2010-2011 PLANNING FOR RESULTS - EARTH SCIENCE

	NYS STANDARD	PERFORMANCE INDICATOR	QUESTION #	% CORRECT FROM NFHS	% CORRECT FROM N/O BOCES SCHOOLS	% CORRECT IN NYS	% GAP BETWEEN NFHS & NYS	POSSIBLE CAUSE FOR ERROR	STRATEGY TO INCREASE PERFORMANCE *(Pick One)* LAB DEMO TECH OTHER	BRIEF DESCRIPTION OF STRATEGY
1	K.I. 2- Air, Water & Land	2.1f Air temperature, dewpoint, cloud formation, and precipitation are affected by. . .	84-CR	12.77%	35.77%	42.38%	29.61%	Explain WHY warm air rises	Tech or Demo or lab	Visually show density differences
2	Standard 1	M1 Abstraction and symbolic representation are used. . .	68-CR	20.72%	32.97%	41.13%	20.41%	trouble with gradient calculation and including units	Lab and practice	Math skills practice
3	K.I. 1- Motion and Persp.	1.1h The Sun's apparent path through the sky varies with latitude and season.	73-CR	23.61%	38.53%	47.45%	23.83%	new view of celestial sphere as seen from North Pole	Lab	include different views/diagrams in guided notes and lab
4	K.I. 2- Air, Water & Land	2 Models are simplified representations of objects, structures, or systems used in analysis. . .	44-MC	25.30%	34.12%	38.27%	12.97%	Not using esrt p14	use esrt review book	use diagrams and practice questions
5	K.I. 1- Motion and Persp.	1.1a Most objects in the solar system are in regular and predictable motion.	34-MC	28.19%	35.94%	39.06%	10.87%	limited understanding of moon phases, progression of cycle	Tech	use smartboard to connect diagram and actual photos with time frame
6	K.I. 1- Motion and Persp.	1.1f Earth's changing position with regard to the Sun and the moon. . .	03-MC	33.73%	41.66%	49.37%	15.63%	cause of seasons, vertical ray	Demo and guided notes	connect seasons and revolution
7	Standard 1	S3 The observations made while testing proposed explanations. . .	78-CR	34.22%	43.04%	47.58%	13.37%	esrt, map reading	Regents question review	Use map symbols at end of unit in review questions to aviod ID confusion
8	Standard 1	M1 Abstraction and symbolic representation are used. . .	76-CR	34.46%	46.51%	48.53%	14.07%	reading, math no formula	bad math question	proportion set up
9	Standard 1	S3 The observations made while testing proposed explanations. . .	56-CR	34.94%	42.38%	51.10%	16.16%	esrt p2,3 and incomplete reading	other	test-taking skill

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10	K.I. 1- Motion and Persp.	1.2g Earth has continuously been recycling water since the outgassing of water. . .	09-MC	35.18%	44.30%	48.01%	12.83%	graph interpretation, lack of factual knowledge	lab with graphing practice	Math skills practice
11	Standard 6	2 Models are simplified representations of objects, structures, or systems used in analysis. . .	69-CR	35.18%	49.20%	48.75%	13.57%	skill: topo profile	Lab	Enhanced review and practice
12	K.I. 2- Air, Water & Land	2.1l The lithosphere consists of separate plates that ride on the more fluid. . .	81-CR	35.90%	48.27%	54.67%	18.77%	why subduction occurs, ocean crust is more dense	Graham cracker lab	Use ESRT, relate terminology
13	K.I. 2- Air, Water & Land	2.1h Atmospheric moisture, temperature and pressure distributions; jet streams, wind. . .	85-CR	36.14%	56.19%	58.83%	22.68%	no clue where nebraska is in relation to ny state	Demo	Use smart board and weather channel to show Storm track
14	K.I. 2- Air, Water & Land	2.1l The lithosphere consists of separate plates that ride on the more fluid. . .	62-CR	38.55%	52.39%	59.01%	20.45%	esrt p5, map reading	other- review/practice	Test-taking skills, identifying key information and using ESRT
15	K.I. 2- Air, Water & Land	2 Models are simplified representations of objects, structures, or systems used in analysis. . .	54-CR	41.20%	48.49%	48.97%	7.76%	drumlin shape, directional evidence, reading comprehension	notes on glacial feature	assist in analyzing diagrams, maps
16	K.I. 1- Motion and Persp.	1.1h The Sun's apparent path through the sky varies with latitude and season.	70-CR	41.93%	58.67%	56.63%	14.71%	vertcal ray location on first day of seasons	Lab on apparent path of the sun	Internet lab
17	Standard 1	S3 The observations made while testing proposed explanations. . .	79-CR	42.17%	39.30%	40.51%	-1.65%	esrt use	Lab	Incorporate graphs, diagrams and ESRT into cause of metamorphism
18	K.I. 2- Air, Water & Land	2 Models are simplified representations of objects, structures, or systems used in analysis. . .	72-CR	42.65%	48.05%	51.15%	8.50%	apparent path	Lab on apparent path of the sun	Internet lab

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19	K.I. 1- Motion and Persp.	1.1f Earth's changing position with regard to the Sun and the moon. . .	71-CR	43.86%	59.82%	60.23%	16.38%	sun not over head. Shadow direction	Lab on apparent path of the sun	Internet lab
20	Standard 1	S3 The observations made while testing proposed explanations. . .	27-MC	43.86%	45.62%	44.11%	0.26%	esrt p8/9	other- review/practice	Poor diagram, test-taking skills practice
21	K.I. 1- Motion and Persp.	1.2j Geologic history can be reconstructed by observing sequences of rock types and fossils. . .	35-MC	45.06%	54.71%	60.14%	15.08%	half life, graphing		
22	Standard 6	5 Identifying patterns of change is necessary for making predictions. . .	55-CR	45.06%	50.08%	50.49%	5.43%	question is unclear		
23	Standard 1	S3 The observations made while testing proposed explanations. . .	46-MC	45.78%	52.06%	54.74%	8.96%	reading comprehension		
24	K.I. 1- Motion and Persp.	1.2j Geologic history can be reconstructed by observing sequences of rock types and fossils. . .	60-CR	46.02%	53.99%	53.26%	7.24%	C14 usage		
25	K.I. 2- Air, Water & Land	2.1u The natural agents of erosion include. . .	36-MC	46.27%	56.63%	61.17%	14.91%	landscape features		
26	K.I. 1- Motion and Persp.	1.2b Stars form when gravity causes clouds of molecules to contract. . .	06-MC	46.99%	61.75%	61.29%	14.30%	nuclear fusion		
27	K.I. 2- Air, Water & Land	2.2c A location's climate is influenced by latitude, proximity to large bodies of water. . .	14-MC	46.99%	60.92%	66.17%	19.18%	climate factors		

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28	K.I. 2- Air, Water & Land	2.1p Landforms are the result of the interaction of tectonic forces and the processes of . . .	24-MC	47.47%	50.96%	51.11%	3.64%	reading comp, fact		
29	K.I. 2- Air, Water & Land	2.2a Insolation (solar radiation) heats Earth's surface and atmosphere unequally due. . .	13-MC	47.71%	63.51%	65.03%	17.32%	fact		
30	K.I. 2- Air, Water & Land	2 Models are simplified representations of objects, structures, or systems used in analysis. . .	47-MC	48.19%	55.53%	57.01%	8.82%	reading comp		
31	K.I. 2- Air, Water & Land	2 Models are simplified representations of objects, structures, or systems used in analysis. . .	45-MC	49.40%	59.22%	61.04%	11.64%	esrt		
32	K.I. 2- Air, Water & Land	2.1j Properties of Earth's internal structure (crust, mantle, inner core, and outer core). . .	63-CR	49.40%	51.46%	53.07%	3.67%	s wave facts		
33	Standard 1	M3 Critical thinking skills are used in the solution. . .	66-CR	50.84%	66.10%	67.79%	16.95%	contour line completion		
34	K.I. 1- Motion and Persp.	1.1b Nine planets move around the Sun in nearly circular orbits. . .	02-MC	51.33%	61.25%	60.29%	8.97%	jovian planet fact		
35	K.I. 2- Air, Water & Land	2.1n Many of Earth's surface features such as mid-ocean ridges/rifts, trenches/subduction. . .	42-MC	52.53%	60.92%	68.79%	16.26%	crustal movement evidence		
36	K.I. 1- Motion and Persp.	1.2g Earth has continuously been recycling water since the outgassing of water. . .	48-MC	53.49%	63.46%	65.49%	11.99%	vocab on Water cycle		

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37	Standard 6	2 Models are simplified representations of objects, structures, or systems used in analysis. . .	28-MC	53.49%	56.85%	59.16%	5.67%	lake effect conditions		
38	K.I. 2- Air, Water & Land	2.1c Weather patterns become evident when weather variables are observed. . .	12-MC	54.22%	59.99%	62.86%	8.65%	storm approaching fact		
39	Standard 1	S3 The observations made while testing proposed explanations. . .	20-MC	54.22%	60.48%	64.86%	10.64%	esrt p6		
40	K.I. 2- Air, Water & Land	2 Models are simplified representations of objects, structures, or systems used in analysis. . .	83-CR	54.94%	66.04%	65.24%	10.30%	comparision format		
41	K.I. 2- Air, Water & Land	2.2d Temperature and precipitation patterns are altered by. . .	17-MC	55.90%	63.13%	61.80%	5.89%	deforestation fact, infrared absorption		
42	K.I. 2- Air, Water & Land	2.1u The natural agents of erosion include. . .	38-MC	56.39%	66.04%	68.44%	12.06%	stream channel shape fact		
43	K.I. 2- Air, Water & Land	2.1g Weather variables can be represented in a variety of formats including radar. . .	82-CR	57.11%	67.53%	70.65%	13.54%	station models		
44	K.I. 3- Matter-Rcks & Min	3.1c Rocks are usually composed of one or more minerals. . .	40-MC	57.11%	62.91%	66.05%	8.94%	map reading, esrt p7		
45	K.I. 2- Air, Water & Land	2.1r Climate variations, structure, and characteristics of bedrock influence. . .	22-MC	57.35%	62.03%	66.06%	8.71%	effects of global warming		

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46	K.I. 1- Motion and Persp.	1.1e The Foucault pendulum and the Coriolis effect provide evidence of Earth's rotation.	01-MC	57.59%	69.12%	74.52%	16.93%	Foucault pendulum fact		
47	K.I. 1- Motion and Persp.	1.1i Approximately 70 percent of the earths surface is covered by a relatively thin layer of water,	77-CR	58.07%	66.43%	68.25%	10.17%	moon and sun tidal influence fact, reading confusion		
48	Standard 1	M2 Deductive and inductive reasoning are used to reach mathematical conclusions.	49-MC	58.80%	68.08%	69.05%	10.26%	infiltration time fact		
49	K.I. 2- Air, Water & Land	2 Models are simplified representations of objects, structures, or systems used in analysis. . .	67-CR	59.04%	63.95%	65.85%	6.81%	interpreting topo maps		
50	K.I. 2- Air, Water & Land	2.1j Properties of Earth's internal structure (crust, mantle, inner core, and outer core). . .	65-CR	59.52%	64.50%	61.83%	2.31%	Lat-Long		
51	K.I. 1- Motion and Persp.	1.2g Earth has continuously been recycling water since the outgassing of water. . .	50-MC	59.76%	71.11%	71.45%	11.69%	retain?		
52	K.I. 1- Motion and Persp.	1.2j Geologic history can be reconstructed by observing sequences of rock types and fossils. . .	23-MC	59.76%	65.16%	68.18%	8.43%	fossil environment, ESRT p8/9		
53	K.I. 2- Air, Water & Land	2.1c Weather patterns become evident when weather variables are observed. . .	08-MC	59.76%	66.43%	69.75%	9.99%	ESRT p12		
54	K.I. 1- Motion and Persp.	1.2j Geologic history can be reconstructed by observing sequences of rock types and fossils. . .	41-MC	60.00%	68.90%	71.41%	11.41%			

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55	K.I. 1- Motion and Persp.	1.2j Geologic history can be reconstructed by observing sequences of rock types and fossils. . .	59-CR	61.20%	65.44%	61.99%	0.79%			
56	Standard 1	M2 Deductive and inductive reasoning are used to reach mathematical conclusions.	53-CR	62.17%	68.24%	68.54%	6.38%			
57	K.I. 1- Motion and Persp.	1.1a Most objects in the solar system are in regular and predictable motion.	75-CR	62.89%	74.13%	75.79%	12.89%			
58	K.I. 1- Motion and Persp.	1.1c Earth's coordinate system of latitude and longitude, with the equator and prime meridian. . .	07-MC	62.89%	67.69%	72.76%	9.87%			
59	K.I. 1- Motion and Persp.	1.2g Earth has continuously been recycling water since the outgassing of water. . .	10-MC	64.82%	72.81%	74.79%	9.97%			
60	K.I. 2- Air, Water & Land	2.1r Climate variations, structure, and characteristics of bedrock influence. . .	39-MC	65.30%	69.29%	70.32%	5.02%			
61	K.I. 2- Air, Water & Land	2.2a Insolation (solar radiation) heats Earth's surface and atmosphere unequally due. . .	16-MC	67.23%	74.68%	79.07%	11.84%			
62	K.I. 2- Air, Water & Land	2.1l The lithosphere consists of separate plates that ride on the more fluid. . .	64-CR	67.47%	58.45%	56.44%	-11.03%			
63	K.I. 2- Air, Water & Land	2.1h Atmospheric moisture, temperature and pressure distributions; jet streams, wind. . .	11-MC	68.43%	74.19%	78.58%	10.14%			

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64	K.I. 2- Air, Water & Land	2.2b The transfer of heat energy within the atmosphere, the hydrosphere, and Earth's surface. . .	33-MC	70.60%	75.01%	77.79%	7.19%			
65	Standard 1	M2 Deductive and inductive reasoning are used to reach mathematical conclusions.	26-MC	70.60%	73.69%	73.87%	3.26%			
66	Standard 1	M2 Deductive and inductive reasoning are used to reach mathematical conclusions.	31-MC	72.29%	80.08%	83.47%	11.18%			
67	K.I. 2- Air, Water & Land	2.1j Properties of Earth's internal structure (crust, mantle, inner core, and outer core). . .	61-CR	73.25%	83.65%	82.95%	9.70%			
68	Standard 1	S3 The observations made while testing proposed explanations. . .	58-CR	73.49%	80.08%	82.68%	9.19%			
69	K.I. 2- Air, Water & Land	2.1j Properties of Earth's internal structure (crust, mantle, inner core, and outer core). . .	18-MC	73.98%	82.83%	85.08%	11.10%			
70	K.I. 2- Air, Water & Land	2.1u The natural agents of erosion include. . .	37-MC	75.18%	82.72%	86.55%	11.37%			
71	K.I. 2- Air, Water & Land	2.1u The natural agents of erosion include. . .	57-CR	75.18%	79.86%	77.59%	2.41%			
72	Standard 6	2.1n Many of Earth's surface features such as mid-ocean ridges/rifts, trenches/subduction. . .	32-MC	75.42%	80.96%	83.43%	8.01%			

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73	Standard 1	S3 The observations made while testing proposed explanations. . .	21-MC	76.14%	80.24%	82.92%	6.78%			
74	K.I. 1- Motion and Persp.	1.2j Geologic history can be reconstructed by observing sequences of rock types and fossils. . .	15-MC	77.11%	82.88%	83.83%	6.72%			
75	Standard 1	S3 The observations made while testing proposed explanations. . .	04-MC	78.31%	82.33%	84.60%	6.29%			
76	K.I. 3- Matter-Rcks & Min	3.1c Rocks are usually composed of one or more minerals. . .	30-MC	78.55%	81.56%	83.49%	4.93%			
77	K.I. 1- Motion and Persp.	1.1i Approximately 70 percent of the earths surface is covered by a relatively thin layer of water,	74-CR	79.76%	85.20%	84.77%	5.01%			
78	Standard 1	M2 Deductive and inductive reasoning are used to reach mathematical conclusions.	52-CR	80.00%	85.86%	88.61%	8.61%			
79	K.I. 1- Motion and Persp.	1.2d Asteroids, comets, and meteors are components of our solar system. . .	05-MC	80.72%	87.23%	87.22%	6.50%			
80	Performance Test Score	Performance Test Score	86-Performance Score	81.22%	82.37%	80.08%	-1.14%			
81	K.I. 2- Air, Water & Land	2.1u The natural agents of erosion include. . .	25-MC	81.45%	88.00%	90.29%	8.84%			

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82	K.I. 3- Matter-Rcks & Min	3.1c Rocks are usually composed of one or more minerals. . .	19-MC	82.17%	86.85%	88.75%	6.58%			
83	K.I. 2- Air, Water & Land	2 Models are simplified representations of objects, structures, or systems used in analysis. . .	80-CR	83.37%	85.91%	87.47%	4.10%			
84	Standard 6	2.1n Many of Earth's surface features such as mid-ocean ridges/rifts, trenches/subduction. . .	29-MC	84.58%	85.58%	88.11%	3.53%			
85	Standard 1	M1 Abstraction and symbolic representation are used. . .	51-CR	91.33%	88.77%	81.86%	-9.47%			
86	K.I. 2- Air, Water & Land	2.1j Properties of Earth's internal structure (crust, mantle, inner core, and outer core). . .	43-MC	91.81%	95.38%	95.23%	3.42%			
	All Key Ideas and Performance Indicators			**60.37%**	**67.03%**	**68.50%**	**8.13%**			