

# **2022 Mathematics Standards** Reference for Curricular Materials

The purpose of this document is to assist educators in aligning the 2022 Idaho Content Standards for Mathematics to existing mathematics curricular materials. This document is organized by three grade bands Kindergarten through Grade 5, Grades 6 – 8, and Grades 9-12.

### Organization and Numbering of Revised Standards

The revised standards for mathematics use the same numbering system as the previous standards. See pages 11 - 12 of the revised standards to study the organization of the standards. The revised standards preserve the major conceptual work of each grade and the learning progression of a concept through the grades. They also kept the naming conventions of standards, clusters and domains from the previous standards. Wording changes to a standard did not change the concept the standard addressed. An important change in formatting to note is that what used to be cluster headings in the previous standards are now numbered as a standard for all grades.

### Kindergarten through Grade 5

Recommendations	New Standards Application
Explicitly state grade levels at which students should demonstrate mastery of addition, subtraction, multiplication, and division facts. Integrate these basics with critical thinking and real-life problem solving throughout the standards to ensure more connections to science, business, and other related disciplines.	<ul> <li>See grade level overview for mastery standards identified for each grade level.</li> <li>See comments about procedural fluency on page 9 of preamble.</li> <li>See pink clarification boxes for instructional guidance.</li> <li>See blue example boxes - all examples were moved out of standards and into blue boxes for clarity.</li> </ul>
Reduce the number of standards, use less complex verbiage, and prioritize the more important concepts without marginalizing the accuracy of the standards.	<ul> <li>Reducing the number of standards was not accomplished – this interest conflicted with adding clarity</li> <li>Reworded standards by Grade: Kindergarten:</li> <li>K.CC.A.2; K.CC.B.4c; K.CC.B.5; K.CC.C.6;</li> <li>K.OA.A.1,2,3; K.NBT. A.1, K.G.B.4,5,6</li> <li>First Grade:</li> </ul>

Recommendations	New Standards Application
	1.OA.A. 1,2; 1.OA.B.3,4; 1.OA.C.5,6; 1.OA.D.2;
	1.NBT.A.1, 1.NBT.B.2; 1.NBT.C.4 a,b,c;
	1.NBT.C.6; 1.G.A.1, 3;
	Second Grade:
	2.OA.A.1; 2.OA.B.2; 2.OA.C.3; 2.NBT.A.1,2,3,4;
	2.NBT.B.5,7,8; 2.MD.B.5; 2.MD.C.8;
	2.MD.D.9,10; 2.G.A.1,3
	Third Grade:
	3.OA.A.1,2,3; 3.OA.B.5,6; 3.OA.C.7; 3.OA.D.8;
	3.NBT.A.1,2,3; 3.NF.A.1,2a, 3, 3b, 3d;
	3.MD.A.1,2; 3.MD.B.4; 3.MD.C.6
	Fourth Grade:
	4.OA.A.1, 2,3; 4.OA.C.5; 4.NBT.A, 1,2,3;
	4.NBT.B.4; 4.NF.A.1,2b; 4.NF.B.3b,c,d;
	4.NF.C.7b; 4.MD.A.1, 2; 4.MD.B.4; 4.MD.C.7;
	Fifth Grade:
	5.NBT.A.3a; 5.NBT.B.5, 5.NF.A.1, 2, 3;
	5.NF.B.3; 5.NF.B.7a,b; 5.MD.A,1, 2; 5.MD.C.3,
	4, 5b; 5.G.A.1a, b; 5.G.A.2
	Added Standards by Grade:
	First Grade:
	1.MD.D.5 (money)
	Fifth Grade:
	5MD.C.5.c ii (volume real-world application)
Ensure the standards are age and grade level-	See grade level introductions
appropriate especially in the early grades,	
emphasizing the concrete nature of young	
minds.	
Make certain that standards requiring problem	See descriptions of standards for
solving are age appropriate and do not exceed	mathematical practice for each grade level
the knowledge standards accepted for each grade level.	to describe what age appropriate problem-
graue ievei.	solving activities could look like for the
	grade level.

# Grades 6 – 8

Recommendations	New Standards Application
Explicitly state grade levels at which students should demonstrate mastery of addition, subtraction, multiplication, and division facts. Integrate these basics with critical thinking and real-life problem solving throughout the standards to ensure more connections to science, business, and other related disciplines.	<ul> <li>See grade level overviews for mastery standards identified for Grade 6 and 7. Grade 8 does not have any mastery standards.</li> <li>See comments about procedural fluency on page 9 of preamble.</li> <li>See pink clarification boxes for instructional guidance.</li> <li>See blue example boxes – all examples were moved out of standards and into blue boxes for clarity.</li> </ul>
Reduce the number of standards, use less complex verbiage, and prioritize the more important concepts without marginalizing the accuracy of the standards.	<ul> <li>Reducing the number of standards was not accomplished – this interest conflicted with adding clarity</li> <li>Reworded standards by Grade:</li> <li>Grade 6:</li> <li>6.R.P.3.d; 6.NS.C.5; 6.EE.B.8a,b; 6.EE.B.9;</li> <li>6.G.A.3; 6.SP.A.2; 6.SP.B.5.c.</li> <li>Grade 7:</li> <li>7.RP.A.2b, 3; 7.NS.A.1.b, 2, 2a, 2d, 3; 7.EE.A.1;</li> <li>7.EE.B.3; 7.G.A.2, 7.G.B.4, 5. 6; 7.SP.A.2;</li> <li>7.SP.C.5, 6</li> <li>Grade 8:</li> <li>8.EE.A.3; 8.EE.C.7.a; 8.EE.C.8.b; 8.F.B.5;</li> <li>8.G.A.1.a,b,c; 8.G.B.6</li> <li>Added Standards by Grade:</li> <li>Grade 7:</li> <li>7.G.B.4.a,b,c (Circles)</li> </ul>
Ensure the standards are age and grade level- appropriate especially in the early grades, emphasizing the concrete nature of young minds.	<ul> <li>See grade level introductions</li> </ul>
Make certain that standards requiring problem solving are age appropriate and do not exceed the knowledge standards accepted for each grade level.	<ul> <li>See descriptions of standards for mathematical practice for each grade level to describe what age appropriate problem- solving activities could look like for the grade level.</li> </ul>

# Grades 9 – 12

RecommendationsIExplicitly state grade levels at which students should demonstrate mastery of addition,•	New Standards Application There are no mastery standards for Grades
subtraction, multiplication, and division facts. Integrate these basics with critical thinking and real-life problem solving throughout the standards to ensure more connections to science, business, and other related disciplines. Reduce the number of standards, use less complex verbiage, and prioritize the more important concepts without marginalizing the accuracy of the standards.	<ul> <li>9 - 12.</li> <li>See comments about procedural fluency on page 9 of preamble.</li> <li>See pink clarification boxes for instructional guidance.</li> <li>See blue example boxes - all examples were moved out of standards and into blue boxes for clarity.</li> <li>Reducing the number of standards was not accomplished – this interest conflicted with adding clarity</li> <li>Reducing Standards: S.ID.C.6c was eliminated;</li> <li>Reworded standards by Conceptual Category:</li> <li>Number and Quantity: None</li> <li>Algebra: A.SSE.A; A.APR.A.1, 1a; A.APR.D.6, 7; A.CED.A.1, 2,2a, 2b, 3; A.REI.A.1; A.REI.C.5; A.REI.D.10</li> <li>Functions: F.I.F.A.1, 3; F.I.F.B; F.I.F.B.8a,b; F.B.F.A.1; T.T.F.C.8</li> <li>Modeling: More standards coded with ★</li> <li>Geometry: G.CO.A.2, 3, 5; G.CO.C.10, 11; C.CO.D.13; G.SRT.A.2; G.SRT.C.6; G.C.A.3, 4; G.GPE.A.3a; G.GPE.B.4;</li> <li>Statistics and Probability: S.ID.A.; S.ID.A.2, 3</li> <li>4; S.ID.B.6; S.ID.B.7a; S.IC.A.2, 5, 6; S.C.P.A; S.C.P.A.2, 3; S.MD.A.2; S.MD.B.6</li> <li>Note: Because of adding S.ID.A1 – the numbering for the S-ID domain will differ from previous standards by one digit in the sequence of standards.</li> </ul>

Recommendations	New Standards Application
Ensure the standards are age and grade level- appropriate especially in the early grades, emphasizing the concrete nature of young minds.	• See introductions to conceptual categories.
Make certain that standards requiring problem solving are age appropriate and do not exceed the knowledge standards accepted for each grade level.	<ul> <li>See descriptions of standards for mathematical practice for these grade levels to describe what age appropriate problem-solving activities could look like in Grades 9 – 12.</li> </ul>

#### For Questions Contact

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