

Mathematics Assessment Updates for 2011



Measurements of Student Progress Grades 3-5

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Introduction

Updates for 2011 contains pertinent information for Washington educators. This document includes a summary of changes and new information in mathematics assessment, links to resources for teachers, and sample test items from *Changes for 2010 and Beyond*. *Updates for 2011* has been customized into grade bands: Grades 3-5, Grades 6-8, and End-of-Course Assessments. The documents are available on <http://www.k12.wa.us/Mathematics/default.aspx>.

Washington State K-12 Mathematics Learning Standards

In 2008, the State Board of Education voted to approve the revised K-8 Mathematics Learning Standards and 9-12 Mathematics Learning Standards for adoption by the Office of Superintendent of Public Instruction (OSPI). Along with the new standards, the legislature provided direction for the redesign of the assessment system. The Measurements of Student Progress (MSP) replaced the Washington Assessment of Student Learning (WASL) and assessed the new mathematics standards in grades 3-8 in the spring of 2010. End-of-course (EOC) exams will replace the High School Proficiency Exam (HSPE) in 2011. These EOC exams will assess the Algebra 1/Integrated Mathematics 1 and Geometry/Integrated Mathematics 2 performance expectations in the spring of 2011.

Overview of the Standards

The *Washington State K-12 Mathematics Learning Standards* outline the mathematics learning expectations for all students in Washington. These standards describe the mathematics content, procedures, applications, and processes that students are expected to learn. The topics and mathematical strands represented across grades K-12 constitute a mathematically complete program that includes the study of numbers, operations, geometry, measurement, algebra, data analysis, probability and important mathematical processes.

The *Washington State K-12 Mathematics Learning Standards* are organized by grade level for grades K-8 and by course for Algebra 1, Integrated Mathematics 1, Geometry, and Integrated Mathematics 2. Each grade/course consists of three elements: *Core Content*, *Additional Key Content*, and *Core Processes*. These elements are referred to as Areas of Emphasis in the Test and Item Specifications. *Core Content* areas describe the major mathematical focuses of each grade level or course. *Additional Key Content* contains important expectations that do not warrant the same amount of instructional time as the Core content areas. *Core Process* includes expectations that address reasoning, problem solving, and communication. At the beginning of each of these elements is an introductory paragraph that conveys the essence of the content in a way that should help readers get a clear “sense” of that content.

View the new Washington State K-12 Mathematics Learning Standards at:

<http://www.k12.wa.us/Mathematics/Standards.aspx>

Test and Item Specifications

The Test and Item Specifications provide guidelines for developing large-scale assessments based on the Washington State K-12 Mathematics Learning Standards that assess the levels of proficiency students have achieved.

The test specifications provide a grade-level or course test map that delineates the type and number of test items in each Area of Emphasis.

The item specifications assist in writing test items that align with the mathematics performance expectations and follow associated restrictions. Restrictions are necessary to construct a valid and reliable statewide on-demand assessment. These restrictions are **not** necessary in classroom-based assessments. Restrictions in items written for the Measurements of Student Progress (MSP) and End-Of-Course exams follow guidelines provided in the Washington K-12 Mathematics Learning Standards. They include limitations and clarifications such as: kinds of numbers, types of geometric figures, types of data displays, etc.

The Test and Item Specifications are periodically updated to:

- clarify performance expectations (e.g. rules, limits, item format);
- incorporate additions/changes recommended as a result of the work of committees convened for the development of items (e.g. Item Writing, Range Finding, Content Review, and Content Review with Data);
- meet new legislative requirements; and
- answer questions from the field.

Included with each updated version of the Test and Item Specifications will be a summary of the changes made since the previous version.

The Test and Item Specifications can be accessed through the following link:

<http://www.k12.wa.us/Mathematics/TestItemSpec.aspx>.

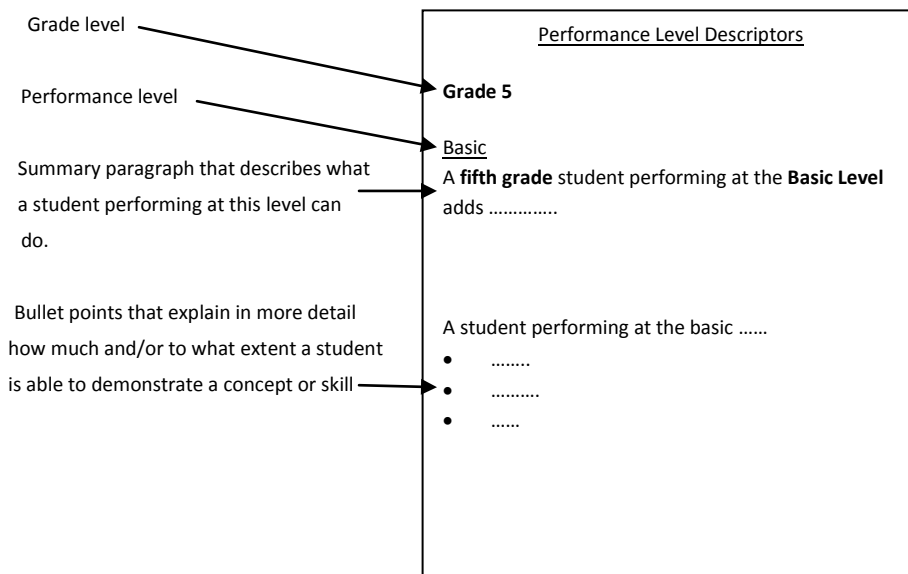
Performance Level Descriptors

Washington State reports four levels of performance on the Measurements of Student Progress: Below Basic, Basic, Proficient, and Advanced. Performance level descriptors (PLDs) describe what a student must be able to do to reach the Basic, Proficient, and Advanced levels at each grade or course.

The PLDs were developed by grade-level teams of educators from all regions of the state with experience in teaching mathematics to students of diverse ethnic and socio-economic backgrounds. These PLDs were used and revised by the standard setting panels when cut scores were established for grades 3-8 in July/August 2010. PLDs for end-of-course (EOC) exams will be developed in the 2010-2011 school year and will be used by the Standard Setting Panels when establishing cut scores for EOC exams and EOC makeup exams in August 2011.

Teachers have reported that the PLDs are useful when communicating with parents and students. The specific bullet points described in the Performance Level Descriptors can also be used by teachers as learning checkpoints.

Sample Performance Level Descriptor



Access the Performance Level Descriptors for grades 3-8 at:

<http://www.k12.wa.us/assessment/statetesting/PLD/default.aspx>.

Performance Level Descriptors for Algebra 1/Integrated Mathematics 1 and Geometry/Integrated Mathematics 2 will be available in Fall 2011 after Standard Setting.

Manipulatives and Tools Allowed

on the Measurements of Student Progress (MSP), End-of-Course (EOC) Exams, and EOC Makeup Exams

New content in the K-12 Mathematics Learning Standards has resulted in confusion about which manipulatives are allowed during the state assessments. Use of a variety of manipulatives by teachers during instruction can be beneficial for students to build concrete understanding of mathematical content and procedures. Students are also expected to understand the meaning of symbolic notation, develop fluency, and apply concepts and procedures in problem solving situations. Many performance expectations require students to demonstrate understanding at the symbolic notation, fluency, and application levels. Because of the need to assess these levels of understanding, some manipulatives used in the classroom are not appropriate for use on the state assessments. Of the utmost importance—**manipulatives should not provide answers to items.**

Manipulatives and Tools Allowed	Manipulatives and Tools Not Allowed
<p>Manipulatives that are used during the assessment should not be distributed to the students but should be available in the classroom to students who elect to use them.</p> <ul style="list-style-type: none"> • Straightedge (all grades) • Ruler with centimeters and inches for grade 3 (required) • Protractor or angle ruler for grade 5 (required) • Abacus for visually impaired/blind students using Braille edition • Tiles, algebra tiles, cubes • Base-ten pieces • Pattern blocks, geoboards, Cuisenaire rods • Judy clocks without a digital display • Glossary of Non-Mathematics Terms <p><i>Tools that can remain on teachers' walls:</i></p> <ul style="list-style-type: none"> • Hundreds charts (0-99 or 1-100 only) • Number lines with whole numbers only <p><i>*Tools that must be collected for shredding, if used:</i></p> <ul style="list-style-type: none"> • Graph paper* 	<p>Because of the multitude and variety of materials available, the following list of materials that are <u>not</u> allowed is not exhaustive. Consider all manipulatives “Not Allowed” if they are not listed as “Allowed”.</p> <p>The following list addresses the most commonly asked questions concerning manipulative use from the field.</p> <ul style="list-style-type: none"> • Calculators for grades 3-6 • Multiplication or addition matrices • Number lines with integers, fractions, decimals, or markings of multiples, prime, and/or composite numbers • Commercially- or student-made fraction pieces, fraction templates, or fraction materials, whether labeled or unlabeled • Dictionaries or thesauruses • Patty paper or tracing paper • Dry erase boards • Highlighters





If you have further questions regarding manipulatives contact: Assessment@k12.wa.us.

The Move to Online State Testing

Washington is joining a growing number of states moving to online testing. In May 2010, a little more than 25 percent of students statewide in grades 6-8 participated in online testing. By 2012, the goal is to move the majority of grades and content areas online. Based on feedback from schools who participated in the spring's online testing, OSPI will evaluate the [rollout plan](#) to determine if any adjustments are needed.

Mathematics

Measurements of Student Progress						
	Gr 3	Gr 4	Gr 5	Gr 6	Gr 7	Gr 8
2010	P/P	P/P	P/P	Online	Online	Online
2011	P/P(*)	Online	Online	Online	Online	Online
2012	Online	Online	Online	Online	Online	Online

P/P = Pencil/Paper
 (*) = Research Online
 = 25% Online
 = 50% Online
 = 80% Online
 = 100% Online

Fourth and fifth grade participation are included in to the 2011 testing schedule. OSPI is conducting feasibility studies for online testing in third grade. For now, third grade will remain a paper-and-pencil test until more information is gathered. Paper-and-pencil testing will always be an option for students with special needs.

New online item types will be piloted in grades 6-8 this year. These items will feature new tools and online capabilities for students' responses.

Demos and tutorials will be available mid to late January 2011 for students and teachers to become familiar with the new item types as well as the format of items and the tools used during the 2009 online administration.

Visit [Washington's Online Testing Web site](#) to download tutorials, view demos, and more.

Item and Point Totals: Spring 2011

May 2011						
Item Type	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
Multiple-Choice (1 point)	20	20	20	25	25	25
Completion (1 point)	6	6	6	5	5	5
Short-Answer (2 points)	4	4	4	5	5	5
Total Items (Questions)	30	30	30	35	35	35
Total Points	34	34	34	40	40	40
*Pilot Items	5	5	5	5	5	5
Total Items on Assessment	35	35	35	40	40	40

*Pilot items are embedded in the assessment. These items do not count towards the students' scores.

State Testing Windows

Spring 2011 Mathematics Measurements of Student Progress (MSP) Testing Window

Grades 3-8	Paper-Pencil: May 2 – May 19
Grades 4-8	Online: May 2 – June 3

A complete schedule of state testing can be accessed at:

<http://www.k12.wa.us/assessment/StateTesting/timelines-calendars.aspx#spring2011>

Spring 2011 End-of-Course (EOC)/EOC Makeup Exams Testing Window

Beginning in Spring 2011, students will take end-of-course exams in Algebra 1/Integrated Mathematics 1 and Geometry/Integrated Mathematics 2 based on the 2008 Standards. Students in the class of 2013 and beyond must pass both EOC exams or both EOC makeup exams to meet the mathematics graduation requirement. Students in seventh and eighth grade who take an Algebra 1/Integrated Mathematics 1 or Geometry/Integrated Mathematics 2 course are required to take the grade-level state MSP assessment (for NCLB purposes) and the appropriate end-of-course exam. Students in sixth grade or below who are in one of the above classes will only take an end-of-course exam if the course is considered high school level. Those students, however, cannot earn high school credit for the course.

Further information regarding EOCs and EOC makeup assessments is located at

<http://www.k12.wa.us/Mathematics/End-of-CourseExams.aspx>.

Sample Items for Classroom Use

The need to build a robust item bank with items that assess the new mathematics standards prevents the release of actual test items that have been used operationally for the current mathematics standards. In this document are three sources of sample items available for classroom use: (1) New samples for 2011, (2) An alignment of Released Items and Practice Tests to the current performance expectations, and (3) Sample items provided in the *Changes for 2010 and Beyond* document that are still pertinent. Items on the MSP will consist of multiple-choice, completion, and short-answer items.

New Samples for 2011

These items are samples that are aligned with the K-12 Mathematics Learning Standards. They have not gone through the comprehensive review process that test items must pass before placement on an actual state test. Teachers may still use these items as classroom exercises, or informal checks for understanding, as teachers have the ability and choice to clarify any questions about these items as students are working on them.

Grade 3

Multiple-Choice Item

Sample item for performance expectation 3.2.C

A number is missing in the equation.

$$7 \times \square = 35$$

Which expression could be used to find the missing number?

O A. $7 \div 35$

O B. $35 \div 7$

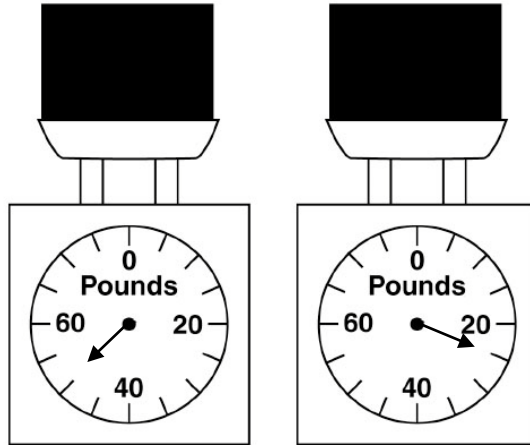
O C. $35 - 7$

Answer: B

Completion Item

Sample item for performance expectation 3.5.C

Nancy weighed two boxes.



Find the difference in the weight of the two boxes.

Write your answer on the line.

**What is the difference in the weight of the
two boxes? _____ pounds**

Answer: 25

Please note that labels will be provided for completion items. Students will be scored on the numeric answer.

Short-Answer Item

Sample item for performance expectation 3.3.D

Felecia, Tracy and Julie each have 12 pencils.

Felecia sharpened 5 of her pencils. Tracy sharpened $\frac{3}{12}$ of her pencils. Julie sharpened $\frac{1}{2}$ of her pencils.

Who sharpened the most pencils?

- O A. Felecia
- O B. Tracy
- O C. Julie

Show how you know who sharpened the most pencils.

Rubric:

Students can earn 2 points by:

- Choosing C (or Julie)
- These are a few examples of how a student can “show who sharpened the most pencils”:
 - Students can explain that $\frac{5}{12}$ and $\frac{3}{12}$ are both less than half so Julie has sharpened the most pencils.
 - Students can show or explain that $\frac{1}{2}$ is the same as $\frac{6}{12}$ and then compare $\frac{6}{12}$ to $\frac{5}{12}$ and $\frac{3}{12}$.
 - Students can represent or draw the fractions of the set of pencils each girl had, or equivalent such as drawing and comparing fractions of a whole.

Note: When students use drawings or representations of fractions for comparison, wholes should be the same size and shape. Fractions should be a proportional representation of the values they represent, such as fourths should be half the size of halves.

Students can earn 1 point by doing one of the above.

Grade 4

Multiple-Choice Item

Sample item for performance expectation 4.1.J

Shawn has 58 books. He will keep 14 books and give the rest away. He will pack the books he will give away in boxes that hold only 8 books. Find the number of boxes he needs to pack all the books he will give away.

What is the number of boxes Shawn needs to pack all the books he will give away?

- O A. 5
- O B. 6
- O C. 9

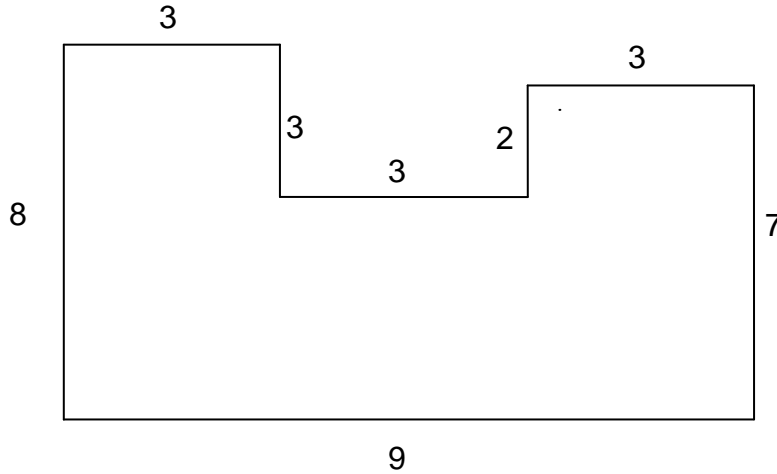
Answer: B

Note: This item also assesses the students understanding of “the remainder.”

Completion Item

Sample item for performance expectation 4.3.D

All segments of the figure intersect at right angles. The lengths are shown in centimeters.



Find the area of the figure.

Write your answer on the line.

What is the area of the figure? _____ sq. cm

Answer: 60

Note: Students do not need to provide a label when the label is given.

Short-Answer Item

Sample item for performance expectation 4.2.1

Shelly wrote down the distances she ran for 3 days.

M	$1\frac{2}{3}$ miles
T	1.3 miles
W	$\frac{5}{4}$ miles

Which distance is the greatest?

- O A. $1\frac{2}{3}$ miles
- O B. 1.3 miles
- O C. $\frac{5}{4}$ miles

Show how you know which distance is the greatest.

Students can earn 2 points by:

- Choosing A or $1\frac{2}{3}$ miles
- These are a few examples of how a student can “show which distance is the longest”:
 - Students can convert all values to the same form and compare:
 - $1\frac{2}{3} \cong 1.6\overline{6}$
 - $1.3 = 1.3$
 - $\frac{5}{4} = 1.25$
 - Students can explain that 1.3 and $\frac{5}{4}$ are less than $1\frac{1}{2}$ and $1\frac{2}{3}$ is the only number greater than $1\frac{1}{2}$.
 - Students can represent the fractions and compare.

Note: When students use drawings or representations of fractions for comparison, wholes should be the same size and shape. Fractions should be a proportional representation of the values they represent, such as fourths should be half the size of halves.

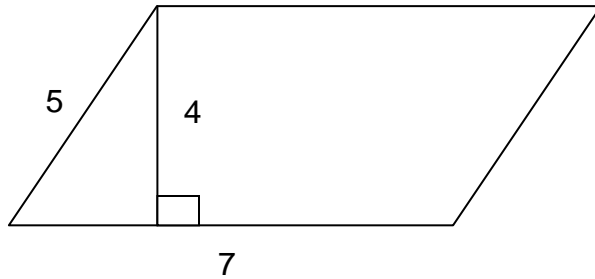
Students can earn 1 point by doing one of the above.

Grade 5

Multiple-Choice Item

Sample item for performance expectation 5.3.F

A parallelogram has dimensions in centimeters as shown.



What is the area of the parallelogram?

- A. 16 sq. cm
- B. 28 sq. cm
- C. 35 sq. cm

Answer: B

Completion Item

Sample item for performance expectation 5.2.D

Determine the least common multiple of the numbers 3, 4, and 6.

Write your answer on the line.

**What is the least common multiple of the
numbers 3, 4 and 6? _____**

Answer: 12

Short-Answer Item

Sample item for performance expectation 5.5.C

Manny recorded the height of his tomato plant for 5 weeks.

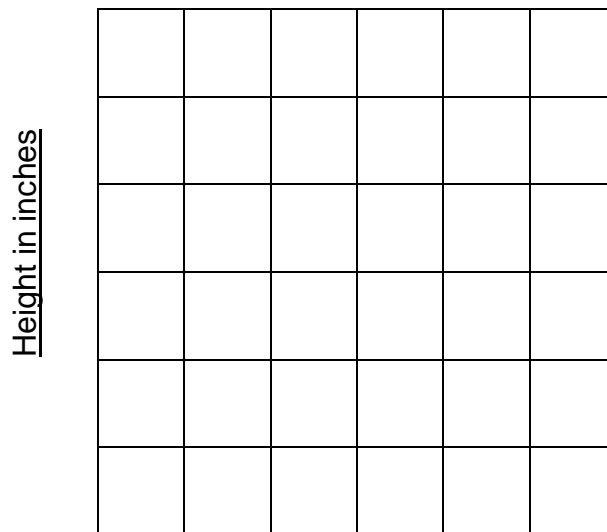
Height of Tomato Plant in Inches

Week 1	$1 \frac{1}{4}$
Week 2	$2 \frac{1}{2}$
Week 3	3
Week 4	$4 \frac{3}{4}$

Make a graph of the data:

- Label the horizontal axis.
- Provide a scale that fits the data.
- Draw points to represent the data and draw a line that connects the points.

Height of Tomato Plant



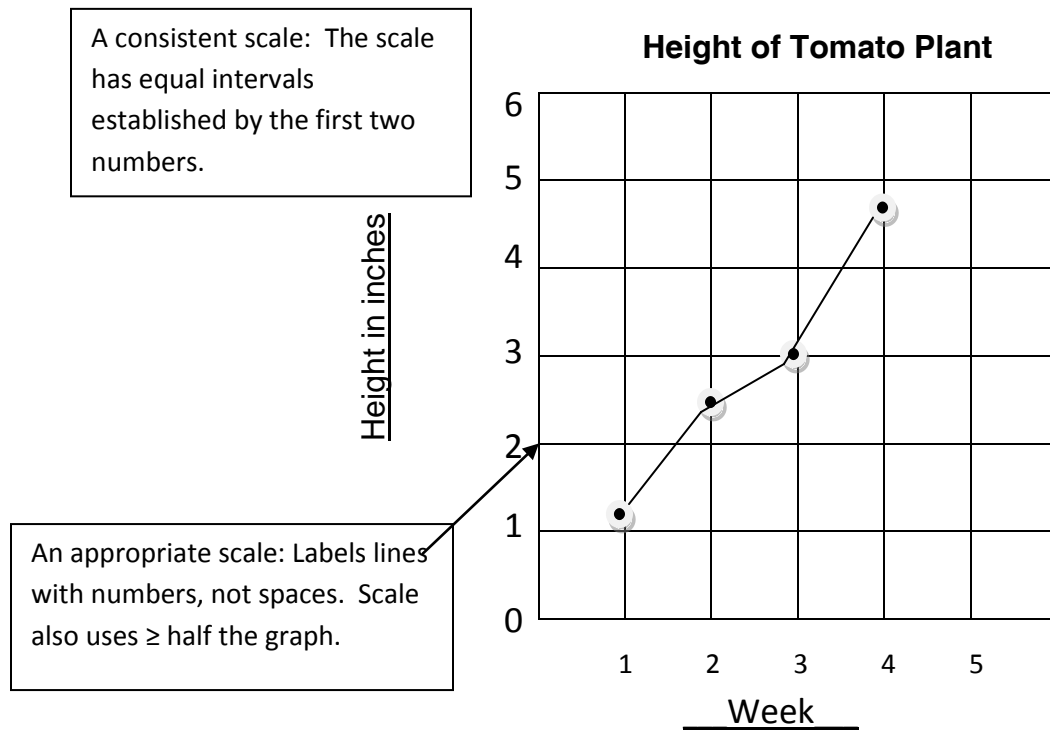
Rubric:

2-point response: The student shows understanding of constructing a line graph by doing the following:

- labels the horizontal axis: Week
- shows an appropriate scale and consistent scale
- Plots 4 out of 4 data points and connects the points with a line

1-point response: the student plots 3 out of 4 data points and one of the following:

- labels the horizontal axis: Week
- shows an appropriate scale
- shows a consistent scale



0-point response: The student shows very little or no understanding of constructing a line graph.

Alignment of Released Items to Current Performance Expectations

OSPI has released items that appeared on previous tests (formerly the WASL). While the WASL has been replaced by the Measurements of Student Progress (MSP) and the End-of-Course (EOC) Exams, the WASL released items remain a valuable resource. Some of the released items align to the new K-12 mathematics standards and can be used in the classroom as they appeared on the WASL.

Some of the Released Items are only partially aligned to the new K-12 mathematics standards and can be used in the classroom with minor modifications or considerations. These considerations are described below.

(1) It is standard practice on our state assessments to write test questions with vocabulary targeted to the previous grade level or lower readability, except for required mathematics terms. As an example, third grade test questions are written at a second grade readability level. Some of the released items written for a standard in a particular grade on the WASL are the same standard assessed at a lower grade level on the MSP or EOC. If a WASL released item has moved down a grade level, the vocabulary in the item may be above the targeted readability level. Because teachers can choose to read items to students during classroom-based activities and/or assessments, this should not be a problem.

(2) Previous WASL items were written in the following formats: multiple-choice, short-answer, and extended response. MSP and EOC items are written in the following formats: multiple-choice, completion, and short-answer. Classroom-based activities and assessments are not limited to the formats of either assessment. The differences in item format will be noted in the comments section of the alignment table. Multiple-choice items have three options in grades 3-5 and four options in grades 6-High School EOC. If a Released Item has changed grade levels which would cause a difference in the number of options, it will also be noted under comments in the alignment table. Teachers can choose to give students experience with items of a different number of options or choose to add or eliminate an answer choice.

The alignment of the previously used Released Items and Practice Test items are organized by document grade level and year. When there is an alignment of the item to a current performance expectation (PE), the PE will be listed in the second column. The “Comments” column will describe the alignment, if any, and note any considerations such as difference in item format, or suggestions to increase rigor to meet current standards.

The following is a brief description of how to read the Alignment Tables:

Grade 3 2006 Released Items		
Item Number	PE	Comments
#1		Does not align.
#2	4.1.B	This P.E. is only assessed as multiple-choice on the MSP. This short-answer item involves factors and multiples of numbers . Suitable for a classroom-based activity/assessment.
#3	4.4.A	This P.E. is only assessed as multiple-choice on the MSP. This short-answer item involves representing quantities in equations using boxes and other symbols . Suitable for a classroom-based activity/assessment.

Shows item number in the document.

In this case, indicates that Item #3 in the Grade 3 2006 Released Items Document is aligned to the performance expectation 4.4.A in the new mathematics standards.

In this case, the comment explains that this PE on the MSP is only assessed as a multiple-choice item. Although this released item is in a short-answer format, teachers can choose to use this item in the classroom because it deals with **representing quantities in equations using boxes and other symbols**, a current performance expectation.

Alignment Tables

Comments provide a written description of the performance expectation assessed in the released item **in bold**. Released items are located at: <http://www.k12.wa.us/Mathematics/ReleasedItems.aspx>.

When applicable, comments will explain partial alignment, any possible changes needed to the item for complete alignment, changes in item format needed, suitability of item as a classroom activity or classroom-based assessment rather than as an example of an item that will be on the Measurements of Student Progress (MSP), etc.

Released items that are italicized are not aligned to the new mathematics performance expectations. The items are described for teachers' convenience for possible classroom enrichment.

Grade 3 Quick Guide

Grade 3 2007 Released Items	
Item Number	PE
#1	2.1.B 3.1.A
#3	3.5.E
Grade 3 2008 Released Items	
Item Number	PE
#2	3.5.E
Grade 3 Practice Test	
Item Number	PE
#2	3.5.E
#6	3.5.E
#7	3.2.H
#9	3.5.E
#11	3.5.E
#12	3.2.H
#15	3.4.C
#16	3.6.C (3.1.E)
Grade 4 2006 Released Items	
Item Number	PE
#3	3.5.E
Grade 4 2007 Released Items	
Item Number	PE
#3	3.5.E

Grade 4 2008 Released Items	
Item Number	PE
#5	3.5.E
#6	3.5.E
Grade 5 2007 Released Items	
Item Number	PE
#3	3.4.B
Grade 5 2008 Released Items	
Item Number	PE
#2	3.4.E
#4	2.5.D (2.2.C) or 3.6.E (3.1.C)
#6	3.5.E
Grade 5 Practice Test	
Item Number	PE
#1	3.4.C
#8	3.3.A
#16	3.4.A* *with modification
#29	3.1.A
Grade 6 Practice Test	
Item Number	PE
#17	3.4.D* *with modification
#26	3.6.I (3.5.E)

Grade 4 Quick Guide

Grade 3 2006 Released Items	
Item Number	PE
#2	4.1.B
#3	4.4.A
Grade 3 2007 Released Items	
Item Number	PE
#2	4.4.C
Grade 3 2008 Released Items	
Item Number	PE
#1	4.3.A
#3	4.4.A
#5	4.4.C
#6	4.4.B
Grade 3 Practice Test	
Item Number	PE
#3	4.3.A
#4	4.4.C
#8	4.4.B
#14	4.4.E
#17	4.4.A
#19	4.5.C (4.1.I)
#20	4.4.B
#23	4.3.A
#25	4.4.A
#27	4.4.A
#32	4.5.B (4.4.C)
Grade 4 2006 Released Items	
Item Number	PE
#1	4.3.F and 4.1.I/4.1.J
#2	5.4.A
Grade 4 2007 Released Items	
Item Number	PE
#1	4.3.A
#2	4.4.A
#4	4.4.A
Grade 4 2008 Released Items	
Item Number	PE
#2	4.4.E
#3	4.1.
Grade 5 2006 Released Items	
Item Number	PE
#1	4.4.E

Grade 5 2007 Released Items	
Item Number	PE
#2	4.2.E
#4	4.4.B/4.4.C
Grade 5 2008 Released Items	
Item Number	PE
#1	4.4.B
#5	4.4.B
Grade 5 Practice Test	
Item Number	PE
#2	4.4.E
#4	4.4.E
#6	4.4.D
#7	4.4.C
#11	4.5.E (4.1.B)
#12	4.3.F
#15	4.3.F
#17	4.4.A
#19	4.5.E (4.1.B)
#20	4.3.F
#21	4.2.C
#24	4.1.I
#25	4.4.C
#26	4.4.C
#27	4.3.F 5.3.I
#31	4.2.E
Grade 6 Practice Test	
Item Number	PE
#13	4.4.G
#21	4.4.G
#33	4.4.E
#37	4.4.G
#38	4.4.B
#42	4.2.E
Grade 7 2007 Released Items	
Item Number	PE
#2	4.4.E (with modification) or 5.5.B

Grade 7 2008 Released Items	
Item Number	PE
#6	4.5.E (4.4.B)
Grade 8 Practice Test	
Item Number	PE
#34	4.5.H (4.4.C)
2006 High School Practice Test	
Item Number	PE
32	4.4.E

Grade 5 Quick Guide

Grade 3 2007 Released Items	
Item Number	PE
#5	5.4.A
Grade 3 Practice Test	
Item Number	PE
#22	5.4.A
Grade 4 2006 Released Items	
Item Number	PE
#2	5.4.A
Grade 4 2007 Released Items	
Item Number	PE
#6	5.2.H
Grade 5 2006 Released Items	
Item Number	PE
#3	5.2.H
Grade 5 2007 Released Items	
Item Number	PE
#1	5.2.H
#5	5.4.A/5.2.F
Grade 5 Practice Test	
Item Number	PE
#3	5.4.A
#9	5.6.F (5.3.H) (5.2.H)
#10	5.4.C
#13	5.5.B
#14	5.4.A
#23	5.5.B
#27	4.3.F 5.3.I
#30	5.3.A
#32	5.6.E (5.2.H)
#35	5.2.H

Grade 6 2006 Released Items	
Item Number	PE
#1	5.3.I
#3	5.6.I (5.2.H)
Grade 6 2007 Released Items	
Item Number	PE
#1	5.2.H
#3	Partially aligned to 5.3.A
#5	5.3.B
Grade 6 2008 Released Items	
Item Number	PE
#1	5.3.C
#5	5.6.F (5.2.H)
#6	5.6.E (5.2.H)
Grade 6 Practice Test	
Item Number	PE
#2	5.4.C
#3	5.6.E (5.1.F)
#5	5.6.B/5.6.C (5.1.F)
#6	5.3.I
#8	5.5.B
#10	5.3.G
#14	5.4.A
#15	5.6.I (5.5.B)

Grade 6 Practice Test <i>continued</i>	
#18	Partially aligned to 5.3.A, 5.3.B and 5.3.H
#24	5.4.A
#27	5.2.H
#32	5.3.H
#39	(5.6.E) 5.4.A
Grade 7 2007 Released Items	
Item Number	PE
#2	4.4.E (with modification) or 5.5.B
Grade 8 2006 Released Items	
Item Number	PE
#3	5.5.C
Grade 8 Practice Test	
Item Number	PE
#3	5.6.E (5.2.H)
#7	5.6.E (5.1.F)
#12	5.4.A
#26	5.1.F
#36	5.1.F
2006 High School Practice Test	
Item Number	PE
37	5.6.E(5.3.F)

Grades 3-8 Alignment Tables

Grade 3 2006 Released Items		
Item Number	PE	Comments
#1	<i>Not aligned</i>	<i>This short-answer item requires students to draw a figure with a given number of sides and a given side-length.</i>
#2	4.1.B	This P.E. is only assessed as multiple-choice on the MSP. This short-answer item assesses factors and multiples of numbers . Suitable for a classroom-based activity/assessment.
#3	4.4.A	This P.E. is only assessed as multiple-choice on the MSP. This short-answer item assesses representing quantities in equations using boxes and other symbols . Suitable for a classroom-based activity/assessment.
Grade 3 2007 Released Items		
Item Number	PE	Comments
#1	2.1.B 3.1.A	This item assesses representing numbers with place value models . It is more aligned to 2.1.B because of the value of the number represented.
#2	4.4.C	This item assesses determining elapsed time .
#3	3.5.E	This item assesses analyzing bar graphs and a number line.
#4	<i>Not aligned</i>	<i>This short-answer item requires students to draw a figure with a given number of sides.</i>
#5	5.4.A	This item assesses describing a rule for a numerical pattern and extending the pattern .
#6	2.5.D (2.2.1)	This item assesses using strategies to solve a problem using values of coins . Suitable for classroom-based activity/assessment.
Grade 3 2008 Released Items		
Item Number	PE	Comments
#1	4.3.A	This item assesses determining congruence of two-dimensional figures . Note: no definitions will be given for new items on the MSP.
#2	3.5.E	This item assesses analyzing a frequency table .
#3	4.4.A	This item assesses representing an unknown quantity in an equation .
#4	<i>Not aligned</i>	
#5	4.4.C	Partial alignment to determining elapsed time , which is only assessed as multiple-choice. This short-answer item is suitable for a classroom-based activity or assessment because it involves solving a word problem.
#6	4.4.B	This item assesses solving a multi-step word problem involving unit conversions .
Grade 3 Practice Test		
Item Number	PE	Comments
#1	1.1.E	This item assesses comparing and ordering numbers to 120 .
#2	3.5.E	This item assesses analyzing bar graphs .
#3	4.3.A	This P.E. is only assessed with multiple-choice items. This short-answer item assesses determining congruence of two-dimensional figures and can be used as a classroom-based activity or assessment.
#4	4.4.C	This item assesses determining elapsed time .
#5	<i>Not aligned</i>	<i>This item requires students to draw pictures to complete a pattern.</i>
#6	3.5.E	This item assesses analyzing bar graphs .

Grade 3 Practice Test <i>continued...</i>		
Item Number	PE	Comments
#7	3.2.H	This item assesses solving single-step word problems involving division.
#8	4.4.B	This item assesses solving problems involving unit conversions.
#9	3.5.E	This item assesses analyzing bar graphs.
#10	2.1.F	This item assesses comparing and ordering numbers from 0 to 1,000.
#11	3.5.E	This item assesses analyzing frequency tables.
#12	3.2.H	This item assesses solving single-step word problems involving division.
#13	1.3.B	This item assesses identifying 2-dimensional figures (triangles.)
#14	4.4.E	This item assesses determining the mode of a set of data. This item provides a definition of the item, which is not true of new items written for the MSP.
#15	3.4.C	This item involves identifying quadrilaterals from attributes.
#16	3.6.C (3.1.E)	This P.E. is only assessed as a multiple choice item on the MSP. As a short-answer item involving identifying missing information , this item can be used as a classroom-based activity.
#17	4.4.A	This item assesses representing an unknown quantity in equations using boxes.
#18	3.2.H	This item assesses solving multi-step word problems involving multiplication.
#19	4.5.C (4.1.I)	This item assesses identifying missing information needed to solve a problem.
#20	4.4.B	This item assesses solving problems involving unit conversions.
#21	<i>Not aligned</i>	<i>This multiple-choice item requires students to identify the question that would elicit information needed.</i>
#22	5.4.A	This item assesses extending a pattern.
#23	4.3.A	This item assesses determining congruence of two-dimensional figures. This item provides a definition of “congruent”. New items, written for the MSP, do not provide definitions.
#24	2.3.C	This item assesses measuring length to the nearest whole inch.
#25	4.4.A	This item assesses representing an unknown quantity in simple expressions.
#26	2.2.B	This item assesses solving addition and subtraction word problems. Change the numbers to 3 or 4-digit numbers to meet P.E. 3.1.E.
#27	4.4.A	This P.E. is only assessed as multiple-choice. This short-answer item assesses representing an unknown quantity in a simple equation. Students are also required to solve the equation. This item is suitable for a classroom-based activity.
#28	1.1.I	This item assesses classifying a number as odd or even.
#29	<i>Not aligned</i>	<i>This short-answer item asks students to write two sentences using information from a chart.</i>
#30	2.4.B	This item assesses interpreting a bar graph and reading a number line with numbers suitable for second grade.
#31	1.2.A	This item assesses connecting pictorial representations to addition expressions.

Grade 3 Practice Test <i>continued...</i>		
Item Number	PE	Comments
#32	4.5.B (4.4.C)	This P.E. is only assessed with multiple-choice. This short-answer item involves identifying information that is necessary to the solution of a problem and determining elapsed time . This item also involves organizing information in a chart, and is suitable as a classroom-based activity.
#33	1.1.E	This item assesses comparing and ordering numbers to 120 .
#34	2.2.F	This item assesses extending a pattern .
#35	1.2.H	This item assesses matching word problems to addition equations .
Grade 4 2006 Released Items		
Item Number	PE	Comments
#1	4.3.F and 4.1.I/4.1.J	This item assesses solving multi-step word problems involving perimeters of rectangles . Students may use multi-digit multiplication and/or division. Suitable for a classroom-based activity or assessment.
#2	5.4.A	This item assesses describing a rule for a numerical pattern and extending the pattern .
#3	3.5.E	Constructing bar graphs for the MSP are no longer 4-point items. This extended-response item is suitable for a classroom-based activity. Teachers may also modify the item by providing students with a scale and one of the axis labels and having students provide a label and draw bars representing all the data.
Grade 4 2007 Released Items		
Item Number	PE	Comments
#1	4.3.A	This item assesses determining congruence of two-dimensional figures .
#2	4.4.A	This item assesses representing an unknown quantity in equations using boxes .
#3	3.5.E	This item assesses analyzing bar graphs .
#4	4.4.A	This P.E. is only assessed using multiple-choice on the MSP. This short-answer item assesses representing an unknown quantity in equations using boxes and other symbols and is suitable for a classroom activity or assessment.
#5	<i>Not aligned</i>	<i>This short-answer item requires students to write two mathematical questions that can be answered using information from a receipt.</i>
#6	5.2.H	This P.E. is only assessed with multiple-choice or short-answer items on the MSP. This extended-response item involves solving multi-step word problems involving addition and subtraction of decimals . This item is suitable for a classroom activity. One way the item may be modified is by requiring students to provide only one example menu that fits the requirements.
Grade 4 2008 Released Items		
Item Number	PE	Comments
#1	<i>Not aligned</i>	<i>This item involves reading a ruler with and comparing measurements with mixed numbers.</i>

Grade 4 2008 Released Items <i>continued.</i>		
Item Number	PE	Comments
#2	4.4.E	This item assesses determining the median of a set of data . This item provides a definition for “median”, which is not provided in new items written for the MSP.
#3	4.1.I	This word problem could be solved using multi-digit multiplication .
#4	Partially aligned to 8.2.D	This item assesses representing a reflection , but not on the coordinate plane.
#5	3.5.E	This item assesses constructing and analyzing a frequency table .
#6	3.5.E	This PE is only assessed with multiple-choice or short-answer items on the MSP. This extended-response item assesses constructing a bar graph and can be used as a classroom activity or assessment. One way the item can be modified is by providing the following: a title for the graph, one of the labels for the axes, and a scale for the data.
Please note, there is no Grade 4 Practice Test. Practice tests were only developed for Grades 3, 5, 6, 8.		
Grade 5 2006 Released Items		
Item Number	PE	Comments
#1	4.4.E	This item assesses determining the median of a set of data . The definition for “median” is provided in this item. New items written for the MSP will not provide the definition.
#2	<i>Not aligned</i>	<i>This item requires students to determine the number of pennies, dimes, and dollars needed to represent a given amount of money.</i>
#3	5.2.H	This PE is assessed with multiple-choice and short-answer items on the MSP. This extended-response item assesses solving word problems involving addition and subtraction of decimals and is suitable for a classroom-based exercise. One way to modify the item is to require students to list only one combination of snacks that fits the criteria.
Grade 5 2007 Released Items		
Item Number	PE	Comments
#1	5.2.H	This item assesses solving a multi-step word problem involving addition and subtraction of mixed numbers .
#2	4.2.E	This item assesses comparing and ordering mixed numbers on a number line .
#3	3.4.B	This item assesses identifying right angles .
#4	4.4.B/4.4.C	This item assesses solving problems involving unit conversions and determining elapsed time .
#5	5.4.A/5.2.F	This item applies content from two areas of emphasis: extending a pattern and adding and subtracting decimals .
#6	<i>Not aligned</i>	<i>This extended response item requires students to organize information in a table (elapsed time) and determining costs by adding and subtracting decimals.</i>

Grade 5 2008 Released Items		
Item Number	PE	Comments
#1	4.4.B	This item assesses solving word problems involving unit conversions (metrics.)
#2	3.4.E	This item assesses solving word problems involving perimeters of quadrilaterals.
#3	<i>Not aligned</i>	<i>This item requires determining length using attributes of a cube.</i>
#4	2.5.D (2.2.C) or 3.6.E (3.1.C)	Because of the use of 2-digit numbers, this item aligns with second grade content: using strategies to solve a problem and adding and subtracting two-digit numbers. Changing the numbers to 2- and 3-digit numbers
#5	4.4.B	This item assesses solving problems involving unit conversions.
#6	3.5.E	This PE is only assessed as a multiple-choice or short-answer item on the MSP. This extended response item assesses constructing a bar graph , and is suitable for a classroom-based activity or assessment. One way to modify the item to fit the short-answer format: provide students with a title and a scale to fit the data; require students to provide labels for the axes and bars to fit the data.
Grade 5 Practice Test		
Item Number	PE	Comments
#1	3.4.C	This item assesses identifying special types of quadrilaterals.
#2	4.4.E	This item assesses determining the median of a set of data. This item provides a definition of median. New items written for the MSP will not provide a definition.
#3	5.4.A	This item assesses describing a rule and extending a pattern.
#4	4.4.E	This item assesses determining the mode for a set of data. This item provides a definition of mode. New items written for the MSP will not provide a definition.
#5	<i>Not aligned</i>	<i>This item requires students to use logic to determine which object weighs least.</i>
#6	4.4.D	This PE is only assessed as multiple-choice on the MSP. This short-answer item assesses writing ordered pairs for points in the first quadrant of the coordinate plane , and is suitable for a classroom-based activity or assessment.
#7	4.4.C	This item assesses determining elapsed time.
#8	3.3.A	This item assesses representing fractions on a number line.
#9	5.6.F (5.3.H) (5.2.H)	This PE is only assessed as short-answer on the MSP. This extended-response item assesses representing a problem situation using lines of symmetry and addition of decimals and is suitable for a classroom-based activity or assessment.
#10	5.4.C	This item assesses writing an expression that represents a simple situation.
#11	4.5.E (4.1.B)	This item assesses using strategies to solve a problem with factors and multiples of numbers.
#12	4.3.F	This item assesses solving word problems involving perimeter and areas of rectangles.

Grade 5 Practice Test <i>continued...</i>		
Item Number	PE	Comments
#13	5.5.B	This item assesses determining the mean of a small data set . This item provides a definition of mean. New items written for the MSP will not provide a definition.
#14	5.4.A	This PE is only assessed with short-answer on the MSP. This multiple-choice item assesses extending a pattern .
#15	4.3.F	This item assesses solving word problems involving areas or rectangles .
#16	3.4.A* *with modification	This item assesses identifying parallel line segments . However, this item is more suitable for a classroom exercise because it uses the symbolic notation of line segments not assessed until grade 7.
#17	4.4.A	This PE is only assessed as multiple-choice on the MSP. This short-answer item assesses representing a quantity with an equation . Students are also required to explain what the numbers mean in the equation.
#18	3.1.E	This PE is only assessed as multiple-choice or short-answer on the MSP. This extended-response item assesses solving a multi-step word problem involving addition and subtraction of whole numbers . Students are also required to organize information and interpret a table. This item is suitable for a classroom exercise or assessment.
#19	4.5.E (4.1.B)	This item assesses using strategies to solve a problem involving factors of a number .
#20	4.3.F	This item assesses solving a multi-step word problem involving areas of rectangles .
#21	4.2.C	This item assesses visually representing a mixed number .
#22	<i>Not aligned</i>	<i>This item requires students to write two questions that can be answered using information from a chart.</i>
#23	5.5.B	This item assesses determining the mean of a data set . This item provides a definition of mean. New items written for the MSP do not provide a definition.
#24	4.1.I	This item assesses solving multi-step word problems involving multiplication .
#25	4.4.C	This item assesses determining elapsed time .
#26	4.4.C	This PE is only assessed with multiple-choice on the MSP. This short-answer item assesses determining elapsed time and is suitable for a classroom-based exercise or assessment.
#27	4.3.F 5.3.I	This PE assesses solving word problems involving area of rectangles (quadrilaterals) . Students are also required to use multi-digit division (grade 5) or repeated subtraction for division (grade 4).
#28	<i>Not aligned</i>	<i>This item requires students to determine the most useful group to survey.</i>
#29	3.1.A	This item assesses comparing whole numbers using symbols .
#30	5.3.A	This item assesses identifying acute, right and obtuse angles .
#31	4.2.E	This item assesses comparing and ordering fractions
#32	5.6.E (5.2.H)	This item assesses using strategies to solve a problem and solving problems involving addition and subtraction of decimals .

Grade 5 Practice Test <i>continued...</i>		
Item Number	PE	Comments
#33	<i>Not aligned</i>	<i>This item requires students to identify a representation of a reflection (8.2.D), but the design is not on a coordinate plane.</i>
#34	<i>Not aligned</i>	<i>This item requires students to describe how to fill a fishbowl with a measuring cup, involving mathematical communication not assessed in the new standards.</i>
#35	5.2.H	This item assesses solving word problems involving addition and subtraction of decimals.
Grade 6 2006 Released Items		
Item Number	PE	Comments
#1	5.3.I	This item assesses solving word problems about areas of quadrilaterals. Multi-digit division may be used.
#2	6.1.H	This item assesses solving word problems involving operations with fractions.
#3	5.6.I (5.2.H)	This PE is only assessed with short-answer on the MSP. This extended-response item assesses summarizing mathematical information and explaining reasoning and solving multi-step word problems involving addition and subtraction of decimals. This item is suitable for a classroom-based exercise.
Grade 6 2007 Released Items		
Item Number	PE	Comments
#1	5.2.H	This item assesses solving word problems involving addition and subtraction of decimals.
#2	<i>Not aligned</i>	<i>This item requires students to choose the appropriate unit of measurement for the situation.</i>
#3	Partially aligned to 5.3.A	This item assesses identifying a figure with a given attribute. Includes some figures not in standard (hexagon and octagon).
#4	6.3.D	This item assesses solving word problems involving percents.
#5	5.3.B	This PE is only assessed as multiple-choice or completion on the MSP. This short-answer item assesses identifying and measuring acute, right, and obtuse angles, and is suitable for a classroom exercise or assessment.
#6	<i>Not aligned</i>	<i>This extended response item requires students to plan for a skate park within given limitations of area.</i>
Grade 6 2008 Released Items		
Item Number	PE	Comments
#1	5.3.C	This item assesses classifying triangles by angle measure. Items on the Grade 5 MSP have only 3 answer choices; this item has 4 answer choices.
#2	8.2.D	This item assesses representing the effect of a rotation of a geometric figure on the coordinate plane.
#3	7.4.D	This item assesses interpreting a circle graph.
#4	8.3.G	This item assesses solving problems using counting techniques.

Grade 6 2008 Released Items <i>continued...</i>		
Item Number	PE	Comments
#5	5.6.F (5.2.H)	This item assesses using strategies to solve problems involving addition and subtraction of decimals.
#6	5.6.E (5.2.H)	This PE is only assessed as multiple-choice and short-answer on the MSP. This extended response item assesses using strategies to solve problems involving addition and subtraction of decimals. Students also need background knowledge of unit conversion (4.4.B) . This item is suitable for a classroom exercise or assessment.
Grade 6 Practice Test		
Item Number	PE	Comments
#1	<i>Not aligned</i>	<i>This item requires students to identify an appropriate survey question.</i>
#2	5.4.C	This item assesses evaluating expressions using substitution.
#3	5.6.E (5.1.F)	This item assesses using strategies to solve a problem involving multi-digit division.
#4	6.3.B	This item assesses writing ratios to represent a rate.
#5	5.6.B/5.6.C (5.1.F)	These PEs are only assessed as multiple-choice on the MSP. This short-answer item assesses identifying extraneous information and identifying missing information. This item is suitable for a classroom exercise or activity.
#6	5.3.I	This item assesses solving word problems involving areas of quadrilaterals and triangles. Items on the Grade 5 MSP have only 3 answer choices; this item has 4 answer choices.
#7	<i>Not aligned</i>	<i>This extended response item requires students to create a workout plan that fits the given requirements of time.</i>
#8	5.5.B	This item assesses determining the mean of a data set. The definition of mean is provided in the item. New items written for the MSP do not provide the definition.
#9	6.1.H	This item assesses solving word problems involving operations with decimals.
#10	5.3.G	This PE is not assessed on the MSP but is designated for classroom assessment. This item assesses drawing quadrilaterals from given information about sides and angles.
#11	6.2.A	This item assesses writing an equation with variables to represent a situation.
#12	8.2.D	This item assesses representing translations but not on a coordinate plane.
#13	4.4.G	This item assesses determining simple probability.
#14	5.4.A	This PE is only assessed as short-answer on the MSP. This multiple-choice item assesses extending a pattern.
#15	5.6.I (5.5.B)	This PE is only assessed as short-answer on the MSP. This extended response item assesses drawing conclusions and explaining reasoning by comparing information in a table involving mean (average) . This item is suitable for a classroom exercise.
#16	6.4.E	This item assesses determining volume of rectangular prisms.

Grade 6 Practice Test <i>continued...</i>		
Item Number	PE	Comments
#17	3.4.D* *with modification	This item assesses measuring perimeter . Change item to measuring to the nearest whole centimeter to meet Grade 3 requirements.
#18	Partially aligned to 5.3.A, 5.3.B and 5.3.H	This item assesses identifying quadrilaterals with acute and obtuse angles . This item includes figures not included in the standards and more than 3 answer choices.
#19	<i>Not aligned</i>	<i>This item requires students to communicate, using mathematical language, a plan to build a ladder.</i>
#20	6.3.D	This item assesses solving a word problem involving ratios .
#21	4.4.G	This item assesses determining simple probability .
#22	7.4.D	This item assesses interpreting circle graphs .
#23	8.2.D	This item assesses representing and explaining the effect of a rotation , but not a geometric figure on a coordinate plane.
#24	5.4.A	This item assesses describing a rule and extending a pattern .
#25	<i>Not aligned</i>	<i>This item requires students to identify the unit of measurement appropriate to a situation.</i>
#26	3.6.I (3.5.E)	This item assesses drawing conclusions by analyzing a table .
#27	5.2.H	This item assesses solving a word problem involving addition and subtraction of fractions .
#28	8.2.D	This item assesses explaining a transformation , but not on a coordinate plane.
#29	<i>Not aligned</i>	<i>This extended response item requires students to communicate steps needed to determine the area of a lawn.</i>
#30	6.2.A	This item assesses writing an equation with variables to represent a situation .
#31	6.1.H	This item assesses solving word problems involving operations with fractions . The item, as it appears in the document, should be modified because the correct answer can be obtained for the wrong reason. Change the number of badges to 12. Change answer choices to: A. $\frac{3}{8}$ yard; B. $\frac{2}{3}$ yard; C. $1\frac{1}{2}$ yards; D. $2\frac{2}{3}$ yards. The correct answer will be C. This item has been corrected and can be seen in the <i>Sample Items from Changes for 2010 and Beyond</i> section of the <i>Grades 6-8 Updates for 2011</i> document.
#32	5.3.H	This item assesses determining lines of symmetry , although figures other than quadrilaterals and triangles are included. Grade 5 on the MSP has 3 answer choices; this item has 6 answer choices.
#33	4.4.E	This item assesses determining the median of a data set . The definition of median is included in this item. New items written for the MSP do not provide the definition.
#34	6.3.D	This item assesses solving word problems involving percents .
#35	6.2.A	This item assesses writing an expression with variable to represent a situation .

Grade 6 Practice Test <i>continued...</i>		
Item Number	PE	Comments
#36	7.4.A/7.1.G	These PEs are only assessed as multiple-choice and short-answer on the MSP. This extended-response item assesses representing sample space and solving word problems involving rational numbers and is suitable for classroom-based exercise or assessment.
#37	4.4.G	This item assesses determining simple probability . Fourth grade items on the MSP have only 3 answer choices. This item has 4 answer choices.
#38	4.4.B	This item assesses solving problems involving unit conversions . Fourth grade items on the MSP have only 3 answer choices. This item has 4 answer choices.
#39	(5.6.E) 5.4.A	This item assesses using strategies to solve problems . Students may solve by extending a pattern .
#40	6.3.D	This item assesses solving word problems involving rate and percents . Students will see this as a sample problem in the MSP Directions, but can still be used as a classroom exercise.
#41	6.1.H	This item assesses solving word problems involving operations with fractions .
#42	4.2.E	This item assesses comparing fractions (including mixed numbers) with symbols . This item includes a symbol (\geq) not included in fourth grade standards. Eliminate answer choice D to align with the fourth grade.
Grade 7 2006 Released Items		
Item Number	PE	Comments
#1	6.3.D	This item assesses solving word problems involving percents .
#2	Partial alignment to 8.1.B	This item assesses graphing inequalities on the number line . This item also requires students to describe the inequality in words which is not assessed on the MSP but is suitable for a classroom-based activity.
#3	<i>Not aligned</i>	<i>This extended response item requires students to draw a view of a park after being given two different perspectives.</i>
Grade 7 2007 Released Items		
Item Number	PE	Comments
#1	<i>Not aligned</i>	<i>This item requires students to choose the unit of measurement appropriate to a situation.</i>
#2	4.4.E (with modification) or 5.5.B	This item assesses understanding of median, mode, range, and mean of a set of data . Eliminate answer choice A for grade 4, which involves the mean. Students in grade 5 would require background knowledge from grade 4.
#3	6.1.H	This item assesses solving word problems involving operations with decimals . Students need back ground knowledge from grade 4 (16 oz. = 1 pound)
#4	Partial alignment to 7.2.C	This item assesses solving problems involving similar figures .

Grade 7 2007 Released Items		
Item Number	PE	Comments
#5	8.3.G	This item assesses solving problems involving counting techniques and Venn diagrams.
#6	<i>Not aligned</i>	<i>This extended-response item requires students to write and answer two questions that can be obtained by reading a schedule.</i>
Grade 7 2008 Released Items		
Item Number	PE	Comments
#1	6.1.E	This item assesses comparing and ordering non-negative decimals in lists.
#2	Partial alignment to 8.2.D	This item assesses representing the effect of rotations of a figure , but not on the coordinate plane.
#3	6.3.A	This item assesses identifying part to whole relationships.
#4	6.2.D	This PE is only assessed with multiple-choice and completion items on the MSP. This short-answer item assesses using order of operations to evaluate a mathematical expression.
#5	<i>Not aligned</i>	<i>This item requires students to apply 360° in a circle. This item is suitable for classroom enrichment in Core Content area 6.4.</i>
#6	4.5.E (4.4.B)	This PE is only assessed with multiple-choice and short-answer on the MSP. This extended response item assesses solving problems involving unit conversions, including time and is suitable for a classroom-based exercise or assessment.
Grade 8 2006 Released Items		
Item Number	PE	Comments
#1	6.3.D	This item assesses solving word problems involving rate.
#2	6.6.C (6.3.D)	This item assesses using strategies to solve problems involving rates.
#3	5.5.C	This PE is only assessed with multiple-choice and short-answer items on the MSP. This extended response item assesses constructing line graphs. One way to change the item is to provide the title and axes labels and ask students to provide a scale and graph the data. Suitable for a classroom-based exercise or assessment.
Grade 8 2007 Released Items		
Item Number	PE	Comments
#1	6.6.G (6.2.D)	This PE is only assessed with short-answer on the MSP. This multiple-choice items assesses drawing conclusions in a situation involving order of operations.
#2	8.2.F	This item assesses applying the Pythagorean Theorem to solve problems.
#3	6.2.A	This item assesses writing equations that represent a situation.
#4	Partial alignment to 8.2.D	This item assesses representing the effect of one or more transformations , but not on a coordinate plane.
#5	7.4.D	This item assesses constructing stem-and-leaf plots

Grade 8 2007 Released Items <i>continued...</i>		
Item Number	PE	Comments
#6	6.6.G (6.3.D)	This PE is only assessed with short-answer on the MSP. This extended-response item assesses extracting mathematical information from a graph, drawing conclusions, and justifying reasoning and solving problems involving rate . This item is suitable for a classroom-based exercise or assessment.
Grade 8 2008 Released Items		
Item Number	PE	Comments
#1	7.3.D	This item involves solving problems involving volume . (Clarification in item needed: boxes are rectangular prisms.)
#2	6.4.D	This item assesses recognizing two-dimensional representations of three-dimensional figures .
#3	6.2.A	This item assesses writing a mathematical equation with variables to represent information in a situation .
#4	<i>Not aligned</i>	<i>This item requires students to use logic to analyze a situation.</i>
#5	Partial alignment to 7.4.D	This item assesses interpreting a circle graph . Students require the background knowledge that a circle has 360° .
#6	6.3.D	This PE is only assessed with multiple-choice and short-answer items on the MSP. This extended-response item assesses solving problems involving rate . This item is suitable for a classroom-based exercise or assessment.
Grade 8 Practice Test		
Item Number	PE	Comments
#1	6.3.D	This item assesses solving problems involving ratios .
#2	6.2.A	This item assesses writing mathematical expressions with variables to represent a situation .
#3	5.6.E (5.2.H)	This item assesses using strategies to solve problems involving addition and subtraction of decimals .
#4	8.3.F	This item assesses determining probabilities for independent events .
#5	G.4.B/ G.4.C	This item assesses determining the coordinates of a point and applying properties of quadrilaterals in the coordinate plane .
#6	7.4.C	This item assesses describing a data set using measure of center (determining the missing data value for a mean).
#7	5.6.E (5.1.F)	This item assesses using strategies to solve problems involving multi-digit division.
#8	7.6.G (7.4.D)	This PE is only assessed with short-answer on the MSP. This extended-response item assesses extracting and organizing mathematical information to draw conclusions and justify reasoning and interpreting circle graphs .
#9	6.2.A	This item assesses writing expressions with variables to represent situations .
#10	7.6.G (7.4.D)	This item assesses extracting mathematical information to make inferences and justify reasoning and interpreting circle graphs .
#11	6.3.D	This item assesses solving word problems involving rates .

Grade 8 Practice Test <i>continued...</i>		
Item Number	PE	Comments
#12	5.4.A	This PE is only assessed with short-answer on the MSP. This multiple-choice item assesses determining and extending a pattern . Grade 5 items on the MSP have only three answer choices; this item has four answer choices.
#13	7.3.D	This item assesses solving word problems involving surface area of a cylinder .
#14	8.2.D	This item assesses representing the effect of one or more transformations on the coordinate plane .
#15	7.6.G (7.3.D)	This PE is only assessed with short-answer on the MSP. This extended-response item assesses extracting and organizing mathematical information involving surface area to draw conclusions and justify reasoning . This item is suitable for a classroom-based exercise or assessment.
#16	Partially aligned to 6.4.C	This item assesses solving word problems involving relationships among radius, diameter, and circumference of circles .
#17	6.6.B (6.1.H)	This PE is only assessed with multiple-choice items on the MSP. This short-answer item assesses identifying missing information and operations with decimals . This item is suitable for a classroom-based exercise or assessment.
#18	6.3.D	This information assesses solving word problems involving rate .
#19	Partial alignment to 6.3.D	This item assesses solving multi-step word problems involving percents and justifying reasoning
#20	8.3.F	This item assesses determining probability for dependent events .
#21	Partial alignment to 6.4.C	This item assesses solving word problems involving the relationship between the radius and area of a circle . This item uses notation not used in grade 6: m^2 . Use square meters.
#22	6.2.A	This item assesses writing an equation with variable to represent information in a given situation.
#23	G.6.D	This item assesses verifying the effect that changing two linear dimensions has on area .
#24	7.6.C (7.4.C)	This item assesses using strategies to solve a problem involving measures of center .
#25	8.3.F	This item assesses determining probabilities for independent events .
#26	5.1.F	This item assesses solving word problems involving multi-digit division . Multiple-choice items on the fifth grade MSP have three answer choices; this item has four answer choices.
#27	6.2.A	This item assesses writing an equation using variables to represent a situation .
#28	7.4.B	This item assesses determining probability and predicting an outcome .
#29	<i>Not aligned</i>	<i>This item requires logic to solve a problem.</i>
#30	6.2.D	This item assesses using order of operations to evaluate expressions .

Grade 8 Practice Test <i>continued...</i>		
Item Number	PE	Comments
#31.	<i>Not aligned</i>	<i>This item requires students to identify the ordered pair of a point that will change a trapezoid to a rectangle.</i>
#32	G.5.B	This item assesses determining properties of transformations.
#33	6.2.A	This item assesses writing mathematical equations to represent information (including defining variables).
#34	4.5.H (4.4.C)	This PE is only assessed with short-answer on the MSP. This extended-response item assesses analyzing and evaluating solutions involving elapsed time. This item is suitable for a classroom-based exercise or assessment.
#35	7.2.B	This item assesses solving problems involving proportional relationships.
#36	5.1.F	This item assesses solving word problems involving multi-digit division. Multiple-choice items on the fifth grade MSP have only three answer choices; this item has only four answer choices.
#37	6.6.B/6.6.C (6.1.H)	This item assesses identifying relevant information and using strategies to solve a problem involving operations with decimals and fractions. This item is suitable for a classroom-based exercise or assessment.
#38	Partial alignment to 7.3.D	This item assesses determining the expression that could be used to estimate surface area.
#39	8.5.G(8.2.F)	This PE is only assessed on the MSP with short-answer. This multiple-choice item assesses extracting information to apply Pythagorean Theorem to solve a problem.
#40	*6.3.D *with modification	This item assesses solving a word problem involving rates. Change “constant” rate to “mean” rate to clarify the problem.
#41	6.2.B	This PE is only assessed with short-answer on the MSP. This multiple-choice item assesses drawing graphs to represent given situations.
#42	7.4.E	This PE is designated for classroom-based assessment. This item assesses evaluating data displays for effectiveness.

Sample Items from Changes for 2010 and Beyond

These sample items were available in the *Changes for 2010 and Beyond* document and are still appropriate for the labeled performance expectation. Some of the items have been edited from 2010 for clarity thanks to feedback from the field. If the sample item is a Released Item, the information has now been added to the sample item.

Grade 3

Multiple-Choice Item

Sample item for performance expectation 3.1.A - Taken from Grade 3 Practice Test, #10

Amber, Lilly, Kayla, and Nikia each have a bag of buttons. They counted the buttons. Amber has 35 buttons. Lilly has 126 buttons. Kayla has 44 buttons. Nikia has 89 buttons.

What is the order of the numbers from least to greatest?

- O A. 126, 89, 44, 35
- O B. 44, 35, 126, 89
- O C. 35, 44, 89, 126

Answer: C

Completion Items

Sample item for performance expectation 3.1.B

There are 8,499 people who live in the city of Laketown.

Round 8,499 to the nearest thousand.

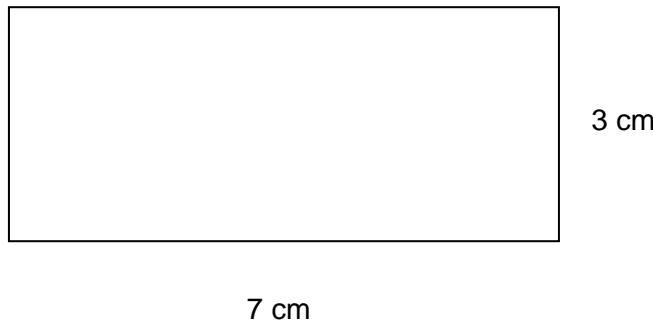
Write your answer on the line.

<p>What is 8,499 rounded to the nearest thousand?_____</p>

Answer: 8,000

Sample item for performance expectation 3.4.D

Look at the rectangle.



Find the perimeter of the rectangle.

Write your answer on the line.

<p>What is the perimeter of the rectangle?_____ cm</p>

Answer: 20

Please note that labels will be provided for completion items. Students will be scored on the numeric answer.

Short-Answer Item

Sample item for performance expectation 3.1.E - Taken from Grade 3 Practice Test, #18

Janet and her family are planning a boat ride.

The table shows boat-ride prices.

Boat-Ride Prices

Time on Boat	Adult	Child
One-hour ride	\$ 9	\$ 3
Two-hour ride	\$18	\$ 6
Four-hour ride	\$36	\$12

What is the total price for a two-hour boat ride for two adults and one child?

Show your work using words, numbers, or pictures.

<p>What is the total price for a two-hour boat ride for two adults and one child? \$ _____</p>

Rubric and sample papers are included with Teacher Materials for Grade 3 Practice Test online.

Grade 4

Multiple-Choice Item

Sample item for performance expectation 4.4.E - Taken from Grade 4 2008 Released Items, #2

A town had very cold temperatures during a week in January 2004.

Temperatures for a Town in January 2004

Date	Temperature (in Fahrenheit)
January 4	11 degrees
January 5	2 degrees
January 6	6 degrees
January 7	1 degree
January 8	3 degrees
January 9	8 degrees
January 10	2 degrees

What was the median of the temperatures during that week?

- A. 1 degree
- B. 2 degrees
- C. 3 degrees

Answer: C

Completion Items

Sample item for performance expectation 4.1.F

Find the product.

$$\begin{array}{r} 483 \\ \times 27 \\ \hline \end{array}$$

Write your answer on the line.

What is the product? _____

Answer: 13,041

Sample item for performance expectation 4.2.F

Write a fraction with a denominator of 18 that is equivalent to $\frac{5}{6}$.

Write your answer on the line.

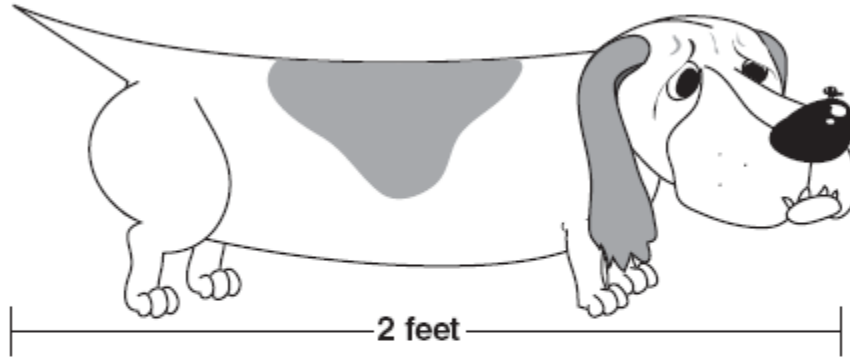
What is a fraction with a denominator of 18 that is equivalent to $\frac{5}{6}$? _____
--

Answer: $\frac{15}{18}$

Short-Answer Item

Sample item for performance expectation 4.4.B - Taken from Grade 5 2008 Released Items, #5

A flea jumps about 3 inches with each hop. The dog is 2 feet long. About how many hops will it take the flea to jump from the tip of the dog's nose to the tip of the tail?



Show your work using words, numbers, or pictures.

<p>About how many hops will it take the flea to jump from the tip of the dog's nose to the tip of the tail? _____</p>

Rubric and sample papers are included with Grade 5 2008 Released Items online.

Grade 5

Multiple-Choice Items

Sample item for performance expectation 5.4.C - Taken from Grade 5 Practice Test, #10

Hannah is 1.65 meters tall. Nathan is 1.57 meters tall.

Which expression can be used to find the difference in their heights?

O A. 1.65×1.57

O B. $1.65 + 1.57$

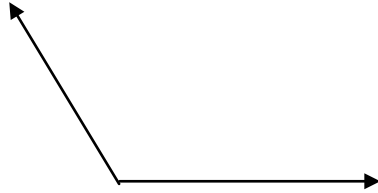
O C. $1.65 - 1.57$

Answer: C

Completion Items

Sample item for performance expectation 5.3.B

Look at the angle.



Use a protractor to measure the angle.

Write your answer on the line.

What is the measure of the angle? _____ ° (degrees)
--

Answer: $120^\circ \pm 3^\circ$. Note: Students are usually allowed a range of acceptable measurements as determined by a range finding committee

Sample item for performance expectation 5.5.B

Students at Sunny Side School recorded the height, in centimeters, of six students on a math team.

Student A	Student B	Student C	Student D	Student E	Student F
152	170	168	175	151	168

Find the mean height of the students on the math team.

Write your answer on the line.

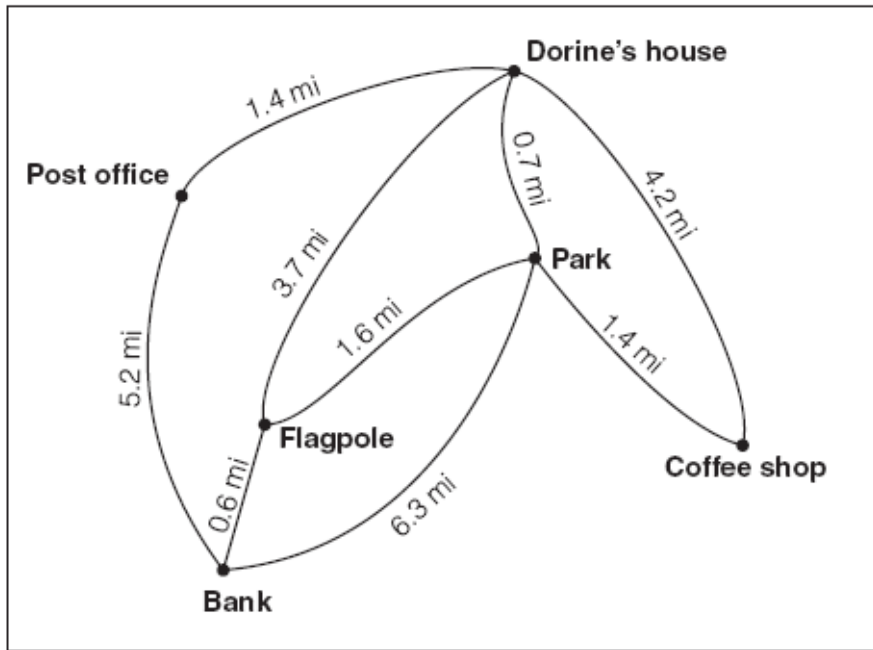
What is the mean height of the students on the math team? ____ cm
--

Answer: 164

Short-Answer Item

Sample item for performance expectation 5.6.E - Taken from Grade 6 2008 Released Items, #5

Dorine is training for a race. She wants to run between 10 and 12 miles each day. She uses this map to find possible routes. Each route must start and end at Dorine's house.



Describe a route with a distance between 10 and 12 miles.

Show that the total distance of the route is between 10 and 12 miles.

Rubric and sample papers included with Grade 6 2008 Released Items online.

Sample Items for Assessing the Standard Algorithms in Grades 3-5

The following performance expectations in the new mathematics standards address the use of “the standard algorithm”:

- 3.1.C** Fluently and accurately add and subtract whole numbers using the standard regrouping algorithms.
- 4.1.F** Fluently and accurately multiply up to a three-digit number by one- and two-digit numbers using the standard multiplication algorithm.
- 5.1.C** Fluently and accurately divide up to a four-digit number by one- or two-digit divisors using the standard long-division algorithm.

OSPI piloted items on the 2010 assessment that assess these performance expectations. Items similar to the following examples will be included on future operational tests following evaluation of data and approval by Data Review Committee.

Sample item for performance expectation 3.1.C

Look at the subtraction problem.

$$\begin{array}{r} 4735 \\ - 2684 \\ \hline \end{array}$$

Which is a correct way to solve the problem?

O A.
$$\begin{array}{r} \overset{3}{4} \overset{6}{7} \overset{12}{3} \overset{15}{5} \\ - 2684 \\ \hline 1049 \end{array}$$

O B.
$$\begin{array}{r} \overset{6}{4} \overset{12}{7} \overset{15}{3} \overset{15}{5} \\ - 2684 \\ \hline 2041 \end{array}$$

O C.
$$\begin{array}{r} \overset{6}{4} \overset{13}{7} \overset{15}{3} \overset{15}{5} \\ - 2684 \\ \hline 2051 \end{array}$$

Answer: C

Sample item for performance expectation 4.1.F

There is one digit missing in the work shown for this multiplication problem.

$$\begin{array}{r} 275 \\ \times 93 \\ \hline 825 \\ +24\boxed{}50 \\ \hline ***** \end{array}$$

Find the missing digit that belongs in the box.

Write your answer on the line.

What is the missing digit that belongs in the box? _____
--

Answer: 7

Sample item for performance expectation 5.1.C

There is one digit missing in the work shown for this division problem.

$$\begin{array}{r} 5\boxed{}1 \text{ R}1 \\ 8 \overline{)4329} \\ \underline{- 40} \\ 32 \\ \underline{- 32} \\ 09 \\ \underline{- 8} \\ 1 \end{array}$$

Determine the missing digit that belongs in the box.

Write your answer on the line.

What is the missing digit that belongs in the box? _____
--

Answer: 4

The Common Core Standards Initiative

Washington is among the majority of states and territories — 48 states, two territories and the District of Columbia — that joined the [Common Core Standards Initiative](#). As a member of this initiative, Washington State was able to review and provide comment on many drafts of the Common Core State Standards (CCSS) prior to their release on June 2, 2010.

In July 2010, with earlier authorization from the Washington State Legislature, Superintendent Dorn provisionally adopted the CCSS ([E2SSB 6696](#)). The next step in the process is to **submit a report to the Legislature** (January 2011) that includes a thorough comparison between Washington’s learning standards and the Common Core State Standards, a proposed timeline for implementation — state and district level — and related costs. Superintendent Dorn will be able to adopt the new standards after the 2011 legislative session, unless directed otherwise by the Legislature.

Compare & Review with Washington State Standards

OSPI has convened a highly-qualified workgroup to review drafts of the standards and conduct a comprehensive comparison of the common core standards with Washington’s current academic standards. The team comprises K-12 educators who are deeply familiar with our existing standards, state education associations and other K-12 sector stakeholders.

The workgroup will gather input and crosswalk our existing state standards with the common core standards for English language arts and mathematics. This analysis will make it possible to determine the support school districts will need as they implement the new standards.

Adoption & Implementation

Since state assessments will not change until the 2014-2015 school year, districts do not need to complete transition to common core standards until that time. Existing state standards will remain in effect until then. State assessments for the new standards will begin in the 2014-15 school year. A draft timeline for approval can be accessed online: <http://www.k12.wa.us/corestandards/Timeline.aspx>. Educators, families and the community can remain confident that existing state standards are academically strong and already aligned with national trends in K-12 education.

SMARTER Balanced Assessment Consortium

The 31-state [SMARTER Balanced Assessment Consortium](#), or SBAC, was awarded a four-year \$160 million Race to the Top assessment grant by the US Department of Education to develop a student assessment system aligned to a common core of academic standards. Washington is the applicant state for the consortium.

SBAC will create state-of-the-art adaptive online exams using “open source” technology. The online system will provide accurate assessment information to teachers and others on the progress of all students, including those with disabilities, English language learners and low- and high-performing students. The system will include:

- 1) the required summative exams (offered twice each school year);
- 2) optional formative, or benchmark, exams; and
- 3) a variety of tools, processes and practices that teachers may use in planning and implementing informal, ongoing assessment. This will assist teachers in understanding what students are and are not learning on a daily basis so they can adjust instruction accordingly.

SBAC’s assessment system will be tied to the [Common Core State Standards](#). By the end of 2011, states in the consortium must agree to adopt the Common Core State Standards in English language arts and mathematics. States still in the consortium in 2014-15 must agree to use the consortium’s tests as their accountability assessments.

The SBAC tests will measure the full range of the common core standards in grades 3-8 and 11, including assessing problem solving and complex thinking skills. Teachers in participating states will be involved at all stages of item and test development, including writing, scoring and the design of reporting systems. Educators will also be able to access a reporting system that identifies each student’s strengths, weakness and progress toward college and career readiness.

Access the entire press release at:

<http://www.k12.wa.us/Communications/PressReleases2010/RTTTAssessmentGrant.aspx>

Resources/Contact Information

[Sign-up now for Movers and Shakers!](#)

Receive pertinent mathematics assessment information and updates, meeting and workshop opportunities, and other mathematics notices on the Movers and Shakers email distribution list. To join, please send a request to felecia.mckinney@k12.wa.us.

Mathematics Webpage:

<http://www.k12.wa.us/mathematics/>

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