

KINDERGARTEN Standard for K-12 : [MACC.K12.MP.5.1](#) Use appropriate tools strategically.

Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a **calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software**. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and their limitations. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. **Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a website, and use them to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts.**

Grade	Critical Areas	Resources
Kindergarten	Instructional time should focus on two critical areas: (1) representing, relating, and operating on whole numbers, initially with sets of objects; (2) describing shapes and space.	<ul style="list-style-type: none"> • iXL Math https://www.ixl.com/signin/wakulla • Go Math! (Thinkcentral) http://www.thinkcentral.com/index.htm • Renaissance Place https://hosted187.renlearn.com/60382/default.aspx • ABCYA http://www.abcya.com/ • Math Landing http://mathlanding.org/ • Math Pickle http://www.mathpickle.com/K-12/patterns.html • PBS Kids http://pbskids.org/ • Think Math! http://www.harcourtschool.com/thinkmath/ • Math Activities (not necessarily online) http://www.k-5mathteachingresources.com/kindergarten-math-activities.html

Resource lists are not all inclusive

FIRST GRADE Standard for K-12 : [MACC.K12.MP.5.1](#) Use appropriate tools strategically.

Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, **a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software.** Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and their limitations. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. **Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a website, and use them to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts.**

Critical Areas	Resources
<p>Instructional time should focus on four critical areas:</p> <ul style="list-style-type: none"> (1) developing understanding of addition, subtraction, and strategies for addition and subtraction within 20; (2) developing understanding of whole number relationships and place value, including grouping in tens and ones; (3) developing understanding of linear measurement and measuring lengths as iterating length units; and (4) reasoning about attributes of, and composing and decomposing geometric shapes. 	<ul style="list-style-type: none"> • iXL Math https://www.ixl.com/signin/wakulla • Go Math! (Thinkcentral) http://www.thinkcentral.com/index.htm • Renaissance Place https://hosted187.renlearn.com/60382/default.aspx • ABCYA http://www.abcya.com/ • Math Landing http://mathlanding.org/ • Math Pickle http://www.mathpickle.com/K-12/patterns.html • PBS Kids http://pbskids.org/ • Think Math! http://www.harcourtschool.com/thinkmath/ • Math Activities (not necessarily online) http://www.k-5mathteachingresources.com/1st-grade-number-activities.html

Resource lists are not all inclusive

SECOND GRADE Standard for K-12 : [MACC.K12.MP.5.1](#) Use appropriate tools strategically.

Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a **calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software**. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and their limitations. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. **Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a website, and use them to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts.**

Critical Areas	Resources
<p>Instructional time should focus on four critical areas:</p> <ul style="list-style-type: none"> (1) extending understanding of base-ten notation; (2) building fluency with addition and subtraction; (3) using standard units of measure; and (4) describing and analyzing shapes. 	<ul style="list-style-type: none"> • iXL Math https://www.ixl.com/signin/wakulla • Go Math! (Thinkcentral) http://www.thinkcentral.com/index.htm • Kahn Academy https://www.khanacademy.org/commoncore/map • Renaissance Place https://hosted187.renlearn.com/60382/default.aspx • ABCYA http://www.abcya.com/ • Math Landing http://mathlanding.org/ • Mr. Nussbaum http://mrnussbaum.com/monster/ • Math Pickle http://www.mathpickle.com/K-12/patterns.html • Think Math! http://www.harcourtschool.com/thinkmath/ • Math Activities (not necessarily online) http://www.k-5mathteachingresources.com/2nd-grade-number-activities.html

Resource lists are not all inclusive

THIRD GRADE Standard for K-12 : [MACC.K12.MP.5.1](#) Use appropriate tools strategically.

Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a **calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software**. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and their limitations. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. **Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a website, and use them to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts.**

Critical Areas	Resources
<p>Instructional time should focus on four critical areas:</p> <ul style="list-style-type: none"> (1) developing understanding of multiplication and division and strategies for multiplication and division within 100; (2) developing understanding of fractions, especially unit fractions (fractions with numerator 1); (3) developing understanding of the structure of rectangular arrays and of area; and (4) describing and analyzing two-dimensional shapes. 	<ul style="list-style-type: none"> • iXL Math https://www.ixl.com/signin/wakulla • Go Math! (Thinkcentral) http://www.thinkcentral.com/index.htm • Kahn Academy https://www.khanacademy.org/commoncore/map • Renaissance Place https://hosted187.renlearn.com/60382/default.aspx • ABCYA http://www.abcya.com/ • Math Landing http://mathlanding.org/ • Math Monster http://mrnussbaum.com/monster/ • Math Pickle http://www.mathpickle.com/K-12/patterns.html • Mr. Nussbaum http://mrnussbaum.com/monster/ • Think Math! http://www.harcourtschool.com/thinkmath/ • Math Activities (not necessarily online) http://www.k-5mathteachingresources.com/3rd-grade-number-activities.html • Virtual Manipulatives http://nlvm.usu.edu/en/nav/grade_q_2.html • CPALMS Pick a Pet (Uses multiplication) In this MEA, students will rank pets from most family friendly to least family friendly by considering data such as purchase price, cost to feed, cleanliness, etc. as well as notes regarding the physical description of the pet. In the twist, students will be given information on additional pets as well as information on cleanliness and life expectancy. Students may need to make trade-offs in regards to cost to adopt, feed, and house along with life expectancy, ease of clean up, etc.

Resource lists are not all inclusive

FOURTH GRADE Standard for K-12 : [MACC.K12.MP.5.1](#) Use appropriate tools strategically.

Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a **calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software**. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and their limitations. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. **Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a website, and use them to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts.**

Critical Areas	Resources
<p>Instructional time should focus on three critical areas:</p> <ul style="list-style-type: none"> (1) developing understanding and fluency with multi-digit multiplication, and developing understanding of dividing to find quotients involving multi-digit dividends; (2) developing an understanding of fraction equivalence, addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers; (3) understanding that geometric figures can be analyzed and classified based on their properties, such as having parallel sides, perpendicular sides, particular angle measures, and symmetry. 	<ul style="list-style-type: none"> • iXL Math https://www.ixl.com/signin/wakulla • Go Math! (Thinkcentral) http://www.thinkcentral.com/index.htm • Kahn Academy https://www.khanacademy.org/commoncore/map • Renaissance Place https://hosted187.renlearn.com/60382/default.aspx • ABCYA http://www.abcya.com/ • Math Landing http://mathlanding.org/ • Math Pickle http://www.mathpickle.com/K-12/patterns.html • Mr. Nussbaum http://mrnussbaum.com/monster/ • Think Math! http://www.harcourtschool.com/thinkmath/ • Math Activities (not necessarily online) http://www.k-5mathteachingresources.com/4th-grade-number-activities.html • Number Cop http://primarygamesarena.com/Number-Cop11310 • Virtual Manipulatives http://nlvm.usu.edu/en/nav/grade_g_2.html • CPALMS Fish Ahoy Fish Students will work in groups to assist a client in purchasing different fish for a fish pond. From a data table, they will need to decide which type of fish and how many fish to purchase according to the size of the each pond. After, they will need to revisit a revised data table to make different selection of fish and calculate costs for the purchase of the fish.

Resource lists are not all inclusive

FIFTH GRADE Standard for K-12 : [MACC.K12.MP.5.1](#) Use appropriate tools strategically.

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Critical Areas	Resources
<p>Instructional time should focus on three critical areas:</p> <ul style="list-style-type: none"> (1) developing fluency with addition and subtraction of fractions, and developing understanding of the multiplication of fractions and of division of fractions in limited cases (unit fractions divided by whole numbers and whole numbers divided by unit fractions); (2) extending division to 2-digit divisors, integrating decimal fractions into the place value system and developing understanding of operations with decimals to hundredths, and developing fluency with whole number and decimal operations; and (3) developing understanding of volume. 	<ul style="list-style-type: none"> • iXL Math https://www.ixl.com/signin/wakulla • Go Math! (Thinkcentral) http://www.thinkcentral.com/index.htm • Kahn Academy https://www.khanacademy.org/commoncore/map • Renaissance Place https://hosted187.renlearn.com/60382/default.aspx • ABCYA http://www.abcya.com/ • Math Landing http://mathlanding.org/ • Math Pickle http://www.mathpickle.com/K-12/patterns.html • Mr. Nussbaum http://mrnussbaum.com/monster/ • Think Math! http://www.harcourtschool.com/thinkmath/ • Math Activities (not necessarily online) http://www.k-5mathteachingresources.com/5th-grade-number-activities.html • Virtual Manipulatives http://nlvm.usu.edu/en/nav/grade_g_2.html <ul style="list-style-type: none"> • CPALMS Tablets for Mrs. Tomlinson's Class Students' love of technology will hook them on this MEA that also applies their knowledge of multiplication, estimation, and rounding. And that's just the beginning! • CPALMS How many Gigabytes does Lathan Really Need? (Uses calculators) Students will be comparing quantitative and qualitative aspects of technology devices in order to rank them for a particular student's needs.

Resource lists are not all inclusive