

Art & Science: A Curriculum for K-12 Teachers

Standards Charts

California Science Content Standards

Content Standards	Insect Anatomy	Cast from Life	Drawn to Biology	Stars in Space	Capturing Light	Magnificent Microscope	Finding Balance	Medieval Natural Resources	Fire, Water, Earth	Fighting Corrosion	Periodic Pigments	Scientific Method
Kindergarten												
Physical Science 1.a								Х				
Life Science 2.a	Х	Х	Х									
Life Science 2.c	Х		Х									
Investigation & Experimentation 4.a	Х							Х				
Investigation & Experimentation 4.b			Х					Х				
Investigation & Experimentation 4.c			Х									
Investigation & Experimentation 4.d	Х		Х									
Investigation & Experimentation 4.e	Х		Х					Х				
Grade 1												
Physical Science 1.b									Х			
Life Science 2.a	X	Х										
Life Science 2.b			Х									
Life Science 2.c	Х		Х									
Investigation & Experimentation 4.a	Х		Х									
Grade 2												
Physical Science 1.c, e							Х					
Life Science 2.b	Х											

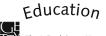
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Life Science 2.d	Х		Х									
Earth Science 3.a								Х				
Earth Science 3.e								Х	Х			
Investigation & Experimentation 4.b						Х						
Investigation & Experimentation 4.c			Х									
Investigation & Experimentation 4.d								Х				
Investigation & Experimentation 4.f			Х									
Investigation & Experimentation 4.g			X									
Grade 3												
Physical Science 1.f									Х			
Physical Science 1.g										Х	Х	
Physical Science 2.a–d					Х							
Life Science 3.a	Χ											
Life Science 3.b	X	X										
Earth Science 4.a				Х								
Investigation & Experimentation 5.b, d, e											Х	Х
Grade 4												
Life Science 2.b		Х										
Investigation & Experimentation 6.a, c											Х	Х
Grade 5												
Physical Science 1.a											Х	
Physical Science 1.c									_	Х		

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Physical Science 1.e						Х						
Physical Science 1.f											Х	
Investigation & Experimentation 6.a	Х		Х	Х								Х
Investigation & Experimentation 6.e											Х	Х
Investigation & Experimentation 6.g				Х								Х
Investigation & Experimentation 6.h											Х	Х
Grade 6 Heat 3.c									Х			
Ecology 5.a, b, c, e		Х							^			
Resources 6.b								Х				
Resources 6.c								Х			Х	
Investigation & Experimentation 7.b						Х					X	Х
Investigation & Experimentation 7.e											Х	Х
Grade 7												
Structure & Function in Living Systems 5.a, c	Х											
Physical Principles in Living Systems 6.b					Х							
Physical Principles in Living Systems 6.d					X	Х						
Physical Principles in Living Systems 6.f					Х							
Investigation & Experimentation 7.a	Х					Х				Х	Х	Х

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Investigation & Experimentation 7.b	Х			Х								Х
Investigation & Experimentation 7.c										Х	Х	Х
Investigation & Experimentation 7.d				Х								Х
Grade 8												
Forces 2.c, e, f							Х					
Structure of Matter 3.b, f										Х		
Earth in the Solar System 4.a, b				Х								
Reactions 5.a, c											Χ	
Grades 9-12												
Physics: Motions & Forces 1.d							X					
Physics: Waves 4.f					Х							
Chemistry: Chemical Bonds 2.c, h											Х	
Chemistry: Conservation of Matter and Stoichiometry 3.b, c, d											Х	
Chemistry: Conservation of Matter and Stoichiometry 3.g										×	Х	
Chemistry: Chemical Thermodynamics 7.c									Х			
Biology/Life Sciences: Cell Biology 1.a						Х						
Biology/Life Sciences: Genetics 2.a–g			Х									



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Biology/Life Sciences: Genetics 3.a, b			Х									
Biology/Life Sciences: Genetics 4.a–e			Х									
Biology/Life Sciences: Genetics 5.a–c			X									
Biology/Life Sciences: Ecology 6.a, e		Х										
Earth Sciences: Earth's Place in the Universe 2.a–d, f				Х								
Earth Sciences: California Geology 9.a								X				
Investigation & Experimentation 1.a						Х						Х



California Visual Arts Content Standards

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Kindergarten												
Artistic Perception 1.1	Х	Х				Х						
Artistic Perception 1.2			Х				Х	Х	Х			
Artistic Perception 1.3	Х		Х	Х		Х			Х			
Creative Expression 2.1				Х		Х						
Creative Expression 2.2		Х				Х	Х		Х			
Creative Expression 2.6		Х		Х		Х			Х			
Creative Expression 2.7		Х					Х		Х			
Historical Cultural Context 3.1		Х		Х		Х		Х	Х			
Historical Cultural Context 3.2								Х				
Historical & Cultural Context 3.3				Х								
Aesthetic Valuing 4.2	Х	Х	Х	Х		Х	Х	Х	Х			
Connections, Relationships, Applications 5.4		×	Х	X				Х	X			
Grade 1												
Artistic Perception 1.1		Х	Х			Х						
Artistic Perception 1.3	Х	Х	Х	Х		Х			Х			
Creative Expression 2.1									Х			
Creative Expression 2.3		Χ					Χ		Χ			
Creative Expression 2.4	Χ	Χ		Х					Х			
Creative Expression 2.5		Х					Х					
Creative Expression 2.7									Х			
Creative Expression 2.8	Х		Х				Х					
Historical & Cultural Context 3.1		Х		Х		×		Х				
Historical & Cultural Context 3.2	Х		Х					Х	Х			

Education

The I Paul Cetty Museum

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Aesthetic Valuing 4.1		Х										
Connections, Relationships, Applications 5.4									Х			
Grade 2												
Artistic Perception 1.1		Х				Х		X				
Artistic Perception 1.3	Х	Х	Х	Х		Х			Х			
Creative Expression 2.1		Χ										
Creative Expression 2.2		Х		Х			Х	Х	Х			
Creative Expression 2.5	Х											
Historical & Cultural Context 3.2		Х		Х		Х		Х				
Aesthetic Valuing 4.4	Х		Х									
Grade 3												
Artistic Perception 1.2	Х										Х	
Artistic Perception 1.3								Х				
Artistic Perception 1.4												Х
Artistic Perception 1.5	Χ	Χ	Χ	Х	Х	Х			Х		Х	Х
Creative Expression 2.4	Х		Х					Х			Х	
Creative Expression 2.5												Х
Aesthetic Valuing 4.1												Х
Connections, Relationships, Applications 5.2										X		
Connections, Relationships, Applications 5.3								Х				
Grade 4												
Artistic Perception 1.2											Х	
Artistic Perception 1.5	Χ	Χ	Х	Х	Χ	Х			Х		Х	Х
Creative Expression 2.1	Х										Х	
Creative Expression 2.2						_	Х					

The J. Paul Getty Museum

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Creative Expression 2.3		Х							Х			
Creative Expression 2.7								Х				
Grade 5												
Artistic Perception 1.3		Х										Х
Historical and Cultural Context 3.1										Х		Х
Historical and Cultural Context 3.4				Х	×			Х				
Aesthetic Valuing 4.3					Χ							
Aesthetic Valuing 4.4		Χ										
Grade 6												
Artistic Perception 1.2					Х			Х			Х	Х
Artistic Perception 1.4		Х					Х					Х
Creative Expression 2.1	Х		Х		Х	Х					Х	
Creative Expression 2.3	Х		Х			Х					Х	
Creative Expression 2.4		Х		Х			Х	Х	Х		Х	
Creative Expression 2.6				Х								
Historical and Cultural Context 3.1				Х								
Historical and Cultural Context 3.2				х								Х
Aesthetic Valuing 4.1				Х	Х	Х		Х	Х	Х	Х	Х
Aesthetic Valuing 4.4				Х								
Grade 7												
Artistic Perception 1.1	Х	Х	Х			Х			Х		Х	
Artistic Perception 1.3	Х		Х								Х	
Creative Expression 2.4								Х			Х	
Creative Expression 2.6				Х	Χ							
Historical & Cultural Context 3.2												Х
Aesthetic Valuing 4.2			_			Х	Х	Х	Х			Х
Aesthetic Valuing 4.4					Х							

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Connections, Relationships, Applications 5.2								Х				
Connections, Relationships, Applications 5.3					Х							
Connections, Relationships, Applications 5.4			Х							×		X
Grade 8												
Artistic Perception 1.1	Х	Х	Х		Х	Х	Х	X	Х	Х	Х	Χ
Artistic Perception 1.2					Х							
Artistic Perception 1.4	Χ											
Creative Expression 2.1				Х	Х							
Creative Expression 2.3				Χ	Χ							
Creative Expression 2.4							Х					
Creative Expression 2.6							Х		Х			
Aesthetic Valuing 4.3				Х	Х		Х		Х	Х		
Aesthetic Valuing 4.4					Х							
Grade 9-12												
Artistic Perception 1.1	Χ	Χ	Χ	Х	Х	Х	Х		Х			Χ
Artistic Expression 1.4		Х										
Artistic Expression 1.6				Х								
Creative Expression 2.1							Х					
Creative Expression 2.3				Х								
Creative Expression 2.4			Х			Х					Х	
Historical & Cultural Context 3.2				Х	Х							
Historical & Cultural Context 3.3				Х				Х			Х	Х
Aesthetic Valuing 4.4					X							



California's Common Core State Standards for English Language Arts

Content Standards	Stars in Space
K–5	
College and Career Readiness Anchor Standard for Reading 1	X
College and Career Readiness Anchor Standard for Reading 7	X
College and Career Readiness Anchor Standard for Reading 8	X
College and Career Readiness Anchor Standard for Reading 10	X
College and Career Readiness Anchor Standard for Writing 3	X
College and Career Readiness Anchor Standard for Writing 5	X
College and Career Readiness Anchor Standard for Speaking and Listening 1	X
College and Career Readiness Anchor Standard for Speaking and Listening 5	X

National Science Content Standards

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Grades K-4												
Science as Inquiry	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Life Science	Х	Х	Х			Х						Х
Earth & Space Science				Х				Х	Х			
Science & Technology					Х	Х						Х
History of Nature & Science						Х					Х	Х
Grades 5–8												
Science as Inquiry	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Physical Science					Х		Х		Х	Х	Х	
Life Science	Х	Х	Х			Х						Х
Earth & Space Science				Х				Х				
Science & Technology						Х				Х		Х
Personal & Social Perspectives		Х				×		Х		Х		Х
History & Nature of Science				Х		Х		Х		Х	Х	Х
Grades 9-12												
Science as Inquiry	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Physical Science					Х		Х		Х	Х	Х	
Earth & Space Science				Х				Х				
Science & Technology						Х				Х		X
Personal & Social Perspectives		Х						Х				Х
History & Nature of Science				Х		Х		Х		Х	Х	Х



National Visual Arts Content Standards

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Grades K-4												
Understanding and Applying Media, Techniques, and Processes	Х	Х	Х	Х	Х	Х	X	Х	Х		Х	
Using Knowledge of Structures and Functions	Х	Х			Х	Х	Х		X			Х
Choosing and Evaluating a Range of Subject Matter, Symbols, and Ideas	Х	Х			Х		Х	Х	Х	X		
Understanding the Visual Arts in Relation to History and Cultures				X	X	Х		Х	X		Х	×
Reflecting Upon and Assessing the Characteristics and Merits of Their Work and Work of Others	Х								x			
Making Connections Between Visual Arts and Other Disciplines	Х	Х	Х	Х	х	х	х	х	X	х	Х	Х
Grades 5–8												
Understanding and Applying Media, Techniques, and Processes		X	×	Х	Х	Х	×	Х	Х		X	
Using Knowledge of Structures and Functions				Х	Х	Х			Х			
Choosing and Evaluating a Range of Subject Matter, Symbols, and Ideas	Х		Х	Х	Х	Х	×	Х	Х	Х		

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Understanding the Visual Arts in Relation to History and Cultures		Х	Х	Х	Х	Х		Х	Х		Х	Х
Reflecting Upon and Assessing the Characteristics and Merits of Their Work and the Work of Others									X			X
Making Connections Between Visual Arts and Other Disciplines	Х	Х	Х	×	X	Х	Х	Х	X	×	×	X
Grades 9-12												
Understanding and Applying Media, Techniques, and Processes	Х	Х	X	Х	Х	Х	X	Х	Х		Х	
Using Knowledge of Structures and Functions		Х		Х	Х		Х					
Choosing and Evaluating a Range of Subject Matter, Symbols, and Ideas	X			х		Х	×		Х	X		Х
Understanding the Visual Arts in Relation to History and Cultures			Х	×	X	Х		Х	X		×	X
Reflecting Upon and Assessing the Characteristics and Merits of Their Work and the Work of Others			Х		Х				Х			Х
Making Connections Between Visual Arts and Other Disciplines	Х		Х	х	×	Х	Х	Х	Х	Х	Х	×

National English Language Arts Standards

Content Standards (Developed by the National Council of Teachers of English and the International Reading Association)	Stars in Space	
K-5		
Standard 1: Students read a wide range of print and non-print texts to build an understanding of texts, of themselves, and of the cultures of the United States and the world; to acquire new information; to respond to the needs and demands of society and the workplace; and for personal fulfillment. Among these texts are fiction and nonfiction, classic and contemporary works.	Х	
Standard 4: Students adjust their use of spoken, written, and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes	Х	
Standard 6: Students apply knowledge of language structure, language conventions (e.g., spelling and punctuation), media techniques, figurative language, and genre to create, critique, and discuss print and non-print texts.	х	

