

# CT SCIENCE STANDARDS FILM MATRIX

Connecticut Science Curriculum Frameworks	Sun	Ocean	Legends	Sea Rex	Bugs!	Tornado	Forces
K.1 - Objects have properties that can be observed and used to describe similarities and differences.	X						
K.2 - Many different kinds of living things inhabit the Earth.		X		X	X		
K.3 - Weather conditions vary daily and seasonally.	X	X				X	
K.4 - Some objects are natural, while others have been designed and made by people to improve the quality of life.		X	X			X	
1.1 - The sun appears to move across the sky in the same way every day, but it's path changes gradually over the seasons.	X						
1.2 - Living things have different structures and behaviors that allow them to meet their basic needs.		X		X	X		
1.3 - Organisms change in form and behavior as part of life cycles.		X		X	X		
1.4 - The properties of materials can be described more accurately through the use of standard measuring units.			X				
2.1 - Materials can be classified as solid, liquid or gas based on observable properties.	X	X					
2.2 - Plants change their forms as part of their life cycles.							
2.3 - Earth materials have varied physical properties which can make them useful in different ways.		X	X				
2.4 - Human beings, like all other living things, have special nutritional needs for survival.		X					
3.1 - Materials have properties that can be identified and described through the use of simple tests.	X		X				
3.2 - Organisms can survive and reproduce only in environments that met their basic needs.		X		X	X		
3.3 - Earth materials have different chemical and physical properties.							
3.4 - Earth materials provide resources for all living things, but these resources are limited and should be conserved.		X					
4.1 - The position and motion of objects can be changed by pushing or pulling.	X		X				X
4.2 - All organisms depend on the living and non-living features of the environment for survival.		X		X	X		
4.3 - Water has a major role in shaping Earth's surface.		X		X		X	
4.4 - Electrical and magnetic energy can be transferred and transformed.	X						
5.1 - Sound and light are forms of energy.	X						
5.2 - Perceiving and responding to information about the environment is critical to the survival of organisms.		X		X	X	X	
5.3 - Most objects in the solar system are in a regular and predictable motion.	X						
5.4 - Humans have the capacity to build and use tools to advance the quality of their lives.	X		X				
6.1 - Materials can be classified as pure substances or mixtures, depending on their chemical and physical properties.							
6.2 - An ecosystem is composed of all the populations that are living in a certain space and the physical factors with which they interact.		X		X	X		
6.3 - Variations in the amount of the sun's energy hitting the Earth's surface affect daily and seasonal weather patterns.						X	
6.4 - Water moving across and through earth materials carries with it the product of human activities.		X					
7.1 - Energy provides the ability to do work and can exist in many forms.	X		X				X
7.2 - Many organisms, including humans, have specialized that interact with each other to maintain dynamic internal balance.		X		X	X		
7.3 - Landforms are the result of the interaction of constructive and destructive forces over time.				X			
7.4 - Technology allows us to improve food production and preservation, thus improving our ability to meet the nutritional needs of growing populations.		X					
8.1 - An object's inertia causes it to continue moving the way it was moving unless it is acted upon by a force to change it's	X		X				X
8.2 - Reproduction is a characteristic of living systems and it is essential for the continuation of every species.		X		X	X		
8.3 - The solar system is composed of planets and other objects that orbit the sun.	X						
8.4 - In the design of structures there is a need to consider factors such as function, materials, safety, cost and appearance.						X	
9.1 - Energy can not be created or destroyed; however, energy can be converted from one form to another.	X					X	
9.2 - The electrical force is a universal force that exists between any two charged objects.							
9.3 - Various sources of energy are used by humans and all have advantages and disadvantages.	X		X				
9.4 - Atoms react with one another to form new molecules.			X				
9.5 - Due to it's unique chemical structure, carbon forms many organic and inorganic compounds.			X				
9.6 - Chemical technologies present both risks and benefits to the health and well-being of humans, plants and animals.		X					
9.7 - Elements on Earth move among reservoirs in the solid earth, oceans, atmosphere and organisms as part of biogeochemical cycles.		X					
9.8 - The use of resources by human populations may affect the quality of the environment.		X					
9.9 - Some materials can be recycled, but others accumulate in the environment and may affect the balance of the Earth Systems.			X				
10.1 - Fundamental life processes depend on the physical structure and the chemical activities of the cell.							
10.2 - Microorganisms have an essential role in life processes and cycles on the Earth.		X		X			
10.3 - Similarities in the chemical and structural properties of DNA in all living organisms all the transfer of genes from one organism to another.							
10.4 - In sexually reproducing organisms, each offspring contains a mix of characteristics inherited from both parents.							
10.5 - Evolution and biodiversity are the result of genetic changes that occur over time in constantly changing environments.		X		X	X		
10.6 - Living organisms have the capability of producing populations of unlimited size, but the environment can support only a limited number of individuals form each species		X		X	X		



www.CTScienceCenter.org  
**860.SCIENCE** [724-3623]  
 250 Columbus Blvd.  
 Hartford, CT 06103

