

Out of the Rock	Utah Science Standard K -2					Utah Science Standard K -2		
	Kindergarten			First Grade		Second Grade		
Standard	1			1		1		
Elementary Core Academy Lessons	1			1		1		
	Book and Page Number	Grade K			Grade 1		Grade 2	
Standard		2	3		2	3	4	2
Objective		1	1	2	1	2	2	1
Activity	Out of The Rock- page	Investigate non-living things.	Identify how non-living things move.	Describe parts of non-living things.	Investigate the natural world including rock, soil and water	Analyze objects and record their properties.	Living things change and depend upon their environment to satisfy their basic needs.	Describe the characteristics of different rocks.
What's My Line	36	X			X	X		X
Hardness Made Easy	39	X						X
Coal Gardens	45							X
Mineral Detective	52	X	X	X	X	X		X
Mineralogy Haiku	57	X	X			X		X
Earth: From Crust to Core	59							
Edible Igneous	61					X		X
Mock Rock Cycle	63	X		X		X		X
The Life of A Rock	66	X				X		X
Rock Cycle Roulette	68	X				X		X
Everyone Needs a Rock	71	X			X	X		X
Dirt Dissection	73	X		X	X			
Candy Bar Cross Section	75	X						X
Memory Stones	77	X			X			X
Water- Hard as a Rock	81				X			
Magnet Earth	86				X			

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Out of The Rock- page								
The Invisible Force	88				X			
The Most "Attractive" Mineral	90				X			
Wash Out!	92				X			
Metal: Foil to Knives	96	X			X			
Growing With Minerals	117				X		X	
As Black as Coal	127				X			
Mineral Scavenger Hunt	130				X			
Mineral Chain Game	133				X			
From The Mine to Your School	139				X			
Elementary, My Dear "Watson"	144				X			
Water Works	169	X						X
Careers in Mining	176				X			
Mineral Map	186				X			
Pass the Sack	200				X			
Recycling Round-up	212				X			
Rock Music – Page								
The Mountain of Stone	20-23	X		X	X			X
Modernized Miner	26-30				X			
Out of The Rock	1 & 2				X			X
Rock Cycle Song	7 & 8	X				X		X
Using Electricity	23 & 24				X			
Rocky Minero	4 & 5				X			
The Geological Time Scale	33							
The Miners Are Reclaiming	36 & 37	X					X	
Handouts & Posters								
The House That Mining Built								
Utah County Mineral Map					X			
Mountains to Metals Poster					X			
Solar Energy Poster - "See the Light"								
Geothermal Energy Poster - "Insulation and the Earth"								
Borax Crystals								X
Energy Fundamentals								
Discovering Sources For Electricity	15-17							
Energy Action Technology								
Get Your Motor Running	20							

**Elementary Core Academy Lessons**

Elementary Core Academy Lessons																					
	Book and PageNumber	Grade 3			Grade 4					Grade 5							Grade 6				
Standard Objective		ILO	2	ILO	3			4	ILO	1		2	3		4	ILO	3	6			
		1		1	2	3	2		2	3	3	1	2	1	2-Jan		1	1	2		
Activity	Out of The Rock- Page	Intended Learning Outcomes	Living & Nonliving	Intended Learning Outcomes	Properties of Rocks & Minerals	Weathering & Erosion - Soil	Soil & Plant Growth	Fossils in Sedimentary Rock	Intended Learning Outcomes	Physical Changes	Chemical Reactions	Volcanoes, Earthquakes, Erosion and Weathering	Magnetism	Earth's magnetic field	Static Electricity	Current Electricity	Intended Learning Outcomes	Compare Physical Properties of Planets	Heat	Light	
What's My Line	36	1, 3a, 4		1, 3a, 4	b				1, 3a, 4a-d				a				1, 3a, 4a-d				
Hardness Made Easy	39	1, 3, 4		1, 3, 4	a, b				3, 4 a-d	a							3, 4 a-d				
Coal Gardens	45	1, 3, 4 b		1, 3, 4 b	b				1, 3, 4b	a, b, c							1, 3, 4b				
Mineral Detective	52	1, 3a, 4		1, 3a, 4	a, b				1, 3a, 4a-d		a		a				1, 3a, 4a-d				
Mineralogy Haiku	57	1a, 4b,c		1a, 4b,c					1a, 4b, c								1a, 4b, c				
Earth: From Crust to Core	59	1d, 3a, 4b		1d, 3a, 4b					1d, 3a, 4b								1d, 3a, 4b	b	a,b,d		
Edible Igneous	61	1a-d,f-h, 3, 4b		1a-d,f-h, 3, 4b	a, c				1a,b,d-h, 3, 4b	a, b, c							1a,b,d-h, 3, 4b		a,b,d,e		
Mock Rock Cycle	63	1a-d,f-h, 3, 4b		1a-d,f-h, 3, 4b	a, c, d				1a,b,d-h, 3, 4b	a, b, c							1a,b,d-h, 3, 4b		a,b,d,e		
The Life of A Rock	66	1a,c,h, 3, 4b,c		1a,c,h, 3, 4b,c	c, d				1a,d,h, 3, 4b,c								1a,d,h, 3, 4b,c		a,b,d		
Rock Cycle Roulette	68	1a-d,f-h, 3, 4b		1a-d,f-h, 3, 4b	a, c, d	a, b, c			1a,b,d-h, 3, 4b, c	a, b, c	a	a, b, c					1a,b,d-h, 3, 4b,c		a,b,d		
Everyone Needs a Rock	71	1a,d, 4b,c		1a,d, 4b,c					1a,d, 4 b,c								1a,b,d-h, 3, 4b,c				
Dirt Dissection	73	1a,b,c,d, 4b	c	1a,b,c,d, 4b		d	a,b		1a,b,d,e, 4b								1a,b,d,e, 4b				
Candy Bar Cross Section	75	1a,b,c,d, 4b		1a,b,c,d, 4b				a	1a,b,d,e, 4b		c						1a,b,d,e, 4b				
Memory Stones	77	1a,d, 4b,c		1a,d, 4b,c					1a,d, 4 b,c								1a,d, 4b,c				
Water- Hard as a Rock	81	1a,b,d,f-h, 3a, 4c		1a,b,d,f-h, 3a, 4c					1a,b,d,f-i, 3a, 4c		a, c						1a,b,d,f-i, 3a, 4c				
Magnet Earth	86	1a-d,f-h, 3a, 4c		1a-d,f-h, 3a, 4c					1a,b,d,e-i, 3a,b, 4a,c				a,d	b,c			1a,b,d,e-i, 3a,b, 4a,c				
The Invisible Force	88	1a-d,f-h, 3a, 4c		1a-d,f-h, 3a, 4c					1a,b,d,e-i, 3a,b, 4a,c					a,d			1a,b,d,e-i, 3a,b, 4a,c				
The Most "Attractive" Mineral	90	1a-d,f-h, 3a, 4c		1a-d,f-h, 3a, 4c					1a,b,d,e-i, 3a,b, 4a,c					a,d			1a,b,d,e-i, 3a,b, 4a,c				
Wash Out!	92	1a-d,f-h, 3a, 4c		1a-d,f-h, 3a, 4c					1a,b,d,e-i, 3a,b, 4a,c	a							1a,b,d,e-i, 3a,b, 4a,c				
Metal: Foil to Knives	96	1a,b,d, 3a, 4b	c	1a,b,d, 3a, 4b					1a,b,d, 3a, 4b								1a,b,d, 3a, 4b				

**Elementary Core Academy Lessons**

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Standard Objective	Book and PageNumber	Grade 3			Grade 4					Grade 5							Grade 6				
		ILO	2	ILO	3			4	ILO	1		2	3		2	4	ILO	3	6		
		1	1	1	2	3	2	1	2	3	3	1	2	1	2-Jan	1	1	2			
Activity	Out of The Rock- Page	Intended Learning Outcomes	Living & Nonliving	Intended Learning Outcomes	Properties of Rocks & Minerals	Weathering & Erosion - Soil	Soil & Plant Growth	Fossils in Sedimentary Rock	Intended Learning Outcomes	Physical Changes	Chemical Reactions	Volcanoes, Earthquakes, Erosion and Weathering	Magnetism	Earth's magnetic field	Static Electricity	Current Electricity	Intended Learning Outcomes	Compare Physical Properties of Planets	Heat	Light	
Growing With Minerals	117	1, 3a, 4	c	1, 3a, 4			c, e		1, 3a, 4								1, 3a, 4				
As Black as Coal	127	1a,b,d, 3a, 4b		1a,b,d, 3a, 4b					1a,b,d, 3a, 4b, 5								1a,b,d, 3a, 4b, 5				
Mineral Scavenger Hunt	130	1a,b,d, 3a, 4b,c		1a,b,d, 3a, 4b,c					1a,b,d,e, 3a, 4b,c								1a,b,d,e, 3a, 4b,c				
Mineral Chain Game	133	1a,b,d, 3a		1a,b,d, 3a					1a,b,d,e, 3a								1a,b,d,e, 3a				
From The Mine to Your School	139	1a,b,d, 3a, 4b,c		1a,b,d, 3a, 4b,c					1a,b,d,e, 3a, 4b,c, 5								1a,b,d,e, 3a, 4b,c, 5				
Elementary, My Dear "Watson"	144	1a,b,d, 3a, 4b,c		1a,b,d, 3a, 4b,c					1a,b,d,e, 3a, 4b,c, 5								1a,b,d,e, 3a, 4b,c, 5				
Water Works	169	1a-d,f-h, 3a, 4b		1a-d,f-h, 3a, 4b					1a,b,d-i, 3a, 4b, 5								1a,b,d-i, 3a, 4b, 5				
Careers in Mining	175	1b		1b					1b, 6a								1b, 6a				
Mineral Map	186	1a,b,d,h, 3a		1a,b,d,h, 3a					1a,b,d,i, 3a								1a,b,d,i, 3a				
Pass the Sack	200	1a-c,f-h, 3a, 4b		1a-c,f-h, 3a, 4b					1a,b,d,f-i, 2e,f, 3a, 4b,e, 5								1a,b,d,f-i, 2e,f, 3a, 4b,e, 5				
Recycling Round-up	212	1a,b,d, 3a, 4c		1a,b,d, 3a, 4c					1a,b,e, 3a, 4c								1a,b,e, 3a, 4c				
Rock Music - Page																					
The Mountain of Stone	20-23																				
Modernized Miner	26-30																				
Out of The Rock	401&1				d																
Rock Cycle Song	7 & 8																				
Using Electricity	23 & 24															c					
Rocky Minero	40274				d											c					
The Geological Time Scale	33							a,c,d													
The Miners Are Reclaiming	36-37					a															
Handouts & Posters																					
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Solar Energy Poster - "See the Light"																				a-c	
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