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# SURVEY OF INSTRUCTIONAL CONTENT

IN

## ELEMENTARY SCHOOL

# MATHEMATICS

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Thank you for your time and patience in completing this survey. The survey was designed with the help of mathematics educators representing a number of states, including your own. We hope the results will help teachers and schools in improving curriculum and support for mathematics education. Each school will receive a report on the results of this survey. Please read each question and the possible responses carefully, and then mark your response by filling in the appropriate circle in the response section.

## Instructions

The following pages request information regarding topic coverage and your expectations for students in the target mathematics class **for the current school year**. The content matrix that follows contains lists of discrete topics associated with mathematics instruction. The categories and the level of specificity are intended to gather information about content across a wide variety of programs. It is not intended to reflect any recommended or prescribed content for the grade level and may or may not be reflective of your local curriculum.

**Please use #2 pencil in responding to this survey.**

## Step 1; Indicate topics not covered in this class.

Begin by reviewing the *entire list* of topics identified in the topics column of each table, noting how topics are grouped. After reviewing each topic within a given grouping, if none of the topics listed within that group receive any instructional coverage, circle the “<none>” in the “Coverage” column for that group. For any **individual topic** which is not covered in this mathematics class, fill-in the circled “zero” in the coverage column. (Not necessary for those groups with “<none>” circled.) Any topics or topic groups so identified will not require further response. [Note, for example, that the class described in the example below did not cover any topics under the group “Operations” and so the “<none>” is circled.]

## Step 2; Indicate amount of time spent on each topic covered in this class.

Examine the list of topics a second time. This time note the amount of coverage devoted to each topic by filling in the appropriately numbered circle in the “Time on Topic” column, based upon the following codes:

- 0** = None, not covered
- 1** = Slight coverage (less than one class/lesson)
- 2** = Moderate coverage (one to five classes/lessons)
- 3** = Sustained coverage (more than five classes/lessons)

Example:

**Step 2**

Time on Topic		Elementary Mathematics Topics	Expectations for Students in Mathematics					
<none>	1	Number sense / Properties / Relationships	Memorize	Understand Concepts	Perform Procedures	Analyze / Reason	Solve Novel Problems	Integrate
● ① ② ③	101	Place value	① ② ③	① ② ③	① ② ③	① ② ③	① ② ③	① ② ③
● ① ② ③	102	Patterns	① ② ③	① ② ③	① ② ③	① ② ③	① ② ③	① ② ③
① ① ② ③	103	Decimals	① ② ③	① ② ③	① ② ③	① ② ③	① ② ③	① ② ③
① ① ② ③	104	Percent	① ② ③	① ② ③	① ② ③	① ② ③	① ② ③	① ② ③
① ① ② ③	105	Real numbers	① ② ③	① ② ③	① ② ③	① ② ③	① ② ③	① ② ③
① ① ② ③	106	Exponents, scientific notation	① ② ③	① ② ③	① ② ③	① ② ③	① ② ③	① ② ③
① ② ③	107	Factors, multiples, divisibility	① ② ③	① ② ③	① ② ③	① ② ③	① ② ③	① ② ③
① ① ② ③	108	Odds, evens, primes, composites	① ② ③	① ② ③	① ② ③	① ② ③	① ② ③	① ② ③
① ① ② ③	109	Estimation	① ② ③	① ② ③	① ② ③	① ② ③	① ② ③	① ② ③
① ② ③	110	Order of operations	① ② ③	① ② ③	① ② ③	① ② ③	① ② ③	① ② ③
① ② ③	111	Relationships between operations	① ② ③	① ② ③	① ② ③	① ② ③	① ② ③	① ② ③
<b>&lt;none&gt;</b>	<b>2</b>	<b>Operations</b>	<b>Memorize</b>	<b>Understand Concepts</b>	<b>Perform Procedures</b>	<b>Analyze / Reason</b>	<b>Solve Novel Problems</b>	<b>Integrate</b>
① ① ② ③	201	Add, subtract whole numbers	① ② ③	① ② ③	① ② ③	① ② ③	① ② ③	① ② ③
① ① ② ③	202	Multiplication whole numbers	① ② ③	① ② ③	① ② ③	① ② ③	① ② ③	① ② ③
① ① ② ③	203	Division whole numbers	① ② ③	① ② ③	① ② ③	① ② ③	① ② ③	① ② ③

**Step 1** (indicated by arrows pointing to the circled “<none>” in the “Time on Topic” column for the “Operations” group and the circled “0” in the “Time on Topic” column for the “Place value” row.)

### Step 3; Indicate relative emphases of each student expectation for every topic taught.

The final step in completing this section of the survey concerns your expectations for students – i.e. your expectations for what students should know or be able to do (cognitive demand). For each topic taught, please provide information about the relative amount to instructional time spent on work designed to help students reach each of the listed performance goals by filling in the appropriately numbered circle using the response codes listed below. (At the top of each content sheet you will find a list of descriptors for each of the six expectations for students.)

- 0 = No emphasis** (Not an expectation for this topic.)
- 1 = Slight emphasis** (Accounts for **less than 25%** of the time spent on this topic.)
- 2 = Moderate emphasis** (Accounts for **25% to 33%** of the time spent on this topic.)
- 3 = Sustained emphasis** (Accounts for **more than 33%** of the time spent on this topic.)

*Note: A code of “3” should typically be given for only one, and no more than two expectation categories within any given topic. No expectation codes should be filled-in for those topics for which no coverage is provided (i.e., circled “0” or “<none>”).*

### Example

## Step 3

Time on Topic		Elementary Mathematics Topics	Expectations for Students in Mathematics										
<none>	1	Number sense / Properties / Relationships	Memorize	Understand Concepts	Perform Procedures	Analyze / Reason	Solve Novel Problems	Integrate					
●	①	②	③	101	Place value	①	①	②	③	①	②	③	
●	①	②	③	102	Patterns	①	①	②	③	①	②	③	
①	●	②	③	103	Decimals	①	①	●	③	①	●	②	③
①	①	●	③	104	Percent	①	●	②	③	●	①	②	③
①	①	②	●	105	Real numbers	①	①	②	●	①	●	③	
①	①	②	●	106	Exponents, scientific notation	①	①	●	③	①	●	②	③
①	●	②	③	107	Factors, multiples, divisibility	①	●	②	③	●	①	②	③
①	①	●	③	108	Odds, evens, primes, composites	①	①	●	③	①	●	②	③
①	①	②	●	109	Estimation	①	①	●	③	①	●	②	③
①	●	②	③	110	Order of operations	①	①	●	③	①	●	②	③
①	●	②	③	111	Relationships between operations	①	①	②	●	①	●	③	
●	①	②	③	2	Operations	Memorize	Understand Concepts	Perform Procedures	Analyze / Reason	Solve Novel Problems	Integrate		
①	①	②	③	201	Add, subtract whole numbers	①	①	②	③	①	②	③	
①	①	②	③	202	Multiplication whole numbers	①	①	②	③	①	②	③	
①	①	②	③	203	Division whole numbers	①	①	②	③	①	②	③	







END OF SURVEY

Thank you for your participation!