NORTH CAROLINA DEPARTMENT OF PUBLIC INSTRUCTION IN TRACE Reports

Pre-Formatted Reports: Benchmark Test Item Analysis - New Format

Data Selections

Institution(s): All School Types, All Schools

Benchmark Administration: 09/03/14, 2014-2015 Baselines Earth Science

Trend Profile: 2014-2015 Subject: Life and Physical Sciences Test Focus: All Test Focuses Test Level: 09

Test Category: District Benchmark

Grade: 09

Enrollment: Any year

Number of questions: 40

Number of test-taking students: 1028

Student Responses

	Correct		Incorrect	Most Common Mistake			Points	P- Value/	
Question - Type	Rate	Value	Total Rate	Rate	Value	Point Value	Achieved / Possible	Item Mean	Discriminati on
1 - Multiple Choice	45%	D	55%	28%	С	1	462 / 1028	0.44	0.27
2 - Multiple Choice	39%	В	61%	30%	С	1	404 / 1028	0.24	0.34
3 - Multiple Choice	55%	С	45%	34%	Α	1	564 / 1028	0.52	0.34
4 - Multiple Choice	71%	D	29%	16%	С	1	728 / 1028	0.79	0.31
5 - Multiple Choice	17%	Α	83%	70%	В	1	179 / 1028	0.27	-0.07
6 - Multiple Choice	57%	Α	43%	18%	В	1	591 / 1028	0.49	0.42
7 - Multiple Choice	61%	С	39%	22%	A	1	624 / 1028	0.56	0.35
8 - Multiple Choice	82%	D	18%	10%	A	1	841 / 1028	0.86	0.26
9 - Multiple Choice	85%	С	15%	7 %	D	1	871 / 1028	0.87	0.10
10 - Multiple Choice	57%	В	43%	37%	С	1	590 / 1028	0.43	0.05
11 - Multiple Choice	87%	D	13%	9%	Α	1	890 / 1028	0.95	-0.02
12 - Multiple Choice	40%	С	60%	51%	В	1	408 / 1028	0.40	0.29
13 - Multiple Choice	50%	В	50%	30%	Α	1	515 / 1028	0.48	0.46
14 - Multiple Choice	30%	С	70%	27%	В	1	308 / 1028	0.33	-0.03
15 - Multiple Choice	31%	A	69%	28%	С	1	323 / 1028	0.24	0.45
16 - Multiple Choice	68%	В	32%	18%	D	1	700 / 1028	0.78	0.31
17 - Multiple Choice	49%	С	51%	46%	D	1	504 / 1028	0.40	0.28
18 - Multiple Choice	89%	D	11%	4%	В	1	912 / 1028	0.90	0.45
19 - Multiple Choice	65%	С	35%	16%	Α	1	672 / 1028	0.56	0.31
20 - Multiple Choice	69%	D	31%	11%	В	1	705 / 1028	0.73	0.41

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21 - Multiple Choice	52%	Α	48%	35%	В	1	538 / 1028	0.57	0.30
22 - Multiple Choice	49%	В	51%	40%	С	1	506 / 1028	0.46	0.34
23 - Multiple Choice	43%	В	57%	37%	С	1	442 / 1028	0.48	-0.04
24 - Multiple Choice	38%	Α	62%	26%	С	1	395 / 1028	0.32	0.25
25 - Multiple Choice	44%	D	56%	32%	В	1	451 / 1028	0.40	0.38
26 - Multiple Choice	78%	С	22%	10%	Α	1	806 / 1028	0.86	0.39
27 - Multiple Choice	75%	В	25%	11%	Α	1	774 / 1028	0.73	0.36
28 - Multiple Choice	66%	С	34%	20%	D	1	678 / 1028	0.70	0.38
29 - Multiple Choice	68%	Α	32%	15%	В	1	695 / 1028	0.68	0.32
30 - Multiple Choice	51%	D	49%	23%	С	1	529 / 1028	0.57	0.33
31 - Multiple Choice	49%	D	51%	36%	В	1	506 / 1028	0.41	0.36
32 - Multiple Choice	61%	В	39%	19%	D	1	627 / 1028	0.57	0.48
33 - Multiple Choice	63%	D	37%	17%	С	1	651 / 1028	0.65	0.42
34 - Multiple Choice	58%	С	42%	24%	A	1	601 / 1028	0.63	0.45
35 - Multiple Choice	83%	В	17%	8%	С	1	856 / 1028	0.86	0.53
36 - Multiple Choice	41%	Α	59%	28%	С	1	419 / 1028	0.29	0.37
37 - Multiple Choice	74%	D	26%	10%	Α	1	760 / 1028	0.76	0.32
38 - Multiple Choice	53%	A	47%	17%	С	1	543 / 1028	0.57	0.49
39 - Multiple Choice	35%	D	65%	36%	С	1	360 / 1028	0.27	0.33
40 - Multiple Choice	44%	В	56%	24%	Α	1	455 / 1028	0.48	0.22
Summary	57%		43%				585 / 1028		

P-value represents an item's difficulty as evaluated by dividing the total number of correct responses by the total number of students tested. P-value is calculated for true/false, multiple choice, gridded or hot spot-single response items.

Item Mean is the average score for student responses to an open response question or to a multi-part question. Item Mean is calculated for inline response, matching or hot spot-multiple selections items.

Discrimination or Item Total Score Correlation is the correlation between the question score and the overall test score and indicates the extent to which success on an item corresponds to success on the test.

Standards Alignment to NC Essential Standards

Question	ID	Standard Description		
1 - Multiple Choice		Earth and Environmental		
2 - Multiple Choice		Earth and Environmental		
3 - Multiple Choice		Earth and Environmental		
4 - Multiple Choice		Earth and Environmental		
5 - Multiple Choice	NCES.EEn.2.3	Explain the structure and processes within the hydrosphere.		
6 - Multiple Choice	NCES.EEn.2.1	Explain how processes and forces affect the lithosphere.		

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7 - Multiple Choice	NCES.EEn.2.2	Understand how human influences impact the lithosphere.
8 - Multiple Choice	NCES.EEn.1.1	Explain the Earth's role as a body in space.
9 - Multiple Choice		Earth and Environmental
10 - Multiple Choice	}	Earth and Environmental
11 - Multiple Choice	NCES.EEn.1.1	Explain the Earth's role as a body in space.
12 - Multiple Choice	NCES.EEn.1.1	Explain the Earth's role as a body in space.
13 - Multiple Choice	NCES.EEn.1.1.4	Explain how incoming solar energy makes life possible on Earth.
14 - Multiple Choice	NCES.EEn.1.1.3	Explain how the sun produces energy which is transferred to the Earth by radiation.
15 - Multiple Choice	NCES.EEn.2.2	Understand how human influences impact the lithosphere.
16 - Multiple Choice	NCES.EEn.2.2	Understand how human influences impact the lithosphere.
17 - Multiple Choice	NCES.EEn.2.2	Understand how human influences impact the lithosphere.
18 - Multiple Choice	NCES.EEn.2.2	Understand how human influences impact the lithosphere.
19 - Multiple Choice	NCES.EEn.2.2	Understand how human influences impact the lithosphere.
20 - Multiple Choice	NCES.EEn.2.2	Understand how human influences impact the lithosphere.
21 - Multiple Choice	NCES.EEn.2.2	Understand how human influences impact the lithosphere.
22 - Multiple Choice	NCES.EEn.2.3	Explain the structure and processes within the hydrosphere.
23 - Multiple Choice	NCES.EEn.2.3	Explain the structure and processes within the hydrosphere.
24 - Multiple Choice	NCES.EEn.2.4	Evaluate how humans use water.
25 - Multiple Choice	NCES.EEn.2.4	Evaluate how humans use water.
26 - Multiple Choice	NCES.EEn.2.4	Evaluate how humans use water.
27 - Multiple Choice	NCES.EEn.2.5	Understand the structure of and processes within our atmosphere.
28 - Multiple Choice	NCES.EEn.2.5	Understand the structure of and processes within our atmosphere.
29 - Multiple Choice	NCES.EEn.2.6	Analyze patterns of global climate change over time.
30 - Multiple Choice	NCES.EEn.2.6	Analyze patterns of global climate change over time.
31 - Multiple Choice	NCES.EEn.2.7	Explain how the lithosphere, hydrosphere, and atmosphere individually and collectively affect the biosphere.
32 - Multiple Choice	NCES.EEn.2.7	Explain how the lithosphere, hydrosphere, and atmosphere individually and collectively affect the biosphere.
33 - Multiple Choice	NCES.EEn.2.7	Explain how the lithosphere, hydrosphere, and atmosphere individually and collectively affect the biosphere.
34 - Multiple Choice	NCES.EEn.2.7	Explain how the lithosphere, hydrosphere, and atmosphere individually and collectively affect the biosphere.
35 - Multiple Choice	NCES.EEn.2.7	Explain how the lithosphere, hydrosphere, and atmosphere individually and collectively affect the biosphere.
36 - Multiple Choice	NCES.EEn.2.8	Evaluate human behaviors in terms of how likely they are to ensure the ability to live sustainably on Earth.
37 - Multiple Choice	NCES.EEn.2.8	Evaluate human behaviors in terms of how likely they are to ensure the ability to live sustainably on Earth.
38 - Multiple Choice	NCES.EEn.2.8	Evaluate human behaviors in terms of how likely they are to ensure the ability to live sustainably on Earth.
39 - Multiple Choice	NCES.EEn.2.8	Evaluate human behaviors in terms of how likely they are to ensure the ability to live sustainably on Earth.
40 - Multiple Choice	NCES.EEn.2.8	Evaluate human behaviors in terms of how likely they are to ensure the ability to live sustainably on Earth.