

CCC – Cause and Effect: Mechanism and explanation
Planning Template

Main Topic/ Question for Unit/Lesson	
NGSS standard (s)	

Components of the Disciplinary Core Idea	Cause	Effect

CCC – Energy and Matter: Flows, cycles, and conservation
 Planning Template

Main Topic/ Question for Unit/Lesson	
NGSS standard (s)	

	How does the disciplinary core idea apply to this category?
Matter involved	
Flows or cycles of the matter	
Forms of energy	
Transfers/flows of energy	
How the energy drives the motion or cycling of the matter	

CCC – Patterns
 Planning Template

Main Topic/ Question for Unit/Lesson	
NGSS standard (s)	

Components of the Disciplinary Core Idea	What is the Repeating Relationship (Pattern) in this Component?	What does the pattern provide information about?

CCC – Scale, Proportion, and Quantity
 Planning Template

Main Topic/ Question for Unit/Lesson	
NGSS standard (s)	

Component of the Disciplinary Core Idea:	What is the scale, proportion or quantity of focus?	How do we apply the scale, proportion or quantity to the disciplinary core?

CCC – Stability and Change
Planning Template

Main Topic/ Question for Unit/Lesson	
NGSS standard (s)	

	System/Topic	System/Topic
What is remaining stable?		
What is changing?		
What is causing the change?		
What is the timeframe?		

CCC – Structure and Function
Planning Template

Main Topic/ Question for Unit/Lesson	
NGSS standard (s)	

Components of the Disciplinary Core Idea	Structure	Function

CCC – Systems and System Models
 Planning Template

Main Topic/ Question for Unit/Lesson	
NGSS standard (s)	

	System of Focus:	System of Focus:
Input:		
Output:		
Boundary:		
Components (parts of the system):		
Interactions:		
Nested System:		