School K	EY & Scoring Gui	de	
Name(s)			
]	FOSSILS	
stations require photochoice questions by to fill in your answer	ylum or class, while other placing the letter of the con	ssil. Make sure you record what as ask for common name or generated choice in the space provided ou may use any printed resource ease print. Good luck!	us. Answer the multiple l. Some stations require you
STATION 1	PRESERVATIO	N	
	A	Depends on san	nples
	В		
	C		
	D		
	E		
	F		
	G		
1	. Rapid burial, under w	vater. Various answers may be	acceptable.
2.	Some organisms have h	nard parts such as shells or inte	ernal skeletons.
SCORING:			
Identification:	M	ultiple Choice Questions:	Free Response:

2 Points for each identification
1 point if incorrect spelling or if
partially correct

Multiple Choice Questions:
1 point each

<u>Free Response:</u>
1-2 pts (use judgement)

School	KEY	Team #
STATION 2 (Eurypterid, photo	Phylum <u>Arthropoda (or Arthro</u> or specimen)	opod)34
STATION 3 (Ammonite)	Class <u>Cephalopoda (Cephalo</u>	5. <u>C</u> 6. <u>A</u>
STATION 4 (Pentremites)	Genus Pentremites	7. <u>B</u> 8. <u>C</u>
STATION 5 (Mucrospirifer)	Genus <u>Mucrospirifer</u>	9. <u>C</u> 10. <u>B</u>
STATION 6 (Exogyra)	Genus <u>Exogyra</u>	11. <u>D</u> 12 <u>B</u>
STATION 7 (Phacops/Elrathia)	Genus A. Phacops B. Elrathia	13. <u>A</u>
		14 B

SchoolK	EY	Team #	
STATION 8 (Horn Coral/Hexagonaria	Common Name) Genus	A. Horn Coral B. Hexagonaria	
			15. <u>B</u> 16. <u>D</u>
STATION 9 (Metasequoia)	Genus <u>Met</u>	asequoia_	17 <u>B</u>
STATION 10 (Tyrannosaurus Allosaurus, Carnotaurus)	В	Tyrannosaurus Allosaurus Carnotaurus	19. <u>C</u>
STATION 11 (Shark Tooth)	Common Name	Shark tooth	20A
STATION 12 (Worthenia or any snail)	Common Name	Snail or Gastropod	23. <u>C</u> 24. <u>A</u>

2004 NYS Regional	Science Olympiad	DIVISION B	FOSSILS
School	<u>KEY</u>	Team #	
STATION 13	Class or commo	on name <u>Graptolite or Grapto</u>	<u>olithina</u>
(Graptolite on shale	2)		25. <u>C</u>
			26. <u>D</u>
			27. <u>B</u>
STATION 14	Phylum	Bryozoa	_
(Bryozoan)			28. <u>D</u>
			29. <u>C</u>
STATION 15	Dinosaur fo	otprint	
(print provided or u	ise cast or sample)		30. <u>B</u>
31. Foot length		Hip Height	
32	ecologic relationsh	ips, herding behavior, walking and r	unning speed
STATION 16	Order	Belemnitida or Belemnite	
(Belemnite)			33. <u>C</u>
			34. <u>D</u>
STATION 17	Fossil name	e <u>Stromatolite</u>	
(Stromatolite photo	or specimen)		35. <u>C</u>
			36. <u>A</u>

School	KEY	Team #	
STATION 18	Genus	A. <u>Rafinesquina</u>	
		B. Platystrophia	_
		C. <u>Leptaena</u>	
			37. <u>B</u>
STATION 19	Dinosaur Genus	A. <u>Iguanodon</u>	38. <u>B</u>
		B. <u>Plateosaurus</u>	
			39. <u>B</u>
		hed into earth causing catastrophiganisms became extinct. (2 pts)	ic tidal waves, fires, etc. Dust in
		ide with Iridium, an element four ered in Yucatan. (2 pts)	nd in extra-terrestrial objects
	osaur species found afte ocodiles, birds, mamma	er K/T boundary; other organisms ls, marine life. (2 pts)	s survived through boundary,
STATION 20 (sample or use phot	Ancient En to provided)		based on photo provided.)
	*	udes the following: Brachiopods rilobites, horn coral) (1 pt each =	(4 types including Rafinesquina & = 8 pts for this sample)
(1 pt) 42. Rock type	e: Limestone (de	epends on sample)	
(1 pt) 43. Geologic	EraPaleozoic	Geologic Period	Ordovician (1 pt)
(1pt) 44. Environ	ment <u>shallow mari</u>	ne	
STATION 21	Relative/A	bsolute Age 4	5 <u>. D</u>
		4	6 <u>. C</u>
		4	7 <u>. B</u>
		Δ	8. B

School KEY		Team #		
STATION 22	INDEX FOSSILS			
49. Geologic Period	Cretaceous	(1 pt)		
50. Index Fossil:	Baculites is the best ind	ex fossil because it has the shortest	range.	

Geologic Age Range of Fossils (1 pt for each correct range)

Geologic Age Range of Fossils (1 pt for each correct range						
ERA	GEOLOGIC PERIOD	Belemnite	Nucula	Exogyra	Baculites	Turitella
CENOZOIC	Recent (1.6-0 my)					
	Tertiary (65 -1.6 my)					
)IC	Cretaceous (142-65 my)					
MESOZOIC	Jurassic (206-142 my)					
	Triassic (251-206 my)					
	Permian (290-206 my)					
PALEOZOIC	Carboniferous (363-290 my)					
	Devonian (418-362)					
	Silurian (443-418 my)					
	Ordovician (490-443 my)					
	Cambrian (544-490 my)					