
Tenth Grade

Math

Power Verbs

Number, Number Sense and Operations Standard

Approximate	Connect	Explain
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Measurement Standard

Calculate	Compare	Determine	Explain
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Geometry and Spatial Sense Standard

Construct	Describe	Make	Show
Define	Establish	Perform	Solve
Derive	Identify	Recognize	Test

Patterns, Functions and Algebra Standard

Compare	Describe	Graph	Solve
Define	Explain	Recognize	

Data Analysis and Probability Standard

Analyze	Display	Interpret	Represent
Describe	Explain	Model	
Differentiate	Identify	Provide	

Tenth Grade

Math

Key Terms and Concepts

Number, Number Sense and Operations Standard

arrangements	irrational numbers	symbolic representations
consecutive integers	n th root	verbal representations
factorial notation	number line	
hypotenuse	physical representations	

Measurement Standard

absolute error	inscribed angles	problematic
calculated results	major arcs	relative error
central angles	minor arcs	

Geometry and Spatial Sense Standard

altitude	diameter	outcome of a single motion
angles	equilateral triangles	parallelograms
arcs	exterior angles	plane
centroid	geometric figures	point
chords	geometric properties	points of concurrency
circles	incenter	polygons
circumcenter	inductive reasoning	protractor
circumference	inscribed angle	Pythagorean Theorem
compass	interior angles	quadrilaterals
compositions	kites	radii
congruent figures	lines	radius
conjecture	major arc	rectangles
coordinate plane	median	reflection symmetries
coordinate rules	midsegment	reflections
counterexample	minor arc	relationship
deductive reasoning	orthocenter	

Tenth Grade

Math

Key Terms and Concepts

Geometry and Spatial Sense Standard (continued)

rhombuses	straightedge	triangle similarity
right triangles	theorems	triangles
rotation symmetries	three-dimensional	two-column proof
rotations	figures	two-dimensional figures
sector	translations	undefined
segments	trapezoids	validity
squares	triangle congruence	

Patterns, Functions and Algebra Standard

algebraic representations	line	slope
angle	linear equations	solutions
basic trigonometric functions	linear functions	specified variable
circles	linear inequalities	square root functions
coefficients	negative reciprocals	square roots
cubic	nonlinear equations	tangent function
domain	origin	roots of equations
equations	parallel lines	slope
exponential functions	perpendicular lines	slope-intercept form
$f(x)$ notation	positive x-axis	solutions of equations
formulas	possible number of roots	substitution
function	quadratic functions	symbolic representations
general shape	quadratic relationship	tabular representations
inequalities	range	value
	rational expressions	

Tenth Grade

Math**Key Terms and Concepts**

Data Analysis and Probability Standard

bivariate data	interquartile range	relationship
box-and-whisker plot	measures of center	scatterplots
categorical	measures of center and spread	spreadsheets
charts	odds of an event	statistic
entire population	outliers	statistical measures
geometric probability	parallel box-and- whisker plots	tables
graphical displays	probability of an event	uncertainty
histograms	range	unintentional bias
intentional bias		variables

Tenth Grade

Reading/Writing

Power Verbs

Phonemic Awareness, Word Recognition, and Fluency

Fluency continues to develop past the primary grades.

Acquisition of Vocabulary

Analyze

Define

Determine

Infer

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

Critique

Identify

Assess

Describe

Interpret

Reading Applications: Literary Text

Analyze

Define

Explain

Interpret

Compare

Distinguish

Writing Processes

Determine

Generate

Reread

Establish

Proofread

Rearrange

Tenth Grade

Reading/Writing

Power Verbs

Writing Applications

Produce Write

Writing Conventions

Use

Research

Compile	Determine	Identify
Compose	Evaluate	Integrate

Communication: Oral and Visual

Adjust	Deliver	Evaluate	Interpret
Apply	Demonstrate	Identify	Vary

Tenth 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	dictionary	puns
Anglo-Saxon	figurative language	roots
antonyms	figurative meaning	sidebars
cause and effect	glossary	similes
comparison	Greek	subject-area vocabulary
complex words	historical events	suffixes
connotation	idioms	synonyms
context clues	Latin	unknown words
contrast	literal meaning	
definitional footnotes	metaphors	
denotation	prefixes	

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		

Tenth Grade

Reading/Writing

Key Terms and Concepts

Reading Applications: Informational, Technical and Persuasive Text

appeal to authority	glittering generalities	purpose
appeal to reason	graphs	repetition of ideas
appeal to emotion	headers	rhetorical devices
appendix	implicit argument	scope
audience	instructional materials	search engines
bait and switch	instructions	sequence
bandwagon	job-related materials	speeches
bias	maps	stereotyping
cause-effect	memoranda	subheading
charts	organizational patterns	summary
consumer documents	overlays	syntax
cutaways	perspective	table of contents
details	persuasive techniques	tables
diagrams	point of view	testimonial
emotional word	problem-solution	transfer
repetition	product information	viewpoint
explicit argument	propaganda	warranties
format	public documents	workplace documents

Reading Applications: Literary Text

conflict	literary text	style
dialect	mood	subplots
direct characterization	parallel plots	symbols
dramatic monologue	point of view	theme
genre	rhythm	tone
indirect characterization	setting	traits
irony	soliloquy	universal themes
literary techniques	sound devices	

Tenth Grade

Reading/Writing

Key Terms and Concepts

Writing Processes

action verbs	feedback	principles of design
audience	focus	punctuation
background reading	fragments	purpose
body	grammar	reference materials
capitalization	graphics	repetitive sentence structure
charts	graphs	resources
checklist	informal language	rubric
clarity	informational writing	run-ons
clear thesis statement	interviews	sensory details
closing sentence	introduction	simple sentence
coherent whole	logical sequence	slang
colorful modifiers	margins	spacing
columns	narrative writing	spelling
complex sentence	notes	style
compound sentence	organizational strategies	surveys
conclusion	outline	tabs
consistency	paragraph form	thesaurus
content structure	parallel structure	topic sentence
delete	personal style	voice
dictionary	point of view	
drawings	precise language	
effective transitions	pre-writing tasks	

Tenth Grade

Reading/Writing

Key Terms and Concepts

Writing Applications

action	informal writings (journals, notes and poems)	prior knowledge
audience		purpose
bibliographies	informational essays	relevant questions
business letters	irrelevant information	sense of closure
context	job applications	sources of information
document sources	judgments	specific references
engaging plot	letters to the editor	suspense
extraneous details	perspective	tension
inconsistencies	persuasive compositions	

Writing Conventions

capitalization	main clause	series
emphasis	modifiers	spelling conventions
gerund phrase	parallel structure	subordinate clause
infinitive phrase	participial phrase	
juxtaposed	punctuation	

Research

accuracy of sources	electronic resources	publication date
appropriate sources	inquiry	relevant information
authority	Internet-based resources	school library catalogs
central ideas	narrow the focus	style guides
citations	objectivity	validity
coverage	online databases	
credibility of the author	open-ended questions	

Tenth Grade

Reading/Writing

Key Terms and Concepts

Communication: Oral and Visual

active listening strategies	emotional appeal	persuasive strategies
analogies	enunciation	position
anecdotes	expository	primary source
appeals to authority	eye contact	problem-solution
appeals to emotion	fallacies of reasoning	quotations
appeals to reason	formal descriptive presentations	reasoning
arguments	hidden agendas	relevant evidence
authority	illustrations	repetition
biased material	inflection	research
case studies	informal descriptive presentations	rhetorical devices
cause-effect	informational presentations	secondary source
changes in pace	listener bias	selecting essential information
charts	logical argument	slanted material
common organizational structures	logical sequence	speaker's choice of delivery styles
compare-contrast	media messages	speaker's choice of language
consistent organizational structure	monitoring message for clarity	speaking techniques
controlled argument	noting cues	statistics
controlling idea	organizing essential information	thesis
counter-arguments	persuasive presentations	voice modulation
credibility of the speaker		
diagrams		

Tenth Grade

Science

Power Verbs

Earth and Space Sciences

Describe	Explain	Summarize
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Life Sciences

Analyze	Describe	Illustrate	Relate
Compare	Explain	Recognize	Use
Conclude			

Physical Sciences

No indicators present for this standard.

Science and Technology

Cite	Describe	Explain
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Scientific Inquiry

Draw conclusions	Present	Use mathematical models
Explain	Research	

Scientific Ways of Knowing

Describe	Discuss	Investigate	Recognize
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Tenth Grade

Science

Key Terms and Concepts

Earth and Space Sciences

biogeochemical cycles	fossil correlation	oxygen content
biomes	geographic features	pest control
carbon cycles	geographic locations	quality of life
chemical fertilizers	geologic time	radiometric dating
climate patterns	geologic time scales	rainfall
climatic zone	global warming	resources
deciduous forest	lake effect snow	rock sequences
depletion of resources	legume rotation crops	temperature
Earth's early atmosphere	mid-latitude	tornado alley
energy pyramids	climatic zone	tropical hurricanes
exponential	natural change	urban growth
population growth	nitrogen cycles	waste disposal
food webs	organisms	weather patterns

Life Sciences

abiotic	carbohydrates	chloroplast
abundance	carbon	chromosome
adaptation	carrying capacity	cilia
adaptive radiation	cell differentiation	cloning
advantaged offspring	cell division	competition
advantageous	cell membrane	complex multicellular
characteristics	cell organelles	organisms
alleles	cell wall	cyclic fluctuations
biological classification	cells	differences
biological evolution	cellular processes	disposal of wastes
biologists	cellular respiration	dissipated
biotechnology	Charles Darwin	distribution
biotic	chemical elements	diversity
body cells	chemosynthesis	DNA

Tenth Grade

Science

Key Terms and Concepts

Life Sciences (continued)

dominant traits	genetic variation	natural disasters
ecosystems	genetically modified food	natural selection
emerging scientific issues	germ theory	nitrogen
emigration	germs	non-Mendelian genetics
energy	groups	nonsustainable agriculture
energy production	growth	nucleic acids
energy pyramids	hierarchy	nucleus
energy transfers	historical scientific developments	one-celled organisms
environmental conditions	homeostasis	organic molecules
environmental quality	hydrogen	organism
equilibrium	immigration	originated
eukaryotic cells	inadvertently	oxygen
evolution	independent assortment	past life forms
evolutionary mechanisms	inheritance	phosphorus
evolutionary relationships	inherited characteristics	photosynthesis
evolutionary thought	interrelatedness	physical environment
fermentation	Jean-Baptiste Lamarck	predation
flagella	jumping genes	pre-existing cells
food webs	life processes	prokaryotic cells
fossil record	lipids	protein synthesis
function	living systems	proteins
gene frequency	living things	reacting to the environment
genes	matter	recessive traits
genetic composition	Mendelian genetics	recycle
genetic drift	microorganisms	reproduce
genetic research	mitochondria	reproduction
	movement	scientific establishment
	mutation	

Tenth Grade

Science

Key Terms and Concepts

Life Sciences (continued)

scientific explanation	structure	transportation of molecules
segregation	sulfur	undirected variation
sex cells	survival value	unexpected findings
sex-linked traits	survive	unity
similarities	sustainable agriculture	variation
simple organisms	synthesis	viruses
space	synthesis of new molecules	weather
specialized cells	technology	
species	thermal energy	
stem cell research		

Physical Sciences

No indicators present for this standard.

Science and Technology

constraints	human problems	replaced
device	maintained	scientific advances
disposed of	manufactured	scientific inquiry
emerging technologies	natural world	sell
evaluating a design	operated	take care of
human needs	process	technology

Tenth Grade

Science

Key Terms and Concepts

Scientific Inquiry

accurate data	graphs	safety precautions
analyze	inquiries	scientific data
available technology	logic	scientific explanation
clear language	maps	scientific findings
conducting scientific investigations	mathematical models	scientific knowledge
designing scientific investigations	MSDS	scientific principles
evidence	natural phenomena	supported
eyewash	OSHA	tables
goggles	predict	ventilation
	rejected	
	revised	

Scientific Ways of Knowing

animal-based research	interpretation of data	response to criticism
continuing investigation	measurement	rigid guidelines
dynamic body of knowledge	new disciplines	science
ethical considerations	observation	systematic method
experimentation	open communication	theory building
explanations of phenomena	process of science	value of rival theories
hypothesis testing	professional standards and laws	voluntary human subjects
informed consent	questioning	
	research	

Tenth Grade

Social Studies

Power Verbs

History

Analyze	Explain	Trace
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People in Societies

Analyze	Describe	Explain
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Geography

Analyze	Describe	Explain
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Economics

Analyze	Demonstrate	Evaluate	Explain
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Government

Examine	Explain
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Citizenship Rights and Responsibilities

Analyze	Describe	Explain
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Social Studies Skills and Methods

Analyze	Critique	Determine
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Tenth Grade

Social Studies

Key Terms and Concepts

History

1920s	domestic developments	minorities
1930s	Dust Bowl	modernization of agriculture
advocates	Far East	monopolies
African-American migration	Fourteen Points	music
American Federation of Labor	goals	nativism
antitrust legislation	Great Depression	New Deal
antiwar protest	Harlem Renaissance	nineteenth century
art	home front	North
Berlin Blockade	immigration	organizations
big business	immigration patterns	Pearl Harbor
<i>Brown v. Board of Education</i>	immigration restrictions	populism
business regulation	industrial mobilization	postwar prosperity
Caribbean	industrialization	progressivism
Central America	internment of Japanese-Americans	protest
change	isolationism	public schooling
child labor	Knights of Labor	race riots
civil rights movement	Korean War	Red Scare
Cold War	Ku Klux Klan	reemergence
communist containment	labor force	reform movements
Congress of Industrial Organizations	labor organizations	Roaring Twenties
consequences	laissez-faire policies	social unrest
conservation	League of Nations	South
controversies	leisure	South Pacific
counterculture	linkages	space race
Cuban Missile Crisis	literature	Spanish-American War
culture	Marshall Plan	standard of living
	McCarthyism	stock market crash of 1929
	middle class	

Tenth Grade

Social Studies

Key Terms and Concepts

History (continued)

stock market speculation	unregulated working conditions	women's right to vote
tactics	urban reforms	Woodrow Wilson
Treaty of Versailles	urbanization	workforce
Truman Doctrine	Vietnam War	world power
twentieth century	war effort	World War I
U.S. foreign policy	women's liberation	World War II
U.S. imperialism		

People in Societies

African-American	labor practices	National Organization for Women
American Indian	language	perspectives
American Indian Movement	Latino	political action groups
art	legalized discrimination	political affiliation
cultural groups	literature	race
education system	media	racial equality
gender equality	music	religion
housing patterns	National Association for the Advancement of Colored People	status of minorities
immigration		
Jim Crow		

Geography

centers of industry and technology	geographic regions	suburbanization
characteristics	immigration	urban areas
economic activities	industrialization	urbanization
farmland	perceptions	wilderness
geographic processes	post-industrialization	
	productive resources	

Tenth Grade

Social Studies

Key Terms and Concepts

Economics

antitrust legislation	federal government	specialization
business organizations	Federal Reserve System	taxes
environmental regulations	Great Depression	trade
farm organizations	interdependence	U.S. economy
	labor unions	World War II

Government

amendments	<i>Plessy v. Ferguson</i>	Supreme Court decisions
<i>Brown v. Board of Education</i>	<i>Regents of the University of California v. Bakke</i>	Twenty-Sixth Amendment
Nineteenth Amendment		

Citizenship Rights and Responsibilities

African-Americans	educational policy	national security
application	environmental legislation	political parties
artists	equal opportunity	public opinion
business regulation	extension of suffrage	public safety
civil disobedience	immigrants	Red Scare
civil rights legislation	intellectuals	slander
civil rights movement	interest groups	student protests
clear and present danger	labor legislation	Vietnam War
compelling government interest	libel	women's suffrage movement
conscientious objectors	lobbyists	World War I
consequences	McCarthy Era	
criteria	media	
dissent	military policy	

Tenth Grade

Social Studies

Key Terms and Concepts

Social Studies Skills and Methods

accuracy	issues	stereotypes
circumstances	persuasive argument	thesis
consistency	position	writer
credibility of sources	qualifications	
credible sources	reputation	