

	Mission Patch	Choose Position	Eros & Mathilde	NEAR Spacecraft
GRADES 9-12 STANDARDS				
UNIFYING CONCEPTS AND PROCESSES				
Systems, order, and organization			✓	
Evidence, models, and explanation			✓	
Change, constancy, and measurement			✓	
Evolution and equilibrium				
Form and function	✓			✓
SCIENCE AS INQUIRY				
Abilities necessary to do scientific inquiry			✓	
Understandings about scientific inquiry			✓	
PHYSICAL SCIENCE				
Structure of atoms				
Structure and properties of matter			✓	
Chemical reactions				
Motion and forces	✓		✓	✓
Conservation of energy and increase in disorder				
Interactions of energy and matter				
LIFE SCIENCE				
The cell				
Molecular basis of heredity				
Biological evolution				
Interdependence of organisms				
Matter, energy, and organization in living systems				
Behavior of organisms				
EARTH AND SPACE SCIENCE				
Energy in the earth system				
Geochemical cycles				
Origin and evolution of the earth system			✓	
Origin and evolution of the universe			✓	
SCIENCE AND TECHNOLOGY				
Abilities of technological design		✓		✓
Understandings about science and technology	✓	✓		✓
SCIENCE IN PERSONAL AND SOCIAL PERSPECTIVES				
Personal and community health				
Population growth				
Natural resources				
Environmental quality				
Natural and human-induced hazards			✓	
Science and technology in local, national, and global challenges	✓	✓		✓
HISTORY AND NATURE OF SCIENCE				
Science as a human endeavor	✓	✓	✓	✓
Nature of scientific knowledge			✓	
Historical perspectives				

	Why Study Asteroids?	Composition of Asteroids	Gravity	Rockets
GRADES 9-12 STANDARDS				
UNIFYING CONCEPTS AND PROCESSES				
Systems, order, and organization				
Evidence, models, and explanation	✓	✓	✓	
Change, constancy, and measurement		✓	✓	
Evolution and equilibrium				
Form and function				
SCIENCE AS INQUIRY				
Abilities necessary to do scientific inquiry	✓			
Understandings about scientific inquiry	✓			
PHYSICAL SCIENCE				
Structure of atoms				
Structure and properties of matter		✓		✓
Chemical reactions				
Motion and forces			✓	✓
Conservation of energy and increase in disorder				
Interactions of energy and matter				✓
LIFE SCIENCE				
The cell				
Molecular basis of heredity				
Biological evolution				
Interdependence of organisms				
Matter, energy, and organization in living systems				
Behavior of organisms				
EARTH AND SPACE SCIENCE				
Energy in the earth system				
Geochemical cycles				
Origin and evolution of the earth system	✓	✓	✓	
Origin and evolution of the universe	✓	✓		
SCIENCE AND TECHNOLOGY				
Abilities of technological design				✓
Understandings about science and technology				✓
SCIENCE IN PERSONAL AND SOCIAL PERSPECTIVES				
Personal and community health				
Population growth				
Natural resources				
Environmental quality				
Natural and human-induced hazards				
Science and technology in local, national, and global challenges	✓			✓
HISTORY AND NATURE OF SCIENCE				
Science as a human endeavor	✓			✓
Nature of scientific knowledge	✓		✓	✓
Historical perspectives	✓		✓	

	Trajectory	Impacts	Kepler's Laws	Doppler Effect
GRADES 9-12 STANDARDS				
UNIFYING CONCEPTS AND PROCESSES				
Systems, order, and organization				
Evidence, models, and explanation	✓	✓	✓	✓
Change, constancy, and measurement	✓	✓	✓	✓
Evolution and equilibrium				
Form and function				
SCIENCE AS INQUIRY				
Abilities necessary to do scientific inquiry		✓		
Understandings about scientific inquiry		✓		
PHYSICAL SCIENCE				
Structure of atoms				
Structure and properties of matter		✓		
Chemical reactions				
Motion and forces	✓	✓	✓	✓
Conservation of energy and increase in disorder		✓		
Interactions of energy and matter		✓		
LIFE SCIENCE				
The cell				
Molecular basis of heredity				
Biological evolution				
Interdependence of organisms				
Matter, energy, and organization in living systems				
Behavior of organisms				
EARTH AND SPACE SCIENCE				
Energy in the earth system				
Geochemical cycles				
Origin and evolution of the earth system	✓	✓	✓	
Origin and evolution of the universe		✓		✓
SCIENCE AND TECHNOLOGY				
Abilities of technological design	✓		✓	
Understandings about science and technology	✓		✓	
SCIENCE IN PERSONAL AND SOCIAL PERSPECTIVES				
Personal and community health				
Population growth				
Natural resources				
Environmental quality				
Natural and human-induced hazards		✓		
Science and technology in local, national, and global challenges	✓		✓	
HISTORY AND NATURE OF SCIENCE				
Science as a human endeavor	✓			
Nature of scientific knowledge	✓	✓	✓	✓
Historical perspectives			✓	✓

	Nature of Light	Atomic Spectra
GRADES 9-12 STANDARDS		
UNIFYING CONCEPTS AND PROCESSES		
Systems, order, and organization		
Evidence, models, and explanation	✓	✓
Change, constancy, and measurement	✓	✓
Evolution and equilibrium		
Form and function		
SCIENCE AS INQUIRY		
Abilities necessary to do scientific inquiry		
Understandings about scientific inquiry		
PHYSICAL SCIENCE		
Structure of atoms		✓
Structure and properties of matter	✓	✓
Chemical reactions		✓
Motion and forces	✓	✓
Conservation of energy and increase in disorder		
Interactions of energy and matter	✓	✓
LIFE SCIENCE		
The cell		
Molecular basis of heredity		
Biological evolution		
Interdependence of organisms		
Matter, energy, and organization in living systems		
Behavior of organisms		
EARTH AND SPACE SCIENCE		
Energy in the earth system		
Geochemical cycles		
Origin and evolution of the earth system		
Origin and evolution of the universe	✓	✓
SCIENCE AND TECHNOLOGY		
Abilities of technological design		✓
Understandings about science and technology		✓
SCIENCE IN PERSONAL AND SOCIAL PERSPECTIVES		
Personal and community health		
Population growth		
Natural resources		
Environmental quality		
Natural and human-induced hazards		
Science and technology in local, national, and global challenges		✓
HISTORY AND NATURE OF SCIENCE		
Science as a human endeavor		
Nature of scientific knowledge	✓	✓
Historical perspectives		