

Eleventh Grade

Math

Power Verbs

Number, Number Sense and Operations Standard

Compute	Model	Use
Determine	Represent	

Measurement Standard

Determine	Derive	Calculate	Solve
-----------	--------	-----------	-------

Geometry and Spatial Sense Standard

Describe	Identify	Represent	Use
----------	----------	-----------	-----

Patterns, Functions and Algebra Standard

Compare	Identify	Represent	Translate
Describe	Model	Solve	

Data Analysis and Probability Standard

Analyze	Describe	Evaluate	Interpret
Create	Design	Examine	Understand

Eleventh Grade

Math

Key Terms and Concepts

Number, Number Sense and Operations Standard

commutative	matrix addition	quotients
complex numbers	matrix multiplication	scalar multiplication
complex plane	negative exponents	sums
coordinate plane	not commutative	vector addition
differences	problem situation	vector multiplication
fractional exponents	products	
matrices	properties	

Measurement Standard

area	conversions	radian angle
base	degree angle	significant digits
circumference	degree of precision	slant height
composite	density	surface area
three-dimensional	distance	volume
objects	function	
cone	measurement	

Geometry and Spatial Sense Standard

algebraically	locations	translations
cross sections	plane	trigonometric
Law of Cosines	polar coordinates	relationships
Law of Sines	scalar	vector

Eleventh Grade

Math

Key Terms and Concepts

Patterns, Functions and Algebra Standard

3 by 3 systems	iterative process	quadratics with
annuity	line	complex roots
asymptotic behavior	logarithmic equation	radical equation
closed form expression	logarithms	radical expressions
complex roots	matrices	range
compound interest	maximum points	rational functions
conic sections	minimum points	recursive function
constant	no solution	reflection symmetry
domain	n th term	rotation symmetry
elimination	number of roots	trigonometric functions
exponential equation	plane	value
general shape	point	vectors
graphically	polynomial functions	x-axis
graphs	polynomials of	$y = x$
inverse of a function	any degree	y-axis

Data Analysis and Probability Standard

bivariate data	linear transformation	standard deviation
causation	linear trend	standard normal curve
convenience sample	mean	statistical experiment
correlation	median	study
correlation coefficient	mode	summary statistics
data	problem situation	survey
data analysis techniques	random variable	trends
descriptive statistics	randomization	univariate data
expected value	range	validity
function	regression coefficient	variability
generalization	risk	
Least Squares	sampling method	
Regression Line	scatterplot	

Eleventh Grade

Reading/Writing

Power Verbs

Phonemic Awareness, Word Recognition, and Fluency

Fluency continues to develop past the primary grades.

Acquisition of Vocabulary

Analyze Determine Examine Recognize

Reading Process:

Concepts of Print, Comprehension Strategies and Self-Monitoring Strategies

Students should read purposefully and automatically, using the comprehension and self-monitoring strategies outlined in previous grades.

Reading Applications: Informational, Technical and Persuasive Text

Analyze Describe Evaluate
 Critique Distinguish Examine

Reading Applications: Literary Text

Analyze Evaluate Interpret
 Compare Explain Recognize

Writing Processes

Determine Generate Reread
 Establish Proofread Rearrange

Eleventh Grade

Reading/Writing

Power Verbs

Writing Applications

Produce Write

Writing Conventions

Use

Research

Analyze Determine Integrate
Compose Identify

Communication: Oral and Visual

Adjust Critique Demonstrate Vary
Apply Deliver Evaluate

Eleventh Grade

Reading/Writing

Key Terms and Concepts

Phonemic Awareness, Word Recognition, and Fluency

Fluency continues to develop past the primary grades.

Acquisition of Vocabulary

analogical statements	definitional footnote	roots
analogous relationships	denotation	sidebar
Anglo-Saxon	dictionary	subject-area vocabulary (unknown words in science, math, social studies)
antonyms	effect	suffixes
cause	example	synonyms
comparison	glossary	textual feature
complex words	Greek	thesaurus
connotation	Latin	
context	prefixes	
contrast	pronunciations	
definition	restatement	

Reading Process:

Concepts of Print, Comprehension Strategies and Self-Monitoring Strategies

comparing	note taking	reading to gain information
conclusion	prediction	reading to perform a task
contrasting	purpose	recalling
criteria	reading comprehension strategy	scanning
evaluative questions	reading for enjoyment	skimming
inference	reading for literary experience	summarizing
inferential questions	reading on	synthesizing questions
literal questions		
looking back		

Eleventh Grade

Reading/Writing

Key Terms and Concepts

Reading Applications: Informational, Technical and Persuasive Text

accessible	functional documents	sequencing of information
anticipation of possible reader misunderstandings	headers	sequencing of procedures
appeal to authority	implicit instructions	sources
appeal to emotion	invalid inference	stereotyping
appeal to reason	organizational patterns and techniques	syntax
audience	philosophical assumptions	technical manuals
beliefs	propaganda techniques	travel schedules
bias	public documents	unsupported inference
business memoranda	purpose	valid inference
effectiveness of arguments	repetition of ideas	validity of arguments
explicit	rhetorical devices	visual appeal
fallacious reasoning	sequence	word choice
format		workplace documents

Reading Applications: Literary Text

aesthetic purposes	imagery	rhetorical purposes
allegory	individual vs. society	satire
characterization	individual vs. nature	setting
characters' thoughts, words and actions	irony	sounds of language
conflicts	literary periods	style
credibility	literary text	subgenres
diction	motivations	symbolism
figurative language	narrator	theme
freedom vs. responsibility	parody	tone
	plot	universal themes
	point of view	voice

Eleventh Grade

Reading/Writing

Key Terms and Concepts

Writing Processes

action verbs	graphics	purpose
adapting focus	graphs	reference materials
audience	inappropriate slang	repetitive sentence structure
background reading	informal language	resources
body	informational writing	rubric
capitalization	interview	run-on
charts	introduction	sensory detail
checklist	logical sequence	sentence length
clarity	margins	sentence structure
closing sentence	narrative writing	simple sentence
coherence	notes	spacing
colorful modifiers	organizational strategies	spelling
columns	organizational structure	strategy
complex sentence	outlines	style
compound sentence	paragraph	survey
conclusion	parallel sentence structure	tabs
content structure	personal style	thesaurus
conventions	point of view	thesis statement
dictionaries	precise language	tool
drawings	precise vocabulary	transition
edit	pre-writing task	voice
feedback	principles of design	
fragments	punctuation	
grammar		

Eleventh Grade

Reading/Writing

Key Terms and Concepts

Writing Applications

abstract comparisons	divergent interpretations	primary source
abstract concepts	evaluative	proposals
ambiguities	examples	purpose
analytical	expert opinion	reflection
appeal to emotion	formatting techniques	reflective
appeal to logic	functional documents	relative value
arguments	generalizations	relevant perspectives
assertion	informal writings	reliability of sources
audience	(journals, notes and poems)	requests for information
author's use of stylistic devices	informational essays	resumes
beliefs	interpretative	rhetorical devices
biases	judgment	secondary source
cause-effect reasoning	key ideas	sense of closure
clear position	letters of complaint	user-friendly
complexities	memos	validity of sources
context	nuances	viewpoints
controlling idea	personal anecdote	
counterclaims	personal experiences	
	perspective	

Eleventh Grade

Reading/Writing**Key Terms and Concepts**

Writing Conventions

capitalization

indefinite pronouns

parallel structure

punctuation

relative pronouns

spelling

verb tenses

Research

accuracy of sources

authority

citations

complexities in
information

coverage

credibility of sources

discrepancies in
information

electronic resources

inquiry

Internet-based resources

in-text documentation

objectivity

online databases

open-ended questions

publication date

quotations

school library catalogs

sources

style guides

validity

Eleventh Grade

Reading/Writing

Key Terms and Concepts

Communication: Oral and Visual

active listening strategies	emotional appeal	organizing essential information
analogy	enunciation	persuasive presentations
anecdote	expository	persuasive strategies
appeal to authority	eye contact	phrasing
appeal to emotion	formal descriptive presentations	primary sources
appeal to logic	illustrations	problem-solution
appeal to pathos	inflection	quotations
appeal to reason	informal descriptive presentations	reasoning
case studies	informational presentations	relevant evidence
causation	introduction	reliability of sources
cause-effect	key points	repetition
changes in pace	language choice	research
charts	listener bias	rhetorical devices
clarity	logic	secondary sources
coherence	logical and controlled argument	selecting essential information
compare-contrast	logical sequence	speaking techniques
conclusion	monitoring message for clarity	statistics
controlling idea	mood	syntax
counter-arguments	noting cues	tone
delivery style	organizational structure	types of arguments
diagrams		validity of sources
diction		visual materials
distinctive perspective		voice modulation
effectiveness		

Eleventh Grade

Science

Power Verbs

Earth and Space Sciences

Analyze	Describe	Interpret
Conclude	Explain	Use

Life Sciences

Describe	Explain	Predict	Relate
Examine	Investigate	Recognize	Show

Physical Sciences

Describe	Explain
----------	---------

Science and Technology

Explain	Identify	Predict
Explore	Investigate	Research

Scientific Inquiry

Design	Evaluate	Formulate	Summarize
--------	----------	-----------	-----------

Scientific Ways of Knowing

Analyze	Demonstrate	Explain	Research
Apply	Describe	Recognize	

Eleventh Grade

Science

Key Terms and Concepts

Earth and Space Sciences

advection	global weather patterns	particulates
air pollution	heat	phases of the moon
atmosphere	Heliocentric Theory	phenomena
atmospheric currents	historical examples	physical cycles of Earth
biomass	human behavior	planet
biosphere	hurricane	Plate Tectonics Theory
chemical cycles of Earth	hydrosphere	radiation
climate	icecaps	radioactive waste
climatic change	interactions	seasons
conduction	interface	social establishment
context	la Niña	solar energy
convection	lithosphere	solar system
cyclone	melting glaciers	space science
deplete	monsoon	symbols
early Earth	motions of Earth	Theory of Continental
Earth science	natural ecosystems	Drift
Earth's solid crust	nebular cloud	tides
eclipses	normal adjustments of	unexpected findings
el Niño	earth	upper mantle
energy transfers	ocean surface	volcanic activity
finite resources	temperatures	vulnerability
gases	oceanic currents	weather maps
global warming	organisms	

Eleventh Grade

Science

Key Terms and Concepts

Life Sciences

abiotic components	environmental condition	new species
biotic components	environmental factors	non-native species
birth control methods	environmental pollution	overconsumption
birth rates	evolution	pathogens
carrying capacity of a given environment	exponential growth	physical conditions
chemical bonds	fertility rates	politics
chemical condition	food molecules	population distribution
correlate	fossils	population growth
cultural norms	geologic time	radioactive isotopes
death rates	heredity	resource use
decay rates	immigration	rock sequences
different ways humans view the earth	infant mortality rates	speciation
economics	internal environment	stability
ecosystems	linear growth	thermal energy
energy bonds	natural change	
	natural systems	

Physical Sciences

bonding of carbon atoms	electrical use	magnetism
changing magnetic field	energy transformations	mass
disorganized states	food pyramid	molecules
electric charges in motion	fossil fuel combustion	protons
electric field	generators	radioactive isotopes
electric motors	isotopes	single electromagnetic force
	magnetic fields	

Eleventh Grade

Science

Key Terms and Concepts

Science and Technology

active debate	fuel cells	solar fuel
alternative sources of energy	fuels	solar power
biomass	hybrid engines	technology-related challenges
economic costs	nuclear fuel	trade-offs
economics	policies	wind power
environmental impact	politics	
ethics	science-related challenges	
fossil fuel	social enterprises	

Scientific Inquiry

assumptions	critique results	peer review
communicate results	data	scientific inquiry
conclusions	hypotheses	variables
controls	investigation	

Scientific Ways of Knowing

bias	ethical professional behavior	societal opinions
biome data	human-induced hazards	theories
cost-benefit considerations	logically consistent	trade-offs
criteria	natural hazards	traditions of science
	similar phenomenon	

Eleventh Grade

Social Studies

Power Verbs

History

Evaluate Trace

People in Societies

Analyze Explain Identify

Geography

Analyze Evaluate Identify
 Compare Explain

Economics

Describe Explain Identify

Government

Analyze Compare Describe Explain

Citizenship Rights and Responsibilities

Analyze Compare Explain Identify

Social Studies Skills and Methods

Adjust Critique Develop
 Apply Determine Identify

Eleventh Grade

Social Studies

Key Terms and Concepts

History

Constitution	length of terms of	separation of
direct election	elected and	church and state
Electoral College	appointed officials	Supreme Court
free speech	provision	decisions
income tax	reapportionment	
legislative districts	senators	

People in Societies

affirmative action	government program	prejudice
civil rights legislation	immigration laws	racial groups
constitutional	Indian policies	racial integration
amendments	legal protections	religious groups
culture	modifications	segregation policies
discrimination	multicultural diversity	selective service laws
economically	naturalization	socially
ethnic groups	perspectives	voting rights
government policy	politically	work force

Geography

alternative public	international boundaries	toxic waste disposal
policies	land use	values
annexation	park development	zoning
congressional	physical characteristics	
reapportionment	political geography	

Eleventh Grade

Social Studies

Key Terms and Concepts

Economics

abilities	government	public services
allocating	government-enforced controls on prices	purchasing power of money
borrowers	Gross Domestic Product	regressive tax
budgets	incentives	savers
business	indicators	savings
comparative advantage	inflation	scarce resources
Consumer Price Index	interdependence	services
consumers	interest rates	shortages
credit	investments	skills
current value of money	investors	specialization
demand	labor market	supply
economic behavior	philanthropy	surpluses
economic growth	producers	trade
economic system	productive resources	unemployment rate
education levels	progressive tax	workers
exchange rates	proportional tax	
financial institutions	public goods	
goods		

Eleventh Grade

Social Studies

Key Terms and Concepts

Government

accountable	federalism	policy agenda
American democracy	Federalist Papers	political parties
appointments	foreign policy	primary elections
bills of attainder	general elections	privilege
branches of the national government	government institutions	prohibitions
checks and balances	habeas corpus	public good
concurrent powers	impeachment	recall
Declaration of Independence	implied powers	referendum
democratic process	individual rights	reserved powers
domestic policy	individuals	separation of powers
elections	initiative	state governments
Electoral College	interest groups	third parties
ex post facto laws	interpretations	U.S. Constitution
expressed powers	local governments	U.S. federal system
facilitating	media	U.S. government
	natural rights	
	philosophical	

Citizenship Rights and Responsibilities

accepting responsibility	candidates	consequences
active participation in a democracy	changing party affiliation	contemporary
behaving in a civil manner	circumstances	declaring party affiliation
being fiscally responsible	citizen movements	depositing a ballot
Bill of Rights	citizen participation	duties
	civil discourse	Eagle Forum
	Common Cause	general elections

Eleventh Grade

Social Studies

Key Terms and Concepts

Citizenship Rights and Responsibilities (continued)

informed	obtaining a ballot	rights of resident aliens
issues	personal responsibility	role of citizens
jurisdiction	policy process	exercising their rights
legislation	political change	role of judiciary in upholding rights
marking a ballot	primary elections	secured
Mothers Against Drunk Driving	providing public service	serving on juries
National Association for the Advancement of Colored People	public issues	taking action
National Organization for Women	qualifications	voting
	registering to vote	
	responsibilities	
	rights of citizens	

Social Studies Skills and Methods

advocacy groups	letters to the editor	rationale
appropriate tools	logic	research question
compromise	negotiation	resolution of conflicts
conclusions	newsletters	sample size
criteria	persuasion	sponsoring organization
demographics	position	survey data
differences	public displays and handouts	
electronic resources	public policy issue	
issue		