Grade Four Numeracy: An Item-level Analysis - Multiple Choice (Provincial Level)

British Columbia All Schools FSA May/2006 FSA population (N=46,828)

Provincial FSA Item-Level Response Reports include data for all BC students in Grade 4 who wrote a particular FSA test. Both public and independent schools are included. The FSA 2004 provincial Item-Level Response Reports display the proportion of students who made errors on each test item and a description of the misconception.

Since the English and French versions of the FSA Numeracy tests are identical, the Item-level Analysis – Multiple Choice provincial report includes all students.

Content Area	Item #	Number of Students who Responded to the Item	Percentage of Students who Answered Incorrectly	Specific Curricular Aspect that Needs Attention [>20% selected incorrect response]
Number	1	41006	41	• In a word problem involving division with whole numbers, students rounded down instead of up.
Number	3	40601	42	• Students completed only the multiplication step in a word problem that involved multiplication followed by subtraction.
Number	4	40546	51	• Students left one value off the answer in a word problem involving subtraction followed by division.
Number	9	40587	36	*
Number	15	40386	40	*
Number	17	40281	54	• Students made a calculation error in a word problem involving division.
Patterns and Relations	2	40974	50	• Students found the value of the (n+1) term in a number pattern rather than the nth term.

Patterns and Relations	13	40306	62	• Students were unable to determine the number of exposed faces as the number of blocks used to extend a pattern increased.
Shape and Space	5	40283	53	• Students just multiplied numbers in the stem of a cost problem without using the rest of the information.
Shape and Space	7	40646	34	*
Shape and Space	8	40424	42	• Students incorrectly divided millilitres into litres.
Shape and Space	10	40443	64	• Students left out one step in a question involving time, in hours and minutes, spent on an activity. • Students did not use all of the information in a question involving time, in hours and minutes, spent on an activity.
Shape and Space	14	40575	46	• Students made one or more calculation errors in finding the perimeter of a rectangular figure made up of several squares
Shape and Space	18	39570	68	• Students made one or more calculation errors in a two-step money problem involving change from a purchase.
Shape and Space	19	39853	50	• Students made a calculation error in trying to find a starting time for an event, given its duration and end time, using the 24-hour clock.
Statistics and Probability	6	40938	30	*

Statistics and Probability	11	40817	34	*
Statistics and Probability	12	40721	33	• Students could not find a missing numerator when comparing two equal ratios.
Statistics and Probability	16	40615	12	N/A
Statistics and Probability	20	39572	31	*

Note: '**N / A**' represents that there were fewer than 20% of the students who incorrectly answered the item; '*****' represents that there was no specific curricular aspect that needed attention since each of the incorrect answers has been chosen by less than 20% of the students.