

## NCTM – National Mathematics Standards Correlation Report for Math & the Cosmos\* Multimedia Lessons

	Multimedia Lessons				
<b>Standards for Grades 6-8</b>	Graphs	Angles	Scientific Notation	Trigonometry	Motion
<b>Number and Operations</b>					
-Understanding numbers, ways of representing numbers, relationships among numbers, and number systems			<b>x</b>		
<b>Geometry</b>					
-Analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships		<b>x</b>			
-Specify locations and describe spatial relationships using coordinate geometry and other representational systems	<b>x</b>				
-Use visualization, spatial reasoning, and geometric modeling to solve problems		<b>x</b>			
<b>Measurement</b>					
-Understand measurable attributes of objects and the units, systems, and processes of measurement		<b>x</b>			
-Apply appropriate techniques, tools, and formulas to determine measurements		<b>x</b>			
<b>Connections</b>					
-recognize and apply mathematics in contexts outside of mathematics	<b>x</b>				
<b>Standards for Grades 9-12</b>	Graphs	Angles	Scientific Notation	Trigonometry	Motion
<b>Numbers and Operations</b>					
Understanding numbers, ways of representing numbers, relationships among numbers, and number systems			<b>x</b>		
<b>Algebra</b>					
Understand patterns, relations, and functions					<b>x</b>
<b>Geometry</b>					
Analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships				<b>x</b>	
-Specify locations and describe spatial relationships using coordinate geometry and other representational systems	<b>x</b>				
Use visualization, spatial reasoning, and geometric modeling to solve problems	<b>x</b>				
<b>Connections</b>					
recognize and apply mathematics in contexts outside of mathematics				<b>x</b>	

## NCTM – National Mathematics Standards Correlation Report for Math & the Cosmos\* Textbook

<b>Standards for Grades 6-8</b>	Observing the Sky	Mapping the Stars	Understanding the Motions of Stars and Planets
<b>Geometry</b>			
Specify locations and describe spatial relationships using coordinate geometry and other representational systems	<b>x</b>	<b>x</b>	
<b>Connections</b>			
Recognize and apply mathematics in contexts outside of mathematics	<b>x</b>	<b>x</b>	
<b>Representation</b>			
Create and use representations to organize, record, and communicate mathematical ideas		<b>x</b>	
Use representations to model and interpret physical, social, and mathematical phenomena.	<b>x</b>	<b>x</b>	
<b>Standards for Grades 9-12</b>	Observing the Sky	Mapping the Stars	Understanding the Motions of Stars and Planets
<b>Algebra</b>			
Understand patterns, relations, and functions		<b>x</b>	
Represent and analyze mathematical situations and structures using algebraic symbols		<b>x</b>	
<b>Geometry</b>			
-Specify locations and describe spatial relationships using coordinate geometry and other representational systems	<b>x</b>	<b>x</b>	
Use visualization, spatial reasoning, and geometric modeling to solve problems	<b>x</b>	<b>x</b>	
<b>Measurement</b>			
Apply appropriate techniques, tools, and formulas to determine measurements			<b>x</b>
<b>Data Analysis and Probability</b>			
Select and use appropriate statistical methods to analyze data	<b>x</b>	<b>x</b>	
<b>Representation</b>			
Create and use representations to organize, record, and communicate mathematical ideas		<b>x</b>	
Use representations to model and interpret physical, social, and mathematical phenomena.	<b>x</b>	<b>x</b>	