and effect relationships and data trends and discrepancies).	
CONTENT - Stud	dents must comp	lete all standards from each content group.	
Astronomy	_		
SC.ES.07.01.01	[7] SD4.2	Describes the composition, motion and position of planets and other major solar bodies.	
SC.ES.07.02.01	[8] SD4.1	Identifies planets and other major solar bodies.	
SC.ES.07.03.01	[8] SD4.2, [7] SD4.2, [7] SD4.1	Identifies the characteristics of eclipses, meteors, comets, black holes, constellations and galaxies.	
SC.ES.07.04.01	[7] SE3.1	Researches and reports on at least one aspect of human accomplishments in space (history of exploration, discoveries, help to humankind, etc.).	
Earth History	•		
SC.ES.07.05.01		Explains the process of fossil formation.	
SC.ES.07.06.01		Creates a timeline identifying the major intervals in Earth's history, organisms that dominated each period and the major geologic events (including opening and closing events) for each.	
SC.ES.07.07.01		Explains the role of dinosaurs in Earth's history.	
Geology and P	1		
SC.ES.07.08.01	[7] SD1.1, [8] SD1.1	Describes the 3 different types of rock (including both formation and identification).	
SC.ES.07.09.01	[7] SD1.1	Explains soil properties, composition, formation and its role in the rock cycle.	
SC.ES.07.10.01	[7] SD2.2, [8] SD2.2	Demonstrates understanding of plate tectonics including earthquakes, volcanoes and the layers of the Earth.	
SC.ES.07.11.01		Writes an earthquake or hazard preparedness plan for student's family.	
Climate, Weath	ner and Water	_	
SC.ES.07.12.01	[7] SD3.2	Explains how elevation, sun, latitude, landforms and air pressure affect weather patterns and climate.	
SC.ES.07.13.01		Explains how temperature, wind, precipitation, and barometric pressure are measured (instruments and units) and their role in forecasting the weather.	
SC.ES.07.14.01		Identifies and explain cloud types.	
SC.ES.07.15.01		Explains the movement of water in local watersheds and aquifers.	
SC.ES.07.16.01	[8] SD1.2,[7] SD3.1,[7] SD3.2, [7] SD1.1	Explains the movement of major water cycles and air currents on Earth, natural current cycles and phenomena and their affect on ocean life and weather.	

LEVEL 8 EXPLORATORY SCIENCE

Performance Standards	State GLE's	Standard Description	
SCIENTIFIC PRO	CESS - Students	must complete all process standards with each group of content standards completed.	
SC.PR.08.01.01	[8] SA1.1, [8] SA3-1	Asks testable questions that will lead to information about a complex question on own and other students' work.	
SC.PR.08.02.01	[8] SA1.1	Develops a hypothesis based on student's own question.	
SC.PR.08.03.01	[8] SA1.2	Designs and conducts investigations to answer complex questions using the Scientific method.	
SC.PR.08.04.01	[8] SA1.2	Collects and records accurate data for a scientifically valid number of trials using appropriate tools and safety methods.	
SC.PR.08.05.01	[8] \$A1.2	Uses various graphic organizers and methods organizing data into readable, informative formats for presentation to others.	
SC.PR.08.06.01	[8] \$A1.2	Uses appropriate models to summarize data and construct conclusions based on observation and findings.	
SC.PR.08.07.01	[8] SA1.2	Communicates investigation methods and results (supported by reasoned evidence) to an audience.	
SC.PR.08.08.01	[8] SA2.1	Defends conclusions based on evidence (including cause and effect relationships, data trends and researched evidence). Reflect and revise conclusions as necessary from new evidence.	
SC.PR.08.09.01		Demonstrates proper care and usage of laboratory equipment.	
CONTENT - Stud	lents must com	plete all standards from each content group.	
Classification a	nd Organization	n of Living Organisms	
SC.LP.08.01.01	[7] SC2.1	Lists the seven levels of the classification system.	
SC.LP.08.02.01	[8] SC2.1	Explains basic characteristics of the kingdoms.	
SC.LP.08.03.01	[8] SC2.1	Classifies and identifies major life forms by kingdom, phylum and class.	
Living Things an	d Their Environr	ment	
SC.LP.08.04.01	[8] SC3.1	Identifies different biomes around the world.	
SC.LP.08.05.01	[8] SC3.2	Explains habitat, niche, ecosystem, community and population.	
SC.LP.08.06.01	[7] SC3.2	Identifies producers, consumers and decomposers in an ecosystem and the role they play in their communities.	
SC.LP.08.07.01	[7] SC3.1	Identifies cyclic responses to the environment (hibernation, migration, adaptation and dormancy).	
SC.LP.08.08.01	[8] SC3.1, [8] SC3.2	Illustrates a basic food chain with all components.	
SC.LP.08.09.01	[7] SC3.1	Explains the process and need for photosynthesis.	
SC.LP.08.10.01		Explain human interactions on biodiversity and long term affects of those interactions.	
SC.LP.08.11.01		Explains human interactions on biodiversity and long term affects of those interactions.	
Human Body Sy	rstems		
SC.LP.08.12.01	[7] SC2.3, [8] SC2.3	Identifies components and function of the human skeletal and muscular systems.	
SC.LP.08.13.01	[7] SC2.3, [8] SC2.3	Identifies components and function of the human respiratory and circulatory systems.	
SC.LP.08.14.01	[7] SC2.3, [8] SC2.3	Identifies components of and function of the human digestive and excretory systems.	
SC.LP.08.15.01	[8] SC3.2	Demonstrates understanding of application of the food pyramid.	
SC.LP.08.16.01		Evaluates healthy menus across generations and cultures.	

Cell Biology		
SC.LP.08.17.01		Explains the role of mitochondria, chloroplasts, cell membrane, cell wall and nuclei in cell structure and function.
SC.LP.08.18.01		Explains mitosis.
SC.LP.08.19.01		Defines genetic terminology (including DNA, genes, chromosomes, alleles, recessive, dominant, Punnett Square, etc.).
SC.LP.08.20.01		Demonstrates knowledge of genetics (including: pundit square, hybrids, genetic theory, history).
Ecology		
SC.LP.08.21.01		Identifies the effects of water, air, and soil pollution on human health and possible costs to society.
SC.LP.08.22.01		Describes the need for recycling and waste management including identification of recyclable materials, decomposition rates, costs and benefits.
SC.LP.08.23.01		Analyzes how mankind's current actions are affecting the global environment (greenhouse effect).

LEVEL 9 LIFE SCIENCE

Performance Standards	State GLE's	Standard Description	
SCIENTIFIC PRO	CESS - Students r	must complete all process standards with each group of content standards completed.	
SC.PR.09.01.01		Contributes to group experiments by being informed, safe, cooperative and responsible during set-up, experimentation, clean-up and presentation of results.	
SC.PR.09.02.01	[9] SA1.1, [9] SA1.2, [9] SA2.1	Presents a written or oral report that reflects on the methods, predicted results and actual results of an authentic experiment.	
SC.PR.09.03.01		Works methodically to ensure safety of self and others by being aware of surroundings, taking organized notes, and keeping a sanitized work area.	
CONTENT - Stud	dents complete s	ix standards in the content group below.	
Human Anaton	ny and Physiolog	у	
SC.AP.09.01.01	[9] SC2.3, [10] SC2.1, [10] SC2.3, [10] SC2.4, [11] SC2.1, [11] SC2.3	Describes how the skeletal system supports the body.	
SC.AP.09.02.01	[9] SC2.3, [10] SC2.1, [10] SC2.3, [10] SC2.4, [11] SC2.1, [11] SC2.3	Examines the three types of muscles and their locations.	
SC.AP.09.03.01	[9] SC2.3, [10] SC2.1, [10] SC2.3, [10] SC2.4, [11] SC2.1, [11] SC2.3	Identifies the components of the central and peripheral nervous systems.	
SC.AP.09.04.01	[9] SC2.3, [10] SC2.1, [10] SC2.3, [10] SC2.4, [11] SC2.1, [11] SC2.3	Examines the organs of the circulatory system and how oxygen is transported. Examines components of blood and blood types.	
SC.AP.09.05.01	[9] SC2.3, [10] SC2.1, [10] SC2.3, [10] SC2.4, [11] SC2.1, [11] SC2.3	Describes how the respiratory system regulates gas exchange.	
SC.AP.09.06.01	[9] SC2.3, [10] SC2.1, [10] SC2.3, [10] SC2.4, [11] SC2.1, [11] SC2.3	Describes how the digestive system breaks down food to gain nutritional value.	
SC.AP.09.07.01	[9] SC2.3, [10] SC2.1, [10] SC2.3, [10] SC2.4, [11] SC2.1, [11] SC2.3	Describes how the kidneys filter blood and prepare urine for excretion.	
SC.AP.09.08.01	[9] SC2.3, [10] SC2.1, [10] SC2.3, [10] SC2.4, [11] SC2.1, [11] SC2.3	Describes the function of male and female reproductive organs. Describes and analyzes a timeline of embryonic development.	

CONTENT - Stud	dents complete t	en standards in the content group below.	
Cells/Genetics/Evolution/Ecology			
SC.CG.09.01.01		Explains cell theory.	
SC.CG.09.02.01		Identifies and explains the functions of basic cell organelles.	
SC.CG.09.03.01		Models or sketches a plant and animal cell; compare and contrast structure and components.	
SC.CG.09.04.01	[10] SC2.2	Describes photosynthesis.	
SC.CG.09.05.01		Describes the stages of mitosis.	
SC.CG.09.06.01	[9] SC1.2	Describes basic Mendelian inheritance (monohybrid, dihybrid, test crosses).	
SC.CG.09.07.01	[9] SC1.2	Explains related terminology (homozygous, heterozygous, dominant, recessive).	
SC.CG.09.08.01	10] SC1.3	Identifies examples of applied genetics (human disorders and scientific advances).	
SC.CG.09.09.01	[9] SC1.1, [11] SC1.1	Describes how the biochemical and physical nature of the Earth determines how life evolves.	
SC.CG.09.10.01	[9] SC1.3, [10] SC1.2, [11] SC1.2	Uses the Darwinian theory to explain how organisms must adapt to survive.	
SC.CG.09.11.01	[9] SC1.3, [10] SC1.2, [11] SC1.2	Describes the theory that life has evolved from simple to more complex forms and that evolution is an ongoing process.	
SC.CG.09.12.01		Identifies Earth's biomes and describes characteristics of each.	
SC.CG.09.13.01	[11] SC3.2, [9] SC3.1, [10] SC3.1, [11] SC3.1, [10] SD1.2	Explores many ecosystems (saltwater, freshwater, and estuaries) including carbon and nitrogen cycles.	
SC.CG.09.14.01	[10] SC3.2	Explains symbiosis and distinguishes between mutualism, commensalism and parasitism.	
SC.CG.09.15.01	[9] SC3.3	Designs a food web that includes producers and primary, secondary and tertiary consumers.	
SC.CG.09.16.01		Explains the need for a classification system by examining its organization and by classifying organisms.	
SC.CG.09.17.01		Describes attributes of the kingdoms.	
SC.CG.09.18.01	[9] SC2.1	Differentiates between unicellular and multicellular organisms.	
SC.CG.09.19.01		Compares sizes and shapes of various viruses and bacteria.	
SC.CG.09.20.01		Lists beneficial and harmful effects of viruses and bacteria on plants and animals.	
SC.CG.09.21.01		Identifies ways to combat viruses and bacteria (hygiene, immunization, antibiotics).	
SC.CG.09.22.01		Identifies various anatomical plant features (tap root, branch root, node, stem, leaf, stoma, vein, bud and flower).	
SC.CG.09.23.01		Describes how plants vary from season to season. (rings on a tree, dropping leaves, bud scarring, etc.).	
SC.CG.09.24.01		Identifies the reproductive parts of a plant and various reproductive methods (spores, pollen, seeds, fruit, etc.).	
SC.CG.09.25.01		Identifies characteristics of the chordata phylum: fish, bird, reptile, amphibian, and mammal.	
SC.CG.09.26.01		Describes different forms of respiration through body surfaces, tracheal tubes, gills and lungs.	
SC.CG.09.27.01		Compares and contrasts differences between hot and cold blooded animals.	
SC.CG.09.28.01		Explains the need for energy in the form of food to sustain an organism's life.	
SC.CG.09.29.01	[10] SF1.1-SF3.1, [9] SF1.1-SF3.1	Explains how human systems (game management, subsistence, interaction, etc.) affect food resources.	
SC.CG.09.30.01	[10] SF1.1-SF3.1, [11] SF1.1-SF3.1	Explains how human life styles (pollution, population, urban growth, etc.) affect food resources.	

LEVEL 10 EARTH SCIENCE

Performance Standards	State GLE's	Standard Description	
SCIENTIFIC PRO	CESS - Students	must complete all process standards with each group of content standards completed.	
SC.PR.10.01.01	[9] SA1.1	Asks testable questions. Analyzes other students' questions and suggest improvements.	
SC.PR.10.02.01	[10] SA1.1, [10] SA1.2, 10] SA2.1	Analyzes own and other students' hypothesis and use of the scientific method and suggests improvements.	
SC.PR.10.03.01	[10] SA1.1, [10] SA1.2, 10] SA2.1	Collects and records accurate data for a number of scientifically valid and reliable trials. Analyze validity and reliability in other students' work.	
SC.PR.10.04.01	[10] SA1.2, [10] SA2.1	Uses various graphic organizers and methods to organize data into readable, informative formats for analysis and presents to others.	
SC.PR.10.05.01	[10] SA1.2, [10] SA2.1	Uses appropriate models to summarize data and construct conclusions based on observations and findings. Uses evidence to defend conclusions.	
SC.PR.10.06.01	[10] SA1.2, [10] SA2.1	Communicates investigation methods and results (supported by reasoned evidence) to an audience, both written and orally.	
SC.PR.10.07.01		Reflects and revises conclusions as necessary from new evidence and/or suggestions for improvement.	
SC.PR.10.08.01		Shows consistent proper care, usage, cleaning and storage of all laboratory equipment.	
CONTENT - Stud	lents must comp	lete all standards from the content group.	
Geology/Plate	Tectonics		
SC.GP.10.01.01		Distinguishes between rocks and minerals.	
SC.GP.10.02.01		Lists and classifies various minerals and their uses.	
SC.GP.10.03.01		Identifies the following types of rock: pumice, obsidian, basalt, granite, sandstone, shale, limestone, gypsum, slate, schist, gneiss, marble and quartzite.	
SC.GP.10.04.01		Summarizes various methods used to determine age of rocks and fossils.	
SC.GP.10.05.01	[9]SD1.1, [10]SD1.1, [11]SD1.1	Illustrates the various processes that are involved in the rock cycle.	
SC.GP.10.06.01		Identifies different types of geologic evidence, including fossils and radioactive dating and their relationship to Earth's past.	
SC.GP.10.07.01		Illustrates the different types of plate motions and boundaries, including types of faults, movements and forces for each.	
SC.GP.10.08.01		Illustrates how the Richter Scale measures earthquakes.	
SC.GP.10.09.01		Diagrams different types of volcanoes and explain the physical conditions that determine their shape and structure.	
SC.GP.10.10.01		Identifies the layers of the Earth.	
SC.GP.10.11.01	[9]SD2.2, [10]SD2.2, [11]SD2.2	Relates sea-floor features such as mid-ocean ridges and trenches to plate tectonic processes, including continental drift and sea-floor spreading.	
SC.GP.10.12.01		Discuss formation and importance of major topographic features such as continental ocean shelves and slopes, abyssal plains and seamounts.	
SC.GP.10.13.01	[9]SD3.2, [11]SD3.2	Describes activities of the sun (spots, flares, auroras and types of energy).	
SC.GP.10.14.01		Identifies the defining characteristics and motions of the objects in our solar system, including planets, satellites, comets and asteroids.	

SC.GP.10.15.01	[9]SD4.1, [10]SD4.1, [11]SD4.1, [9]SD4.2, [10]SD4.2, [11]SD4.2, [10]SD4.4, [11]SD4.4	Describes the life cycle of stars, including types and the role of nebulae, using evidence to explain how the position of the stars change in an expanding universe. Describes the Big Bang Theory.
SC.GP.10.16.01	[11] SE2.1	Models distances and relative size of the planets in our solar system and our nearest solar bodies.
SC.GP.10.17.01	[9]SD3.1	Describes the relationship between gravity and tides.
SC.GP.10.18.01	[11] SE2.1	Describes and models the rotation and movement of Earth on its axis and the effect on climate and calendar (seasons, leap year, etc.).

LEVEL 11 ENVIRONMENTAL SCIENCE

Performance Standards	State GLE's	Standard Description	
SCIENTIFIC PRO	CESS - Students i	must complete all process standards with each group of content standards completed.	
SC.PR.11.01.01	[10] SA1.1, [10] SA1.2, 10] SA2.1	Analyzes own and other students' hypothesis and use of the scientific method and suggests improvements.	
SC.PR.11.02.01	[10] SA1.1, [10] SA1.2, 10] SA2.1	Collects and records accurate data for a number of scientifically valid and reliable trials. Analyzes validity and reliability in other students' work.	
SC.PR.11.03.01	[10] SA1.2, [10] SA2.1	Uses various graphic organizers and methods to organize data into readable, informative formats for analysis and presentation to others.	
SC.PR.11.04.01	[10] SA1.2, [10] SA2.1	Uses appropriate models to summarize data and construct conclusions based on observations and findings. Uses evidence to defend conclusions.	
SC.PR.11.05.01	[10] SA1.2, [10] SA2.1	Communicates investigation methods and results (supported by reasoned evidence) to an audience, both written and orally.	
SC.PR.11.06.01		Reflects and revises conclusions as necessary from new evidence and/or improvement suggestions.	
SC.PR.11.07.01		Shows consistent proper care, usage, cleaning and storage of all laboratory equipment.	
CONTENT - Stud	ents must comp	lete all standards from the content group.	
Natural Resourc	es/Water/Metec	orology	
SC.NW.11.01.01		Describes composition and quality of sea water, fresh water and estuaries.	
SC.NW.11.02.01		Labels a simple groundwater diagram with zones of aeration and saturation, water table and aquifer.	
SC.NW.11.03.01	[9]SD1.2, [10]SD1.2, [11]SD1.2	Designs and labels a simple water cycle diagram.	
SC.NW.11.04.01		Describes formation, melting and recession of glaciers and the resulting characteristic land formations.	
SC.NW.11.05.01		Identifies the structure, composition and function of each of the layers of the Earth's atmosphere.	
SC.NW.11.06.01		Identifies the role of convection cells in creating weather.	
SC.NW.11.07.01		Explains the Coriolis effect and how it helps create the global wind pattern.	
SC.NW.11.08.01		Predicts the weather using various weather measuring instruments (i.e. barometer, hydrometer, and anemometer). Be able to explain and defend predictions.	
SC.NW.11.09.01		Identifies causes and different types of weather disasters and propose safety and/or warning measures.	
SC.NW.11.11.01	[10] SD3.1, [11] SD3.1, [9] SE3.1	Identifies major world climates and describe causes, effects, preventions and mitigations of human impact on climate.	
SC.NW.11.12.01	[9] \$C3.1, [10] \$C3.1, [11] \$C3.1	Suggests possible actions to be taken to conserve or better the quality of life for the planet Earth (climate change).	
SC.NW.11.13.01	[10]SE1.1, [11]SE1.1	Identify current energy use and exploration and/or invention trends.	
SC.NW.11.14.01	[10] SE3.1, [11] SE3.1	Constructs a model or plausible theory of a future alternative energy source.	
SC.NW.11.15.01	[9]SE2.1, [10]SE2.1, [9] SE1.1	Identifies and classifies natural resources as renewable or non-renewable and list possible effects of long term use.	
SC.NW.11.16.01	[9]SD2.1, [10]SD2.1, [11]SD2.1	Describes the dynamic interactions of erosion and deposition including human causes.	

LEVEL 12 PHYSICS AND CHEMISTRY

Performance Standards	State GLE's	Standard Description	
SCIENTIFIC PRO	CESS - Students r	nust complete all process standards with each group of content standards completed.	
SC.PR.12.01.01	[11] SA1.1	Analyzes own and other students' hypothesis and use of the scientific method and suggests improvements.	
SC.PR.12.02.01	[11] SA1.1	Collects and records accurate data for a number of scientifically valid and reliable trials. Analyzes validity and reliability in other students' work.	
SC.PR.12.03.01	[11] SA1.1	Uses various graphic organizers and methods to organize data into readable, informative formats for analysis and presentation to others.	
SC.PR.12.04.01	[11] SA1.2	Uses appropriate models to summarize data and construct conclusions based on observations and findings. Uses evidence to defend conclusions.	
SC.PR.12.05.01	[11] SA1.1, [11] SA2.1, [11] SA3.1	Communicates investigation methods and results (supported by reasoned evidence) to an audience, both written and orally.	
SC.PR.12.06.01	[11] SA1.2	Reflects and revises conclusions as necessary from new evidence and/or improvement suggestions.	
SC.PR.12.07.01		Shows consistent proper care, usage, cleaning and storage of all laboratory equipment.	
SC.PR.12.08.01		Uses and converts units within an appropriate system of measurement in describing common physical quantities.	
SC.PR.12.09.01			
CONTENT - Stud	dents complete e	ight standards in the content group below.	
Kinetics/Gravit	ation/Conservation	on of Energy	
SC.KG.12.01.01		Identifies and contrasts examples of accelerated and constant velocity motion.	
SC.KG.12.02.01		Graphs relations between displacement vs. time and velocity vs. time.	
SC.KG.12.03.01		Solves kinematic and dynamic problems in one and two dimensions (including projectile motion) using appropriate vector and scalar quantities.	
SC.KG.12.04.01		Constructs graphs representing one and two-dimensional motion.	
SC.KG.12.05.01		Predicts the motion of an object using Newton's Laws (F = ma) together with the kinematics equations.	
SC.KG.12.06.01	[10]SB4.1, [11]SB4.1	Determines the result of net force on different bodies.	
SC.KG.12.07.01		Computes force(s) needed to maintain equilibrium.	
SC.KG.12.08.01	[10]SB4.1, [11]SB4.1	Predicts, both conceptually and quantitatively, the results of the collisions between objects using the conservation of energy and conservation of momentum laws.	
SC.KG.12.09.01		Recognizes energy in its different manifestations, such as kinetic (KE = 1/2mv2), gravitational potential (PE = mgh), thermal, chemical, nuclear, electromagnetic or mechanical.	
SC.KG.12.10.01		Determines the relationships between potential and kinetic energy for a mass on a spring or a physical pendulum.	
SC.KG.12.11.01	[10]SB2.1, [11]SB2.1	Explain the relation between energy (E) and power (P).	
SC.KG.12.12.01	[9]SB4.1, [9]SB4.2	Calculates the acceleration due to gravity on another planet.	
SC.KG.12.13.01		Demonstrates an understanding of the inverse square nature of gravitational and electrostatic forces.	

CONTENT - Stud	dents complete e	eight standards in the content group below.
Circular Motion/Electromagnetism		
SC.CE.12.01.01		Demonstrates the difference between uniform and non-uniform circular motion.
SC.CE.12.02.01		Constructs a Free Body Diagram of an object in uniform circular motion.
SC.CE.12.03.01		Predicts the motion of an object in uniform circular motion using ideas of centripetal force and centripetal acceleration (including the formula $a = v2/r$).
SC.CE.12.04.01	[10]SB4.2, [11]SB4.2	Compares the effect on a moving electric charge of a magnetic and electric field.
SC.CE.12.05.01		Experiments with the magnetic fields of various magnets.
SC.CE.12.06.01		Investigates the electric force between two charged particles at given distances to each other using Coulomb's Law.
SC.CE.12.07.01		Explains the concepts of electrical charge, electrical current, electrical potential, electric field, and magnetic field. Use the definitions of the coulomb, the ampere, the volt, the volt meter and the tesla.
SC.CE.12.08.01	[9]SB2.1	Analyzes simple arrangements of electrical components in series and parallel circuits including finding the current, resistance, voltage and power.
SC.CE.12.09.01	[9] SB4.3	Describes the interactions of waves (reflection, refraction, wave addition).
SC.CE.12.10.01	[9] SB1.1, [10] SB1.1, [11] SB1.1	Predicts the properties of an element (reactivity, metal, non-metal) using the periodic table and verifying the predictions through experimentation.
SC.CE.12.11.01	[9] SB3.1, [10] SB3.1, [11] SB3.1	Predicts how an atom can interact with other atoms based on its electron configuration and verifying the results.
SC.CE.12.12.01	[9] SB3.2, [10] SB3.2, [11] SB3.2	Describes applications of nuclear reactions in which a small amount of matter is converted directly into a large amount of energy (E=MC2).
SC.CE.12.13.01	[9] SB3.3, [10] SB3.3	Compares the relative wavelengths and applications of different forms of electromagnetic radiation (x-ray, visible, infrared, microwaves, radio).

LEVEL 13 ADVANCED SCIENCES

Performance Standards	State GLE's	Standard Description		
Standards to be	e completed by f	ocusing on one of the previous content levels, increasing the degree of study.		
Conducting Inv	vestigations			
SC.PR.13.01.01		Participates in a science or environmental fair.		
Conducting Re	search			
SC.PR.13.02.01		Conducts an investigation of a current local, regional or global scientific issue.		
SC.PR.13.03.01		Contacts and interviews a research professional related to the investigation.		
Presentation				
SC.PR.13.04.01		Attends and reports on lectures, meetings or hearings related to a scientific issue.		
SC.PR.13.05.01		Presents a paper for publication (or multimedia equivalent) on findings and recommendations (may be based on previous investigation) to community members.		
SC.PR.13.06.01		Becomes an expert in a content standard from level 2 or 3 and teaches that standard to the appropriate level students (length to be determined by student and teacher).		
SC.PR.13.07.01		Participates in a written or oral debate on a scientific issue.		
SC.PR.13.08.01		Composes a scientific paper and has it published on a local, state or national level.		
Career				
SC.PR.13.09.01		Researches a minimum of 2 specific career opportunities in science.		
SC.PR.13.10.01		Networks with a professional in the field of scientific interest.		
SC.PR.13.11.01		Participates in job shadowing, work experience or internship in a scientific field.		
Historical				
SC.PR.13.12.01		Prepares and presents a report on a major historical development in science. Report should include the short and long term effects on science and society. (Copernican revolution, Newtonian synthesis, plate tectonics, Darwinian evolution).		
SC.PR.13.13.01		Prepares and presents reports (written and multimedia) on two of the following historical advances in science, including the short and long term effects on science and society (germ theory, galactic universe, medical and health technology).		

SOCIAL ENVIRONMENTS

Students will comprehend US, World, and Alaska history, cultures, languages, geography, and political systems.

Key Elements: Social Environments

Standards:

Use understanding of the chronological flow of human history and cultures to identify characteristics, patterns, ideas, and events over time.	SCS	History B1-B5 Culture E1-E8
Identify and analyze relationships among events and cultures, describing how different perspectives affect interpretation of those events.	SCS	History A1-A9 Culture B1-B4
Interpret historical themes through factual knowledge of time, places, ideas, institutions, cultures, art, languages, people and events.	SCS	History C1-C4 Culture A1-A7
Use experiences with language and cultures to interact appropriately in multilingual communities and the international marketplace.	SCS	World Lang C1-C4 Culture C1-C4
Identify the historical and contemporary role of the arts in Alaska, the nation, and the world.	SCS	Art B1-B9 Culture D1-D6
Read, interpret, and make maps, charts, and graphs to explain spatial relationships.	SCS	Geography A1-A6
Identify the physical and human characteristics of places.	SCS	Geography B1-B8
Describe the distribution and migration of human populations, ideas, and products and how they interact.	SCS	Geography D1-D5
Explain how humans and the physical environment impact and influence each other.	SCS	Geography E1-E6
Describe the structure and function of national, state, and local governments in the US.	SCS	Government A1-A4
Explain the constitutional foundations, principles and ideals upon which government in the US is based.	SCS	Government B1-B9
Interpret the roles, rights, and responsibilities of citizens in the US as compared to other societies.	SCS	Government C1-C8 History D1-D6
Describe how the world is organized politically and how it relates to US policy.	SCS	Government D1-D5
Participate effectively as an informed and responsible citizen.	SCS	Government E1-E7
Explain the economies of the United States and the state and their relationships to the global economy, as well as explain the impact of economic choices and participate effectively in the local, state, national and global economies.	SCS	Government G1-G7 Geography F1-F6

SCS - State Content Standards

SCANS - Secretary's Commission on Achieving Necessary Skills

AES - Alaska Employability Standards

LEVEL 7 GEOGRAPHY

Performance Standards	Standard Description
Analytical	
SE.AN.07.01.01	Develops questions to focus inquiry and analysis.
SE.AN.07.02.01	Summarizes information through restatement.
SE.AN.07.03.01	Notes cause and effect relationships.
SE.AN.07.04.01	Identifies central ideas from supporting details.
SE.AN.07.05.01	Distinguishes facts from opinions.
SE.AN.07.06.01	Forms opinions based on examination of evidence.
Content	
SE.GO.07.01.01	Identifies the physical features of local, state or national regions.
SE.GO.07.02.01	Designs comprehensive maps which include title, legend and directions.
SE.GO.07.03.01	Designs tables, charts and graphs of the physical and human resources of Anchorage and the United States.
SE.GO.07.04.01	Uses and calculates scale, longitude and latitude, and time zones on maps.
SE.GO.07.05.01	Distinguishes different types of maps (political, physical, topographic, economic, etc.).
SE.GO.07.06.01	Examines key geographical features, landmarks, and regions of the world.
SE.GO.07.07.01	Describes the cultural values shared within a cross section of world folklores and mythologies.
SE.GO.07.08.01	Identifies types of social organizations (family, clan, tribe, village, neighborhood, and community).
SE.GO.07.09.01	Explains the role of pioneers and explorers in the settling and development of the region.
SE.GO.07.10.01	Identifies language, cultural, and religious communities within the world.
SE.GO.07.11.01	Compares and contrasts relationships of authority and power in the family, community and nations.
SE.GO.07.12.01	Identifies general forms of government and economic systems.
SE.GO.07.13.01	Describes the use of resources in subsistence economies.
SE.GO.07.14.01	Identifies key geographical features and regions in the world (nations, continents, and oceans).
SE.GO.07.15.01	Understands how to use and calculate scale, longitude and latitude, and time zones on maps.

LEVEL 8 SOCIAL SCIENCE SURVEY

Performance Standards	Standard Description
Analytical	
SE.AN.08.01.01	Uses imagination to identify alternative courses of action.
SE.AN.08.02.01	Forms a simple organization of main and subordinate ideas on a topic.
SE.AN.08.03.01	Develops inferences from factual material.
SE.AN.08.04.01	Traces effects from causes.
SE.AN.08.05.01	Interprets social and political messages in cartoons and works of art.
SE.AN.08.06.01	Forms, expresses and explains student's own point of view on a variety of issues.
Content	
SE.SS.08.01.01	Explains how and why cultures change over time.
SE.SS.08.02.01	Compares and contrasts the cultures, resources and political systems of three or more culturally diverse groups of people.
SE.SS.08.03.01	Identifies ways to communicate cross-culturally.
SE.SS.08.04.01	Identifies major ideas of Eastern and Western Civilization.
SE.SS.08.05.01	Makes a list of characteristics of a political leader.
SE.SS.08.06.01	Interviews leaders in the local and tribal organizations.
SE.SS.08.07.01	Recognizes leadership positions in the city, state and nation.
SE.SS.08.08.01	Summarize the concepts of equality, justice, liberty and privacy.
SE.SS.08.09.01	Identifies forms of legal issues at all levels of government.
SE.SS.08.10.01	Lists steps of the trial process and describes roles of the participants.
SE.SS.08.11.01	Identifies and provides examples of the ways people participate in government.
SE.SS.08.12.01	Explains the rights and responsibilities of citizenship.
SE.SS.08.13.01	Explains how a bill becomes a law.
SE.SS.08.14.01	Identifies the role of political parties, campaigns, the press, political action committees, finances, etc. in elections.
SE.SS.08.15.01	Defines the law of supply and demand.
SE.SS.08.16.01	Understands key vocabulary and concepts in comparative government.
SE.SS.08.17.01	Understands the qualities and characteristics of world leaders.
SE.SS.08.18.01	Understands the differences between currencies from different countries.
SE.SS.08.19.01	Understands different forms of economics such as subsistence, barter and money-based.
SE.SS.08.20.01	Understands economics of trade between countries.

LEVEL 9 WORLD HISTORY

Performance Standards	Standard Description
Analytical	
SE.AN.09.01.01	Forms simple organization of main and subordinate ideas on a topic.
SE.AN.09.02.01	Develops inferences from factual material.
SE.AN.09.03.01	Traces effects from causes.
SE.AN.09.04.01	Understands how to use and calculate scale, longitude and latitude, and time zones on maps.
SE.AN.09.05.01	Designs different types of comprehensive maps (political, physical, topographic, economic, etc.) which include title, legend and directions.
SE.AN.09.06.01	Compares and contrasts differing accounts of the same event and analyzes degrees of credibility.
SE.AN.09.07.01	Analyzes the cultural values shared within a cross section of world folklores and mythologies.
SE.AN.09.08.01	Understands current issues in the context of historical events.
SE.AN.09.09.01	Identifies different types of factors in a causal chain.
Content	
SE.WH.09.01.01	Describes cultural and religious communities around the world.
SE.WH.09.02.01	Models key geographical features and regions in the world (nations, continents and oceans).
SE.WH.09.03.01	Identifies nations and cities that relate to global history and economy.
SE.WH.09.04.01	Compares and contrasts the cultures, resources and political systems of three or more culturally diverse groups of people.
SE.WH.09.05.01	Compares and contrasts major ideas of Eastern and Western Civilization.
SE.WH.09.06.01	Describes at least four eras in world history according to significant ideas, institutions, people and events.
SE.WH.09.07.01	Investigates two global influences on culture and civilizations.
SE.WH.09.08.01	Compares and contrasts at least three ancient civilizations.
SE.WH.09.09.01	Explains the impact of International exploration, imperialism and colonization on indigenous cultures.
SE.WH.09.10.01	Evaluates the impact of two individual thinkers on revolutions in science and social science.
SE.WH.09.11.01	Investigates the exploration, conquest, rise and fall of major civilizations.
SE.WH.09.12.01	Understands the purpose of and investigates at least two International organizations.
SE.WH.09.13.01	Analyzes the social, economic and political consequences of at least two environmental and/or social issues.

LEVEL 10 U.S. HISTORY

Performance Standards	Standard Description
Analytical	
SE.AN.10.01.01	Proposes a new plan of operation, creates a new system or devises a future scenario based on available information.
SE.AN.10.02.01	Interprets data in time lines, graphs and charts.
SE.AN.10.03.01	Compares and contrasts differing accounts of the same event and analyzes degrees of credibility.
SE.AN.10.04.01	Analyzes different types of maps to interpret change over the course of history.
SE.AN.10.05.01	Reinterprets events in terms of what might have happened and shows the likely effects of subsequent events.
SE.AN.10.06.01	Recognizes the bias in a point of view or in collected data including historical accounts.
SE.AN.10.07.01	Compares and contrasts different political and economic concepts throughout times in history.
SE.AN.10.08.01	Interprets current issues in the context of historical events.
SE.AN.10.09.01	Compares and contrasts the accomplishments of a historical figure to their own. Cites examples of ways courage and compassion for others contributed to their importance in history.
SE.AN.10.10.01	Traces the origin and development of idea, institution or political system.
Content	
SE.US.10.01.01	Summarizes the causes, significant events and impact of the American Revolution including key people and places of the Revolutionary War.
SE.US.10.02.01	Explores the significant battles, individuals, issues and impacts of the Civil War and reconstruction period on American society.
SE.US.10.03.01	Summarizes the organization and responsibilities of the United States government, including the Constitution and the Declaration of Independence.
SE.US.10.04.01	Describes the impact of the Industrial Revolution on American society.
SE.US.10.05.01	Analyzes the role of pioneers and explorers in the settling and development of a region.
SE.US.10.06.01	Examines American involvement in World War I.
SE.US.10.07.01	Describes the causes and effects of the Great Depression and America's plan for economic recovery.
SE.US.10.08.01	Examines American involvement in World War II.
SE.US.10.09.01	Summarizes the causes, effects and significant events of the Cold War between the U.S. and Communist countries.
SE.US.10.10.01	Explores recent events in America's history.
SE.US.10.11.01	Identifies leaders who exhibit truth, loyalty or civic mindedness in the areas of social, economic, religious, and environmental protection or reform.
SE.US.10.12.01	Explains changes in strategy, technology and diplomacy in the history of warfare.
SE.US.10.13.01	Investigates the history of immigration and the cultural heritage of immigrants in the United States.
SE.US.10.14.01	Uses events and documents from history to develop and support a point of view regarding American identity and culture.
SE.US.10.15.01	Contrasts two social issues of class, gender, religion, ethnicity and race.
SE.US.10.16.01	Identifies key U.S. geographical features, regions, states, territories and capitals.

LEVEL 11 ALASKA STUDIES

Performance Standards	Standard Description
Analytical	
SE.AN.11.01.01	Prepares a research paper that requires a creative solution to a global issue including tools of visual representation.
SE.AN.11.02.01	Employs criteria for determining the validity and soundness of an argument from information.
SE.AN.11.03.01	Identifies different types of factors in a causal chain.
SE.AN.11.04.01	Interprets current issues in the context of historical events.
SE.AN.11.05.01	Develops strategies for resource management.
SE.AN.11.06.01	Works individually or with others to decide on an appropriate course of action in response to a contemporary problem.
Content	
SE.AK.11.01.01	Compares and contrasts the characteristics of the five (5) Native Alaskan groups and how they retain and adapt their cultural heritage through time.
SE.AK.11.02.01	Explains the exploration and settlement of Alaska.
SE.AK.11.03.01	Identifies the roles and relationships among the federal, tribal, local and state governments.
SE.AK.11.04.01	Identifies key issues and events in Alaska's history since statehood.
SE.AK.11.05.01	Demonstrates an understanding of the key sections of the Alaska Native Claims Settlement Act and the impact and implications for all stakeholders.
SE.AK.11.06.01	Compares and contrasts current industries and projects and their future impact on Alaska's economy and environment.
SE.AK.11.07.01	Analyzes Alaska's wildlife industries, their economic influences and environmental impact.
SE.AK.11.08.01	Evaluates the organization and responsibilities of Alaska state government, including the Alaska Constitution and the Statehood Compact.
SE.AK.11.09.01	Shows how the purpose and function of International governments are interrelated with the politics and interests of the State.
SE.AK.11.10.01	Understands the impact of non-governmental groups on government policy.
SE.AK.11.11.01	Understands the role of government in regulating the economy.
SE.AK.11.12.01	Understands the purpose and land impact of ANILCA.
SE.AK.11.13.01	Understands events and turning points in the history of Alaska from the 1910 Gold Rush through WWII, the Oil Boom, Statehood and Native Rights movement to present day.
SE.AK.11.14.01	Understands current issues in the context of historical events.

LEVEL 12 GOVERNMENT

Performance Standards	Standard Description
Analytical	
SE.AN.12.01.01	Interprets and creates social and political messages in cartoons and works of art.
SE.AN.12.02.01	Forms, expresses and explains student's own point of view on a variety of issues.
SE.AN.12.03.01	Participates and reflects on the political process at the school, local or state level, and makes suggestions for change.
SE.AN.12.04.01	Evaluates the validity and soundness of an argument.
SE.AN.12.05.01	Explains the implications of a point of view on a variety of specific issues.
SE.AN.12.06.01	Works individually or with others to decide on an appropriate course of action in response to a contemporary problem. (advanced: Implements a plan of action to influence those in power in the local, state, and national community).
Content	
SE.GV.12.01.01	Identifies the ways people participate in government and explains the responsibilities of citizenship.
SE.GV.12.02.01	Identifies the role of political parties, campaigns, the press, political action committees and finances, in elections.
SE.GV.12.03.01	Identifies key ideas in the Declaration of Independence and the Constitution of the United States, including the branches of government, distribution and limitations of power, checks and balances, the federalist system, the amendment process and the Bill of Rights.
SE.GV.12.04.01	Understands and summarizes the role of government in regulating the economy.
SE.GV.12.05.01	Understands how a bill becomes a law and actively pursues writing of legislation.
SE.GV.12.06.01	Applies key vocabulary and concepts in comparative government and examines the concept of limited government and unlimited power.
SE.GV.12.07.01	Analyzes and discusses the impact of non-governmental groups on influencing federal, state and local policies, statutes, laws, and regulations.
SE.GV.12.08.01	Distinguishes the characteristics of political points of view and participates in mock political discussions.
SE.GV.12.09.01	Compares and contrasts different forms of government and economic systems.
SE.GV.12.10.01	Researches and compares the foreign policy relationships between the United States and two developing countries, analyzes the economic impact of imports and exports, currencies, human rights, democratic development, and predicts future U.S. involvement with that country.

LEVEL 13 ECONOMICS

Performance Standards	Standard Description
Analytical	
SE.AN.13.01.01	Summarizes concepts and methods of sampling, testing, and evaluating research.
SE.AN.13.02.01	Able to implement appropriate organizational tools in a variety of situations.
SE.AN.13.03.01	Distinguishes the validity of researched information, using such criteria as source, objectivity and technical correctness.
SE.AN.13.04.01	Implements a plan of action to influence those in power in the local, state and national community.
SE.AN.13.05.01	Compares and contrasts various views on environmental conservation and development.
SE.AN.13.06.01	Prepares a research paper that requires a creative solution to a global issue.
SE.AN.13.07.01	Employs criteria for determining the validity and soundness of an argument all information.
SE.AN.13.08.01	Works individually or with others to decide on an appropriate course of action in response to a contemporary problem.
Content	
SE.EC.13.01.01	Defines and demonstrates the law of supply and demand.
SE.EC.13.02.01	Understands different forms of economies such as subsistence, barter and money-based and demonstrates uses of each.
SE.EC.13.03.01	Demonstrates the role of the entrepreneur in the market system.
SE.EC.13.04.01	Identifies the components of the federal budget.
SE.EC.13.05.01	Understands the meaning of and evaluates economic statistics.
SE.EC.13.06.01	Researches International trade and discusses economic importance.
SE.EC.13.07.01	Understands how factors of production influence International corporations and the world economy.
SE.EC.13.08.01	Understands and interprets exchange rates of International currencies and their relation to buying power.
SE.EC.13.09.01	Uses historical data and demographics to interpret current issues and predict future political and economic trends.

PERSONAL EXPRESSION & COMMUNITY CONNECTIONS

Students will possess core values and healthy lifestyle skills necessary to reach ones full potential and foster the development of those around them. Students will develop reliable interpersonal strategies and become self-motivated, competent, lifelong learners, prepared to contribute positively to our society.

Key Elements: Personal Expression & Community Connections

Standards:

Demonstrate leadership, responsibility to culture and community in social and civic settings, and promote community well being.	SCS	Health D1, D6
Apply honesty, integrity, humility, dignity and respect for self and others in making personal decisions, interacting with others and through community service.	SCS	Health C4, Citizenship E6
Demonstrate moral development through ethics, hard work, and cooperation in school or a service setting.	SCANS AES	Personal Qual AES - A1
Practice basic academic skills in real life situations when engaged in community service.	AES SCS	Health D5, A2
Display social growth and development through service learning.	SCS	Health D5, D6
Demonstrate respect and fairness when dealing with others in a variety of situations and activities, resolve conflicts responsibly, and accept responsibility for actions.	SCS	Health C1, C4
Recognize personal strengths and weaknesses and set goals to evaluate performance.	SCS	Health C3, C5
Accept and offer constructive criticism, exhibit appropriate audience skills, and respect the artistic works of others.	SCS	Art C3, C7, C5, D7
Apply problem-solving processes to make responsible decisions by discriminating among risks and by identifying consequences.	SCS	Citizenship E7
Interpret the availability and effective use of professionals, health service agencies, products and information.	SCS	Health D4
Interpret how the relationships of family, friends, co-workers, community, and culture impact personal health.	SCS	Health B6
Maintain and promote personal health through eating habits, physical fitness, personal hygiene, safety, and environmental choices.	SCS	Health A2
Participates in healthy lifestyle activities through indoor and outdoor physical activities, clubs, team sports, and personal interest activities.	SCS	Health A2
Participate in the arts: dance, drama, music, visual arts, and/or creative writing.	SCS	Arts A1
Demonstrate the creativity and imagination necessary for innovative thinking and problem solving.	SCS	Arts A4

SCS - State Content Standards

SCANS - Secretary's Commission on Achieving Necessary Skills

AES - Alaska Employability Standards

LEVEL 6 PERSONAL EXPRESSION & COMMUNITY CONNECTIONS

Performance Standards	Standard Description
Personal	
CC.PR.06.01.01	Defines and demonstrates respect for self, others, and property.
CC.PR.06.02.01	Defines and demonstrates honesty and responsibility (prepared for class, calls if late, cleans up work area, stays on task, completes tasks on time, appropriate humor, etc.).
CC.PR.06.03.01	Identifies and learns a variety of problem-solving processes.
CC.PR.06.04.01	Demonstrates the importance of setting and meeting goals.
Health	
CC.HL.06.01.01	States basic first aid principles (hypothermia prevention, wound treatment, direct pressure to stop bleeding, etc.).
CC.HL.06.02.01	Chooses positive, healthy leisure activities.
CC.HL.06.03.01	Identifies effects of drugs, alcohol and tobacco use on physical, emotional and social well being.
CC.HL.06.04.01	Recognizes benefits of good personal hygiene traits, nutritious diet and exercise.
CC.HL.06.05.01	Participates willingly and exhibits positive attitude.
Social	
CC.SC.06.01.01	Contributes to group work success in a project by completing tasks.
CC.SC.06.02.01	Demonstrates effective interpersonal skills.
CC.SC.06.03.01	Role-plays a variety of situations that demonstrate inclusion/exclusion.
CC.SC.06.04.01	Practices skills to interact with adults (takes turns speaking, respect, manners, eye contact, etc.).
Service	
CC.SV.06.01.01	Interviews, as a group or individually, a service-oriented person regarding their thoughts about helping others and working in groups.
CC.SV.06.02.01	Reflects on, and shares a story about justice or injustice which has a moral or lesson which affects more than one person (from a book or experience).
CC.SV.06.03.01	Gives back to the community by volunteering or participating in community service at a local agency or program (volunteer time, donates skills, volunteers at homeless shelter, food bank, etc.).
Personal Expre	ession
CC.PE.06.01.01	Participates in a form of personal expression (dance, music, theater, visual arts).
CC.PE.06.02.01	States the meaning and relevance of the arts in relation to one's own life.
CC.PE.06.03.01	Acknowledges and respects personal artistic expression.

LEVEL 7 PERSONAL EXPRESSION & COMMUNITY CONNECTIONS

Performance Standards	Standard Description	
Personal		
CC.PR.07.01.01	Demonstrates good study skills (organization, consistency, time management, responsibility, note taking, assignment completion, etc.).	
CC.PR.07.02.01	Identifies personal strengths and weaknesses of one's own behavior.	
CC.PR.07.03.01	Practices decision-making, conflict resolution and problem-solving strategies.	
CC.PR.07.04.01	Practices a goal-setting process to establish short-term and long-term goals.	
Health		
CC.HL.07.01.01	Identifies safety procedures and first aid skills for various situations (winter, earthquake, fire, and recreational vehicles).	
CC.HL.07.02.01	Practices healthy lifestyle activities during leisure time.	
CC.HL.07.03.01	Analyzes personal and social changes and responsibilities associated with sexuality.	
Social		
CC.SC.07.01.01	Employs effective group interaction skills (taking turns, coming to consensus, sharing, accepting ideas, communicates positively and constructively, etc.).	
CC.\$C.07.02.01	Identifies strategies to deal effectively with peer pressure (illegal or improper social activities, dealing with bullies, knowing when to confront, sexual activity, etc.).	
CC.SC.07.03.01	Defines and gives examples of diversity, empathy and equality from own life experiences.	
Service		
CC.SV.07.01.01	Demonstrates teamwork in service settings (contributes to the accomplishment of team goals, works well with others, etc.).	
CC.SV.07.02.01	Identifies three ways service involvement can be a rewarding experience (appreciates own situation, gets recognized as a positive role model, gains a sense of pride, feels like they made a difference, etc.).	
CC.SV.07.03.01	Performs a simple service project inside the school.	
CC.SV.07.04.01	Recognizes and can discuss potential negative consequences due to lack of service and/or volunteerism (Red Cross, Coast Guard, etc.).	
Personal Expre	ssion	
CC.PE.07.01.01	Participates in a form of personal expression (dance, music, theater, visual arts).	
CC.PE.07.02.01	Recognizes characteristic elements of a particular art form.	
CC.PE.07.03.01	Expresses themselves in an artistic format.	

LEVEL 8 PERSONAL EXPRESSION & COMMUNITY CONNECTIONS

Standard Description	
Exhibits pride in work, self-discipline and concern for others.	
Self-evaluates behavior in a variety of settings.	
Practices decision-making, conflict resolution and problem-solving strategies and chooses the best process for a particular situation.	
Models a goal-setting process to establish short-term and long-term goals.	
Practices safety procedures and first aid skills for various situations (winter, earthquake, fire, and recreational vehicles).	
Participates in lifestyle activities, clubs, team sports or personal interest activities.	
Investigates the emotional and physical changes related to positive and negative nutritional issues (eating disorders).	
Explains strategies for stress management and for responding to a personal crisis (divorce, death, suicide prevention, family substance abuse, etc.).	
Investigates interrelationships and disparities among physical, emotional and social changes occurring with puberty.	
Employs skills to be a team player (cooperation, acceptance of roles, sportsmanship, etc.).	
Investigates strategies for dealing with peer pressure.	
Understands the concept and relevance of equality, empathy and diversity (gender, economic, cultural, special needs, etc.).	
Participates actively in a team service commitment by volunteering for a non-profit agency or community event.	
Reflects upon the meaning of service learning experiences by delivering an oral presentation to an audience.	
Demonstrates understanding of how he/she can contribute to society by performing simple service learning projects outside the school.	
on	
Participates in a form of personal expression (dance, music, theater, visual arts).	
Uses the elements of an art form, practices accepting and offering constructive criticism in order to develop critiquing skills.	
Demonstrates a degree of skill in expressing one's own ideas in an artistic format.	

LEVEL 9 PERSONAL EXPRESSION & COMMUNITY CONNECTIONS

Performance Standards	Standard Description	
Personal		
CC.PR.09.01.01	Demonstrates flexibility, adaptability and resiliency (through perseverance, acceptance of change, patience, etc.).	
CC.PR.09.02.01	Displays appropriate, positive behavior in a variety of situations (punctuality, quality task completion, best effort, honesty, integrity).	
CC.PR.09.03.01	Applies conflict resolution and critical thinking skills to a variety of situations.	
CC.PR.09.04.01	Demonstrates personal awareness through sharing of values, interests, strengths and weaknesses (ILP, Life Skills portfolio, etc.).	
Health		
CC.HL.09.01.01	Models strategies to alter behavior to promote personal safety (crisis or natural disasters).	
CC.HL.09.02.01	Explores and participates in an unfamiliar physical health activity.	
CC.HL.09.03.01	Creates a personal health plan to maintain proper nutrition and exercise.	
CC.HL.09.04.01	Reviews strategies for stress management during a crisis and practices them in a simulation.	
Social		
CC.SC.09.01.01	Practices positive interpersonal relationships in a variety of group settings.	
CC.SC.09.02.01	Simulates strategies for dealing with peer pressure (drug and alcohol use, sexual activity, etc.).	
CC.SC.09.03.01	Demonstrates empathy and respect for diversity in a variety of ways (skit, play, simulation, art, etc).	
Service		
CC.SV.09.01.01	Evaluates own performance of a service event and reflects on the needed skills for leadership.	
CC.SV.09.02.01	Completes a needs assessment of the community to determine issues and possible service opportunities (gathers data through surveying, interviewing agencies, researching, etc.).	
CC.SV.09.03.01	Designs, completes and evaluates a community service learning project (completes a proposal with reasonable/measurable goals, timeline, etc.).	
Personal Express	ion	
CC.PE.09.01.01	Participates in an art form that is new to the student.	
CC.PE.09.02.01	Practices accepting and giving constructive criticism to increase skills.	
CC.PE.09.03.01	Practices to increase skill and knowledge in an artistic discipline to develop individual style.	

LEVEL 10 PERSONAL EXPRESSION & COMMUNITY CONNECTIONS

Performance Standards	Standard Description	
Personal		
CC.PR.10.01.01	Exhibits leadership qualities (communication, consensus building, respect, humility, empathy, compassion, teamwork, etc.).	
CC.PR.10.02.01	Displays appropriate, positive behavior in a variety of situations (punctuality, quality task completion, best effort, honesty, integrity).	
CC.PR.10.03.01	Teaches a variety of decision-making processes.	
CC.PR.10.04.01	Identifies, applies and evaluates personal life philosophy.	
Health		
CC.HL.10.01.01	Applies basic first aid principles in a simulated situation.	
CC.HL.10.02.01	Participates in lifestyle activities, clubs, team sports or personal health interest activities.	
CC.HL.10.03.01	Reflects on personal decisions/choices regarding health and nutrition issues.	
CC.HL.10.04.01	Practices different strategies for stress management (personal loss or crisis).	
Social		
CC.SC.10.01.01	Develops interpersonal relationships and takes on a specific role to accomplish a cooperative project.	
CC.SC.10.02.01	Practices strategies for dealing with peer pressure.	
CC.SC.10.03.01	Demonstrates empathy and respect for diverse cultures in a meaningful way.	
Service		
CC.SV.10.01.01	Demonstrates appropriate characteristics of a volunteer by assisting another student in the design or implementation of their service project.	
CC.SV.10.02.01	Creates and implements a plan for fulfilling personal responsibilities to society and/or community (registers to vote, recycles, mentors others, etc.).	
CC.SV.10.03.01	Participates in and analyzes the organizational structure of a national and/or global service agency.	
Personal Express	ion	
CC.PE.10.01.01	Participates in an art form that is new to the student.	
CC.PE.10.02.01	Discusses what makes an object or performance a famous work of art.	
CC.PE.10.03.01	Teaches skills and techniques using artistic characteristics unique to a particular discipline.	

LEVEL 11 PERSONAL EXPRESSION & COMMUNITY CONNECTIONS

Performance Standards	Standard Description	
Personal		
CC.PR.11.01.01	Models honesty, integrity and respect when interacting with others (children, peers, adults).	
CC.PR.11.02.01	Consistently displays appropriate positive behavior in a variety of situations.	
CC.PR.11.03.01	Articulates and defends the decision making processes used in a variety of situations.	
CC.PR.11.04.01	Demonstrates personal growth through commitment to life-long learning.	
Health		
CC.HL.11.01.01	Receives health certification in a specialized training (first aid card, ETT, EMT, etc.).	
CC.HL.11.02.01	Takes a leadership role in lifestyle activities, clubs, team sports, or personal health interest activities.	
CC.HL.11.03.01	Implements life long nutrition and exercise plan.	
CC.HL.11.04.01	Models strategies to deal with stress management.	
Social		
CC.SC.11.01.01	Models techniques to foster positive personal relationships in a variety of group settings.	
CC.SC.11.02.01	Models for others strategies for dealing with peer pressure.	
CC.SC.11.03.01	Reflects and shares experiences gained from an unfamiliar, live cultural event.	
Service		
CC.SV.11.01.01	Performs leadership roles in service settings (enlists and/or motivates others, is a mentor to others, helps others to solve problems).	
CC.SV.11.02.01	Reflects on the meaning of community service and how it will be used in one's personal life, then presents ideas to an audience.	
CC.SV.11.03.01	Establishes communication and interacts nationally or globally with others to assist with service projects.	
Personal Express	sion	
CC.PE.11.01.01	.11.01.01 Completes one independent project using an artistic form.	
CC.PE.11.02.01	Models acceptance and shows consideration of others when participating in constructive criticism.	
CC.PE.11.03.01	Models for others advanced skills and techniques in an artistic discipline which shows unique individual expression.	

LEVEL 12 PERSONAL EXPRESSION & COMMUNITY CONNECTIONS

Performance Standards	Standard Description	
Personal		
CC.PR.12.01.01	Articulates the concept of calculated risk-taking.	
CC.PR.12.02.01	Makes informed decisions after exploring options and weighing consequences.	
CC.PR.12.03.01	Displays ethical behavior in a variety of settings.	
Health		
CC.HL 12.01.01	Implements life long nutrition and exercise plan.	
Social		
CC.SC.12.01.01	Proposes strategies and support structures to assist in dealing with problems associated with family, school and work.	
CC.SC.12.02.01	Volunteers at cultural events.	
Service		
CC.SV.12.01.01	Establishes communication and interacts nationally or globally with others to assist with service projects and gives a presentation to younger students on the results of the project.	
Personal Express	sion	
CC.PE.12.01.01	Completes an advanced artistic course.	

CAREER & EMPLOYABILITY SKILLS

SCANS NATIONAL WORK SKILLS

- 1. Productive Attitude and Personal Qualities
- 2. People Skills
- 3. Punctuality & Attendance
- 4. Critical Thinking and Problem Solving
- 5. Time and Resource Allocation
- 6. Business Basics
- 7. Information & Analysis, Technology & Communication
- 8. Career Decision Making
- 9. Job Seeking Skills
- 10. Job Transition Skills

Students will use career decision-making skills for the changing workplace by understanding the relationship between education and employment. Students apply their career skills and content knowledge in a variety of settings to become good citizens, parents, employees and life-long learners.

Key Elements: Career & Employability Skills

Standards:

Identify and select from multiple strategies to complete projects independently and cooperatively.	SCS	English - C1
Demonstrate organization of a project, make and keep deadlines, seek, select, and use relevant resources.	SCS	English - C2
Identify high standards for project quality.	SCS	English - C4
Demonstrate collegiality on projects by sharing ideas, workloads, talents, and perspectives.	SCS	English - C5
Explain and defend a position orally and with visual aids as appropriate.	SCS	English - D4
Practice thinking skills using decision making, problem solving, reasoning, and creative thinking.	SCANS	Thinking Skills
Demonstrate leadership skills through negotiations, working with diversity, teaching others new skills, and communicating effectively.	SCANS	Interpersonal Skills
Interpret global systems, monitor trends, predict impacts, correct performance, improve or design alternative systems.	SCANS	Information
Develop and maintain a work ethic necessary for success in the workplace that includes honesty, integrity, dependability, punctuality, self discipline, initiative, reliability, accuracy, productivity, respect, and perseverance.	AES	Al
Apply skills and academic knowledge in a variety work settings.	AES	A2
Demonstrate the process to seek employment, such as resume development, application completion, interview skills, and appropriate dress for the work setting.	AES	A3
Demonstrate the process for developing self-employment opportunities including marketing studies, business plan development and managing business finances.	AES	A4
Identify career options in relation to occupational and economic trends and opportunities, education and/or training needed for advancement.	AES	B2
Develop a career plan by identifying personal interests, aptitudes, abilities, and priorities.	AES	B1

SCS - State Content Standards

SCANS - Secretary's Commission on Achieving Necessary Skills

AES - Alaska Employability Standards

LEVEL 6 CAREER & EMPLOYABILITY SKILLS

Performance Standards	Standard Description	
CR.ES.06.01.01	Shows courtesy and respect toward others. Listens carefully to what others say, noting tone of voice and body language, responding in a way that shows understanding of what is said.	
CR.ES.06.02.01	Demonstrates ability to be a good team member in formal and informal situations, respecting authority of group roles.	
CR.ES.06.03.01	Creates with advisor/teacher/supervisor a plan to observe school/company policy regarding schedule and punctuality.	
CR.ES.06.04.01	Identifies cause and effect of varying problems.	
CR.ES.06.05.01	Is able to identify resources to complete schoolwork.	
CR.ES.06.06.01	Dresses and grooms appropriately.	
CR.ES.06.07.01	Accomplishes work by applying appropriate ethical and moral uses of technology. Practices applying research skills, including evaluating the validity, objectivity, reliability and quality of information.	
CR.ES.06.08.01	Identifies careers in the local community and beyond.	
CR.ES.06.09.01	Uses basic career vocabulary in the start of building a Life Skills Portfolio.	
CR.ES.06.10.01	Identifies the correlation between educational experience and career opportunities.	

LEVEL 7 CAREER & EMPLOYABILITY SKILLS

Performance Standards	Standard Description	
CR.ES.07.01.01	Shows understanding, friendliness, and respect for feelings of others; asserts oneself when appropriate; takes an interest in what people say and why they think and act as they do.	
CR.ES.07.02.01	Recognizes various learning/communication styles by taking a personal learning style survey, and shows specific steps to be more effective in a group.	
CR.ES.07.03.01	Follows through and is dependable in work assignments.	
CR.ES.07.04.01	Uses processes consistently in identifying and solving problems.	
CR.ES.07.05.01	Deals constructively with advice and criticism in a variety of situations in improving time and resource allocation.	
CR.ES.07.06.01	Identifies skills for safety in a variety of work and school settings Including appropriate dress and behavior for activity/environment.	
CR.ES.07.07.01	Collects and organizes relevant information for web-based Life Skills Portfolio including a resume and recommendation letters, awards, certificates, etc.	
CR.ES.07.08.01	Completes a self-assessment survey of interests, abilities, and strengths for future career paths.	
CR.ES.07.09.01	Identifies several possible careers and practices interview procedures with one business/community partner.	
CR.ES.07.10.01	Identifies and explains five post-secondary pathways (vocational training, college/university, entrepreneurial endeavors, military or directly to work) and practices pre-employment skills (proper phone etiquette, eye contact, handshakes, etc.).	

LEVEL 8 CAREER & EMPLOYABILITY SKILLS

Performance Standards	Standard Description	
CR.ES.08.01.01	Participates in a community service project or job shadowship that demonstrates leadership, ethics and integrity.	
CR.ES.08.02.01	Models for others constructive and effective leadership relationships (customers, subordinates, supervisors, peers) by participating in a site-based enterprise (student store, bake sale, craft sale, etc.) and practices customer service skills (marketing, money management, politeness, etc.).	
CR.ES.08.03.01	Arrives at school and/or work site and performs scheduled activities on time.	
CR.ES.08.04.01	Works collaboratively with a business and/or community person to practice problem-solving processes.	
CR.ES.08.05.01	Adopts a process (PIER) with input from a business or community person to develop and complete action plans.	
CR.ES.08.06.01	Completes a job shadow or site visit to a business and posts a summary on web Life Skills Portfolio.	
CR.ES.08.07.01	Outlines and practices the process for seeking employment (including resume and cover letter development, application completion, interview skills, and appropriate dress and manners for work settings, etc.).	
CR.ES.08.08.01	Identifies the training and experience requirements for three different potential jobs.	
CR.ES.08.09.01	Observes and practices presentation skills (clear visual aids, clear enunciation, good volume, appropriate gestures, eye contact, artistic self-expression, etc.) with business partner.	

LEVEL 9 CAREER & EMPLOYABILITY SKILLS

Performance Standards	Standard Description	
CR.ES.09.01.01	Identifies and describes responsibilities and required personal skills of community leaders in the areas of leadership, ethics and integrity.	
CR.ES.09.02.01	Models leadership skills by leading a group through a team-building experience.	
CR.ES.09.03.01	Summarizes a business's policy regarding absences and completes scheduled activities on time. Presents findings to the business partner and/or parent and teacher.	
CR.ES.09.04.01	Uses problem-solving solutions with a business and/or community person to identify a problem or concern at school and present three possible solutions.	
CR.ES.09.05.01	Brainstorms with a business/community partner ways to utilize resources more effectively. Presents findings to appropriate audience.	
CR.ES.09.06.01	Completes an internship and posts a summary in personal Life Skills Portfolio.	
CR.ES.09.07.01	Presents Life Skills Portfolio (in a self-initiated meeting with instructor, parent/guardian, and business/community partner) while demonstrating presentation skills (clear visual aids, clear enunciation, good volume, appropriate gestures, eye contact, artistic self-expression, etc.).	
CR.ES.09.08.01	Develops plan for completing post-secondary pathways (vocational training, college/university, entrepreneurial endeavors, military or directly to work) and explores matching interests to needs.	
CR.ES.09.09.01	Creates life-skills budget for completing post-secondary option or plan (salary, housing, transportation, taxes, fixed and variable expenses, etc.).	
CR.ES.09.10.01	Identifies specific steps needed to move from an entry-level job to a management position in an industry/business of choice.	

LEVEL 10 CAREER & EMPLOYABILITY SKILLS

Performance Standards	Standard Description	
CR.ES.10.01.01	remonstrates empathy and respect for people from diverse cultures in a meaningful way within school, family and/or community.	
CR.ES.10.02.01	Completes two case studies of a chosen career that relates to problems conducting business in different countries.	
CR.ES.10.03.01	Demonstrates valued work habits when working in teams, including civility and fairness.	
CR.ES.10.04.01	Develops plan with another student, as a mentor, to help them build skills in punctuality and attendance.	
CR.ES.10.05.01	Demonstrates mastery of connections between theory and practice of resources.	
CR.ES.10.06.01	Uses two different case studies to identifies how profit and loss impacts businesses. Demonstrates how to deal with job stress in positive ways.	
CR.ES.10.07.01	Refines Life Skills Portfolio to include updated resume, events, awards and interests.	
CR.ES.10.08.01	Completes two job shadows and/or an internship for a week or more.	
CR.ES.10.09.01	Demonstrates ability to work independently in a career-option as identified on 9.09.	
CR.ES.10.10.01	Coordinates or assists in hosting at least one business luncheon at school.	

LEVEL 11 CAREER & EMPLOYABILITY SKILLS

Performance Standards	Standard Description	
CR.ES.11.01.01	Demonstrates understanding of verbal and non-verbal communication as perceived by people of different cultures, race, gender, backgrounds, countries and businesses.	
CR.ES.11.02.01	Demonstrates knowledge of motivational elements for people in different roles.	
CR.ES.11.03.01	Demonstrates valued work habits in a variety of situations while working as a member of a team.	
CR.ES.11.04.01	Mentors another student to practice workplace skills (accepting advice, supervision and criticism, recognizing discrimination and harassment, practicing safety in the work place, striving for equality and attaining job transfer skills, etc.).	
CR.ES.11.05.01	Mentors another student to practice skills to seek and obtain careers (resume writing, interviews, career portfolio, reference lists, cover letters, etc.).	
CR.ES.11.06.01	Identifies components of quality organizations. Makes presentation about a quality organization using Critical Friends Peer Review process.	
CR.ES.11.07.01	Refines personal Life Skills Portfolio on web.	
CR.ES.11.08.01	Completes two job shadows, an internship, or a part-time job for a semester.	
CR.ES.11.09.01	Mentors another student to work independently in a career-option selected in their standard 9.09. Summary includes PIER process.	
CR.ES.11.10.01	Conducts presentation of a potential future outcome (skilled trades, post-secondary education, entrepreneurial endeavors, service learning, and business).	

TECHNOLOGY

Students will operate technology based tools to manage information, solve problems, and express ideas in a responsible manner.

Key Elements: Technology

Standards:

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Use technological tools for learning, communications, productivity, entering		Technology
and retrieving information.	SCS	Technology A1, A2
Use technology to observe, analyze, interpret, and draw conclusions.	SCANS SCS	Information Technology C1
Use local and worldwide networks to explore new and innovative methods to	SCANS	Interpersonal Skills
communicate, exchange ideas and information and for interaction with others globally.	SCS	Technology A3, B1, B2, B3, D2, D3
Evaluate the potentials and limitations of existing technologies and their role in		Basic Skills
careers, workplace, and cultural environments, as well as the implications of emerging technologies.		B1 - B5
Manage and maintain technology tools, diagnose and solve common technology problems.		Technology
		Technology A4, A5
Create new knowledge by evaluating, combining, or extending information using multiple technologies.		Thinking Skills
		Technology C3
Convey ideas to a variety of audiences using publishing, multi- media, and		Basic Skills
communications tools.		Technology D1
Discriminate between responsible and irresponsible uses of technology, use ethics when using software and hardware, and respect others' rights of privacy in electronic environments.	SCANS SCS	Personal Qualities

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LEVEL 5 TECHNOLOGY

Performance Standards	Standard Description	
Communication	on & Application Tools	
TL.CA.05.01.01	Uses word processing tools (dictionary, thesaurus, grammar check, word count, etc.) to perform simple editing tasks (checking for spelling, punctuation, capitalization).	
TL.CA.05.02.01	Types 10 (ten) WPM with a 90% degree of accuracy using proper keyboarding position (body posture, eye level, etc.) when working on computers (ergonomics).	
TL.CA.05.03.01	Identifies and uses appropriate software for tasks with guidance.	
TL.CA.05.04.01	Identifies basic components of a spreadsheet (cells, rows, columns and sheets) and enters data.	
TL.CA.05.05.01	Uses a digital camera in educational projects.	
TL.CA.05.06.01	Designs, develops, publishes, and presents products using technology resources that demonstrate and communicate curriculum concepts to audiences inside or outside the classroom.	
TL.CA.05.07.01	Applies productivity/multimedia tools and peripherals to support personal productivity, group collaboration, and learning throughout the curriculum.	
TL.CA.05.08.01	Uses word processing functions (cut, copy, paste, undo, etc.).	
Ethics & Action	1	
TL.EA.05.01.01	Recognizes legal and ethical issues related to copying programs from one computer to another without permission.	
TL.EA.05.02.01	Demonstrates application of manners and ethics in personal computing.	
TL.EA.05.03.01	Exhibits legal and ethical behaviors when using information and technology, and discusses consequences of misuse.	
Hardware & No	etworking Operations	
TL.HN.05.01.01	Identifies issues related to computer viruses and their transmission.	
TL.HN.05.02.01	Practices proper care, storage, and cleaning of hardware and software.	
TL.HN.05.03.01	Demonstrates knowledge of basic troubleshooting techniques.	
Information G	athering & Organizing	
TL.IN.05.01.01	Manages an email address accurately, responsibly and professionally.	
TL.IN.05.02.01	Locates specific information on the web using Boolean search techniques (AND, NOT, OR).	
TL.IN.05.03.01	Knows how to save and retrieve information using a variety of software applications.	

LEVEL 6 TECHNOLOGY

Performance Standards	Standard Description
Communicati	on & Application Tools
TL.CA.06.01.01	Types 20 (twenty) WPM with a 90% degree of accuracy using proper keyboarding position.
TL.CA.06.02.01	Creates simple multimedia projects and/or presentations.
TL.CA.06.03.01	Accesses educational resources on the Internet.
TL.CA.06.04.01	Manages simple operations (installs software, creates folders, selects printer, sets date/time, etc.).
TL.CA.06.05.01	Uses digital video hardware and software to edit and publish simple, short movies for integration into multimedia projects.
TL.CA.06.06.01	Understands that different software applications make the computer perform different functions and can explain when it is appropriate to use word processing, database, spreadsheet, and presentation software.
Ethics & Actio	n
TL.EA.06.01.01	Identifies possible dangers associated with Internet use.
TL.EA.06.02.01	Explains ethical and copyright issues associated with Internet research as a source.
TL.EA.06.03.01	Demonstrates ability to use templates to create various reports and documents.
Hardware & N	etworking Operations
TL.HN.06.01.01	Demonstrates ability to record media properly.
Information G	athering & Organizing
TL.IN.06.01.01	Demonstrates knowledge of current changes in information technologies and the effects those changes have on the workplace and society.
TL.IN.06.02.01	Collaborates with peers, experts, and others using telecommunications and collaborative tools to investigate current problems, issues and information, and develops solutions or products for audiences inside and outside the classroom.
TL.IN.06.03.01	Researches and evaluates the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems.

LEVEL 7 TECHNOLOGY

Performance Standards	Standard Description		
Communication	Communication & Application Tools		
TL.CA.07.01.01	Uses formatting techniques in word processing and spreadsheets (formats text/cells, changes margins, adds bullets, etc.).		
TL.CA.07.02.01	Creates formulas in spreadsheets.		
TL.CA.07.03.01	Creates multimedia projects using a minimum of two forms of media (pictures, sound, video, text, etc.).		
TL.CA.07.04.01	Uses appropriate software independently to support learning.		
TL.CA.07.05.01	Builds a simple database, including fields, graphics, buttons or checkboxes and pop-up menus (address book, portfolio, fundraising record, reading list, etc.).		
TL.CA.07.06.01	Types 30 (thirty) WPM with a proficient degree of accuracy using proper keyboarding position.		
TL.CA.07.07.01	Converts documents to PDF format.		
Ethics & Action	Ethics & Action		
TL.EA.07.01.01	Identifies capabilities and limitations of contemporary and emerging technology resources and assesses the potential of these systems and services to address personal, learning and workplace needs.		
Hardware & N	etworking Operations		
TL.HN.07.01.01	Identifies computer specifications and how they affect computer performance (RAM, processor speed, memory, etc.).		
TL.HN.07.02.01	States the use and basic functions of four various forms of technology (scanner, bar coding, fax machine, slide projectors, copiers, teleconferencing equipment, video, 10 key, cash machines, digital cameras, cell phones and various computer peripherals).		
TL.HN.07.03.01	Uses appropriate technology vocabulary.		
Information G	athering & Organizing		
TL.IN.07.01.01	Begins an academic, electronic portfolio.		
TL.IN.07.02.01	Navigates through the internet, locates valid resources and looks up email addresses.		
TL.IN.07.03.01	Uses internet search engines to locate information for research projects (including various on-line newspapers and periodicals).		

LEVEL 8 TECHNOLOGY

Performance Standards	Standard Description	
Communication & Application Tools		
TL.CA.08.01.01	Types 40 (forty) WPM with a 90% degree of accuracy using proper keyboarding position.	
TL.CA.08.02.01	Combines several functions in word processing (adds pictures, tables and columns to a text document).	
TL.CA.08.03.01	Uses word processing software to compose a variety of documents (newspapers, brochures, posters) using complex formatting techniques (borders, columns, imports, etc.).	
TL.CA.08.04.01	Uses advanced features of Power Point or other multimedia presentation software using a minimum of three forms of media (pictures, sound, video, text, etc.).	
TL.CA.08.05.01	Assists others in choosing appropriate software to support learning.	
Ethics & Action		
TL.EA.08.01.01	Demonstrates ethical use of common computers (file privacy, operating system, e-mail, etc.).	
Hardware & N	etworking Operations	
TL.HN.08.01.01	Explains the basic principles of Local Area Networks and Wide Area Networks.	
TL.HN.08.02.01	Selects and demonstrates how to use four various forms of technology (scanner, bar coding, fax machine, slide projectors, copiers, teleconferencing equipment, video, 10 key, cash machines, digital cameras, and various computer peripherals, etc.).	
TL.HN.08.03.01	Installs a print driver to allow printing from designated computer.	
Information G	othering & Organizing	
TL.IN.08.01.01	Continues to build an academic, electronic portfolio.	
TL.IN.08.02.01	Analyzes advantages and disadvantages of widespread use and reliance on technology in the workplace and in society as a whole.	

LEVEL 9 TECHNOLOGY

Performance Standards	Standard Description
Communication	on & Application Tools
TL.CA.09.01.01	Uses advanced functions to complete a spreadsheet and customize the cell formulas (summation and averaging in real life situations such as tracking student account expenses).
TL.CA.09.02.01	Uses calendar and event/task scheduling software.
TL.CA.09.03.01	Performs mail merges using existing databases.
TL.CA.09.04.01	Creates a web page that includes graphics, tables, and one or more links to another internet site.
Ethics & Action	1
TL.EA.09.01.01	Assesses own technology strengths and weaknesses and sets goals for improvement.
TL.EA.09.02.01	Demonstrates and advocates for legal and ethical behaviors among peers, family and community regarding the use of technology and information.
TL.EA.09.03.01	Demonstrates competency in one or more technological areas of interest by instructing other students in that area.
Hardware & N	etworking Operations
TL.HN.09.01.01	Demonstrates basic trouble shooting strategies such as printing problems (print monitor), hardware/software problems and retrieving information.
TL.HN.09.02.01	Explains port differences (USB, firewire, s-video, ethernet, serial and modem).
TL.HN.09.03.01	Develops a working knowledge of specific technology for one or more interest areas such as programmable calculators, subject-specific software and hardware, CAD/CAM engine analyzers, photo-editing, graphic design, and video/audio tools.
Information G	athering & Organizing
TL.IN.09.01.01	Uses technology tools and resources for managing and communicating personal/professional information (finances, schedules, addresses, purchases, correspondence).
TL.IN.09.02.01	Uses online information resources routinely and efficiently to meet needs for collaboration, research, publications, communications, and productivity.
TL.IN.09.03.01	Completes personal educational and personal electronic portfolio.

LEVEL 10 TECHNOLOGY

Performance Standards	Standard Description		
Communication	Communication & Application Tools		
TL.CA.10.01.01	Teachers others the basic operations of word processing, databases, spreadsheets, multimedia, and Internet access.		
TL.CA.10.02.01	Creates a multimedia project for public presentation using advanced audio-visual techniques.		
TL.CA.10.03.01	Creates a web site incorporating advanced web authoring techniques.		
TL.CA.10.04.01	Creates and manipulates PDF documents for web page application.		
Ethics & Action	Ethics & Action		
TL.EA.10.01.01	Evaluates technology projects of others and assists them in improving their work.		
Hardware & N	etworking Operations		
TL.HN.10.01.01	Identifies communication interface ports (USB, firewire, ethernet, modem, serial, parallel, s-video, RGB, sound input/output, etc.).		
TL.HN.10.02.01	Sets up a workstation (operating system, internet access, and e-mail account) and connects to a server operating system.		
Information G	Information Gathering & Organizing		
TL.IN.10.01.01	Collaborates with peers, experts, and others to contribute to a content-related knowledge base by using technology to compile, synthesize, produce, and disseminate information, models, and other creative works.		
TL.IN.10.02.01	Uses the Internet, AKCIS, or other career resource software to obtain information on post secondary education, service learning, skilled trades, entrepreneurship, employment options, etc.		
TL.IN.10.03.01	Evaluates technology-based options, including distance and distributed education, for lifelong learning.		
TL.IN.10.04.01	Designs a spreadsheet project that uses multiple formulas and graphic features (pie charts, bar graphs and line graphs) to show patterns in real life statistical information.		

LEVEL 11 TECHNOLOGY

Performance Standards	Standard Description		
Communicatio	Communication & Application Tools		
TL.CA.11.01.01	Coordinates a project or event with real life application, using current video conferencing tools.		
Ethics & Action			
TL.EA.11.01.01	Designs and teaches a lesson for a targeted group of students exploring the legal and ethical uses of computers.		
Hardware & Networking Operations			
TL.HN.11.01.01	Identifies the relationships between computer specifications and how they affect computer performance (RAM, processor speed, video RAM, hard drive space).		
TL.HN.11.02.01	Safely opens and identifies the internal components of a computer.		
TL.HN.11.03.01	Builds or rebuilds an operational computer from a supplied set of parts.		

LEVEL 12 TECHNOLOGY

Performance Standards	Standard Description		
Communication	Communication & Application Tools		
TL.CA.12.01.01	Completes an approved University Computer Science course or IT Professional Certification program.		