

Technology Competencies 2008-2009

Grade 3/Math

ISTE Standards

1. Creativity and Innovation
2. Communication and Collaboration
3. Research and Information Fluency
4. Critical Thinking, Problem Solving and Decision Making
5. Digital Citizenship
6. Technology Operations and Concepts

<i>AKS/MA/3</i>	<i>ISTE Standards</i>	<i>Suggested Activity</i>
Identify and model place value from tenths through ten thousands (GPS) (3MA_2007-20)	<ol style="list-style-type: none"> 1. Creativity and Innovation 2. Communication and Collaboration 4. Critical Thinking, Problem Solving and Decision Making 5. Digital Citizenship 6. Technology Operations and Concepts 	<p>Work with your LSTC to make the template below available to students in lab.</p> <p><i>(Kid Pix template: 3MA_Place_Value.kid)</i></p>
determine when an estimate is appropriate (GPS) (3MA_B2007-22)	<ol style="list-style-type: none"> 4. Critical Thinking, Problem Solving and Decision Making 6. Technology Operations and Concepts 	<p>After practicing estimating, use overhead projector with class to access Glowa's Estimation Contraption site using link below.</p> <p>http://pbskids.org/cyberchase/games/ballparkestimation/ballparkestimation.html</p>
Use mental math and estimation strategies to add, subtract, multiply and divide (GPS) (3MA_B2007-23)	<ol style="list-style-type: none"> 4. Critical Thinking, Problem Solving and Decision Making 6. Technology Operations and Concepts 	<p>After practicing estimating, use overhead projector with class to access Glowa's Estimation Contraption site using link below.</p> <p>http://pbskids.org/cyberchase/games/ballparkestimation/ballparkestimation.html</p>
explain the relationship between addition and multiplication (GPS) (3MA_B2007-24)	<ol style="list-style-type: none"> 1. Creativity and Innovation 2. Communication and Collaboration 4. Critical Thinking, Problem Solving and Decision Making 5. Digital Citizenship 6. Technology Operations and Concepts 	<p>Work with your LSTC to make the document/site below available to show students in classroom or lab. (GPS) (3MA_B2007-24)</p> <p><i>(Microsoft Powerpoint template: 3MA_Revised_Jelly_Bean_Math.ppt)</i></p> <p>After showing and discussing above slide show have students go to http://www.funbrain.com/tictactoe/index.html and practice multiplication facts by playing Tic Tac Toe against the computer.</p>

Technology Competencies 2008-2009

Grade 3/Math

ISTE Standards

1. Creativity and Innovation
2. Communication and Collaboration
3. Research and Information Fluency
4. Critical Thinking, Problem Solving and Decision Making
5. Digital Citizenship
6. Technology Operations and Concepts

<p>model and use multiplication facts (to 10 x 10) with understanding and fluency (GPS) (3MA_B2007-25)</p>	<ol style="list-style-type: none"> 1. Creativity and Innovation 2. Communication and Collaboration 4. Critical Thinking, Problem Solving and Decision Making 5. Digital Citizenship 6. Technology Operations and Concepts 	<p>Work with LSTC to have template/web sites available for students to practice multiplication facts to 10 http://www.kidshub.org/games/Multiplication_Station.html http://www.harcourtschool.com/activity/mult/mult.html Have students open Inspiration template and complete the multiplication activity on 7's. To extend activity students can then make their own template using another number and have a peer complete it. <i>(Inspiration template: 3MA_Multiplication7s.isf)</i></p>
<p>explain the relationship between division and subtraction and division and multiplication (GPS) (3MA_B2007-29)</p>	<ol style="list-style-type: none"> 1. Creativity and Innovation 2. Communication and Collaboration 4. Critical Thinking, Problem Solving and Decision Making 5. Digital Citizenship 6. Technology Operations and Concepts 	<p>Work with your LSTC to make the template below available to students in lab. This is a spin off on the jelly bean multiplication power point. Have students open the template below, review the connection between multiplication and division and have students complete the template. <i>(Microsoft Powerpoint template: 3MA_Dividing_Jelly_Beans.ppt)</i></p>
<p>recognize and explain the two models of division: determining how many equal parts of a given size or amount may be taken away from the whole (repeated subtraction) and determining the size of the parts when the whole is separated into a given number of equal parts (sharing model) (GPS) (3MA_B2007-30)</p>	<ol style="list-style-type: none"> 4. Critical Thinking, Problem Solving and Decision Making 6. Technology Operations and Concepts 	<p>Use these sites to demonstrate division problems. http://www.kidsnumbers.com/apple-baskets-division.php http://www.kidsnumbers.com/long-division.php (Great site for demonstrating long division. Use a projector and access the web site with your class)</p>
<p>recognize problem-solving situations in which division may be applied and write corresponding mathematical expressions (GPS) (3MA_B2007-31)</p>	<ol style="list-style-type: none"> 1. Creativity and Innovation 2. Communication and Collaboration 4. Critical Thinking, Problem Solving and Decision Making 5. Digital Citizenship 6. Technology Operations and Concepts 	<p>Work with LSTC to have web site available for students to practice division problem solving facts to 10. http://www.ixl.com/math/practice/grade-3-division-word-problems-facts-to-10 Have students choose one of their problems from the above website and illustrate it in KidPix. <i>(Kid Pix template: 3MA_Division_Problem_Solving.kpx)</i></p>

Technology Competencies 2008-2009

Grade 3/Math

ISTE Standards

1. Creativity and Innovation
2. Communication and Collaboration
3. Research and Information Fluency
4. Critical Thinking, Problem Solving and Decision Making
5. Digital Citizenship
6. Technology Operations and Concepts

<p>model and explain that the fraction a/b represents a equal sized parts of a whole that is divided into b. equal sized parts (GPS) (3MA_B2007-35)</p>	<ol style="list-style-type: none"> 1. Creativity and Innovation 2. Communication and Collaboration 4. Critical Thinking, Problem Solving and Decision Making 5. Digital Citizenship 6. Technology Operations and Concepts 	<p>Work with your LSTC to make the template below available to students in the lab. Have students complete the template on fractions.</p> <p><i>(Kid Pix template: 3MA_Fractional_Part.kid)</i></p>
<p>draw and classify geometric figures to include scalene, isosceles and equilateral triangles (GPS) (3MA_C2007-41)</p>	<ol style="list-style-type: none"> 1. Creativity and Innovation 3. Research and Information Fluency 4. Critical Thinking, Problem Solving and Decision Making 6. Technology Operations and Concepts 	<p>Work with your LSTC to make the document available to all student workstations in a computer lab. Have students complete the PowerPoint template demonstrating knowledge of Triangles and Angles.</p> <p><i>(PowerPoint template: 3MA_Angles_and_Triangles.ppt)</i></p>
<p>identify polygons (regular, irregular, equilateral, equiangular) and model and explain properties of fundamental geometric figures including congruence, similarity and symmetry (GPS) (3MA_C2007-42)</p>	<ol style="list-style-type: none"> 1. Creativity and Innovation 3. Research and Information Fluency 4. Critical Thinking, Problem Solving and Decision Making 6. Technology Operations and Concepts 	<p>Work with your LSTC to make the document available to all student workstations in a computer lab. Have students complete the PowerPoint template demonstrating knowledge and understanding of regular, irregular, equilateral, equiangular Polygons.</p> <p><i>(PowerPoint template: 3MA_Polygons.ppt)</i></p>
<p>examine, identify and compare angles of geometric figures (GPS) (3MA_C2007-43)</p>	<ol style="list-style-type: none"> 1. Creativity and Innovation 3. Research and Information Fluency 4. Critical Thinking, Problem Solving and Decision Making 6. Technology Operations and Concepts 	<p>Work with your LSTC to make the document available to all student workstations in a computer lab. Have students complete the PowerPoint template demonstrating knowledge of Triangles and Angles.</p> <p><i>(PowerPoint template: 3MA_Angles and Triangles.ppt)</i></p>

Technology Competencies 2008-2009

Grade 3/Math

ISTE Standards

1. Creativity and Innovation
2. Communication and Collaboration
3. Research and Information Fluency
4. Critical Thinking, Problem Solving and Decision Making
5. Digital Citizenship
6. Technology Operations and Concepts

<p>identify the center, diameter and radius of a circle (GPS) (3MA_C2007-44)</p>	<ol style="list-style-type: none"> 1. Creativity and Innovation 4. Critical Thinking, Problem Solving and Decision Making 6. Technology Operations and Concepts 	<p>Work with your LSTC to make the document available to all student workstations in a computer lab. Have students complete the template demonstrating knowledge of the center, diameter and radius of a circle.</p> <p><i>(Kidspiration Template : 3MA_Circles.kid)</i></p>
<p>compare one unit to another within a single system of linear measurement (GPS) (3MA_D2007-49)</p>	<ol style="list-style-type: none"> 1. Creativity and Innovation 2. Communication and Collaboration 4. Critical Thinking, Problem Solving and Decision Making 5. Digital Citizenship 6. Technology Operations and Concepts 	<p>Work with your LSTC to make the templates below available to students in the lab. Students will complete the Kidspiration template on gallons, quarts, pints and cups. Students will then use that template to complete the measurement conversion template in Kid Pix.</p> <p><i>(Gallon.kid)</i></p> <p><i>(Kidspiration template: 3MA_Measurement_Convert.kpx)</i></p>
<p>use the properties of addition and subtraction to compute and verify results (GPS) (3MA_E2007-57)</p>	<ol style="list-style-type: none"> 1. Creativity and Innovation 2. Communication and Collaboration 4. Critical Thinking, Problem Solving and Decision Making 5. Digital Citizenship 6. Technology Operations and Concepts 	<p>Work with your LSTC to make the document and template below available to show students in classroom or lab.</p> <p><i>(Microsoft Powerpoint: 3MA_Revised_Fact_Families.ppt)</i></p> <p>After viewing the fact family powerpoint, have students use the template to create their own.</p> <p><i>(Microsoft PowerPoint template: 3MS_Revised_Fact_families_Blank.ppt)</i></p>
<p>identify and apply commutative and associative properties of multiplication and verify the results (GPS) (3MA_E2007-58)</p>	<ol style="list-style-type: none"> 1. Creativity and Innovation 2. Communication and Collaboration 4. Critical Thinking, Problem Solving and Decision Making 5. Digital Citizenship 6. Technology Operations and Concepts 	<p>Work with your LSTC to make the web site below available to show students in classroom or lab to demo commutative and associative properties.</p> <p>http://home.europa.com/~paulg/mathmodels/commutative.html</p> <p>After web site demo have students create their own examples using KidPix.</p>

Technology Competencies 2008-2009

Grade 3/Math

ISTE Standards

1. Creativity and Innovation
2. Communication and Collaboration
3. Research and Information Fluency
4. Critical Thinking, Problem Solving and Decision Making
5. Digital Citizenship
6. Technology Operations and Concepts

<p>use symbols to represent an unknown and find the value of the unknown in a number sentence (GPS) (3MA_E2007-60)</p>	<ol style="list-style-type: none"> 1. Creativity and Innovation 2. Communication and Collaboration 4. Critical Thinking, Problem Solving and Decision Making 5. Digital Citizenship 6. Technology Operations and Concepts 	<p>Work with your LSTC to have access to the United Streaming video "Discovering Algebra". Choose segments that apply to AKS topics 56-62.</p>
<p>demonstrate equivalent relationships using numbers, objects, pictures, words and symbols (GPS) (3MA_E2007-61)</p>	<ol style="list-style-type: none"> 1. Creativity and Innovation 2. Communication and Collaboration 4. Critical Thinking, Problem Solving and Decision Making 5. Digital Citizenship 6. Technology Operations and Concepts 	<p>Continue with "Discovering Algebra" video segments downloaded from United Streaming.</p> <p>Have students use Microsoft Word and clipart to create examples of equivalent relationships.</p>
<p>solve problems by collecting, organizing, interpreting and representing data in bar graphs and tables (GPS) (3MA_F2007-63)</p>	<ol style="list-style-type: none"> 1. Creativity and Innovation 2. Communication and Collaboration 3. Research and Information Fluency 4. Critical Thinking, Problem Solving and Decision Making 5. Digital Citizenship 6. Technology Operations and Concepts 	<p>Review the website below. This site has numerous excel templates for collecting and representing data. Once you have decided which activity/activities you want your class to do have your LSTC to make them available to all students in the lab.</p> <p>http://www.northcanton.sparcc.org/~technology/excel/</p>