



SDO Solar Modules NGSS Physical Sciences		NGSS Middle School (6-8) Standards		
		MS-PS2 Motion and Stability: Forces and Interactions	MS-PS4 Waves and their Applications in Technologies for Information Transfer	
SDO Solar Module Topics	Solar Module Activity Objectives	Disciplinary Core Ideas		
		PS2.B: Types of Interactions	PS4.A: Wave Properties	PS4.B: Electromagnetic Radiation
Module 1 What are the features of the Sun?	A. Structure of the Sun B. Observing the Sun C. Light Energy			1C (MS-PS4-2)
Module 2 How and why do we study the Sun?	A. Electromagnetic Spectrum B. Magnetism C. Spectroscopy	2A (MS-PS2-3) 2B (MS-PS2-3) 2B (MS-PS2-5)	2A (MS-PS4-1) 2C (MS-PS4-1)	2A (MS-PS4-2) 2C (MS-PS4-2)
Module 3 How does the Sun affect the Earth?	A. Cause of Seasons B. Space Weather C. Magnetosphere	3A (MS-PS2-4) 3B (MS-PS2-5) 3C (MS-PS2-5)		



SDO Solar Modules NGSS Earth and Space Sciences		NGSS Middle School (6-8) Standards		
		MS-ESS1 Earth's Place in the Universe		MS-ESS3 Earth and Human Activity
SDO Solar Module Topics	Solar Module Activity Objectives	Disciplinary Core Ideas		
		ESS1.A: The Universe and Its Stars	ESS1.B: Earth and the Solar System	ESS3.B: Natural Hazards
Module 1 What are the features of the Sun?	A. Structure of the Sun B. Observing the Sun C. Light Energy	1B (MS-ESS1-1)	1A (MS-ESS1-3) 1C (MS-ESS1-3)	
Module 2 How and why do we study the Sun?	A. Electromagnetic Spectrum B. Magnetism C. Spectroscopy			
Module 3 How does the Sun affect the Earth?	A. Cause of Seasons B. Space Weather C. Magnetosphere	3A (MS-ESS1-1)	3A (MS-ESS1-1)	3B (MS-ESS3-2) 3C (MS-ESS3-2)



SDO Solar Modules NGSS Science and Engineering Practices									
SDO Solar Module Topics	Solar Module Activity Objectives	Asking Questions and Defining Problems	Developing and Using Models	Planning and Carrying Out Investigations	Analyzing and Interpreting Data	Using Mathematics and Computational Skills	Constructing Explanations and Designing Solutions	Engaging in Argument from Evidence	Obtaining, Evaluating, and Communicating Information
Module 1 What are the features of the Sun?	A. Structure of the Sun	X	X		X	X			X
	B. Observing the Sun	X		X	X	X	X	X	X
	C. Light Energy	X	X	X		X			X
Module 2 How and why do we study the Sun?	A. Electromagnetic Spectrum	X	X	X	X	X			X
	B. Magnetism	X	X	X	X	X			X
	C. Spectroscopy	X		X	X	X			X
Module 3 How does the Sun affect the Earth?	A. Causes of Seasons	X	X				X	X	X
	B. Space Weather	X		X	X		X	X	X
	C. Magnetosphere	X		X	X	X	X	X	X



SDO Solar Modules NGSS Crosscutting Concepts								
SDO Solar Module Topics	Solar Module Activity Objectives	Patterns	Cause and Effect: Mechanism and Prediction	Scale, Proportion, and Quantity	Systems and System Models	Energy and Matter: Flows, Cycles and Conservation	Structure and Function	Stability and Change
Module 1 What are the features of the Sun?	A. Structure of the Sun			X	X		X	
	B. Observing the Sun	X	X	X				X
	C. Light Energy			X	X	X		
Module 2 How and why do we study the Sun?	A. Electromagnetic Spectrum	X	X		X	X		X
	B. Magnetism	X	X		X			X
	C. Spectroscopy	X		X		X		
Module 3 How does the Sun affect the Earth?	A. Causes of Seasons		X		X		X	X
	B. Space Weather	X	X			X		X
	C. Magnetosphere	X	X	X				X