

Common Core Instructional Tools:

For special education teachers whose students will be assessed using the next generation of alternate assessment based on alternate achievement standards. These materials align with the Common Core State Standards and the Dynamic Learning Maps Essential Elements and are created specifically for use with students with severe cognitive disabilities.



Mathematics

Grade: Two



North Dakota Department of Public Instruction
Kirsten Baesler, State Superintendent
Offices of Special Education and Assessment
600 E. Boulevard Avenue., Dept. 201
Bismarck, North Dakota 58505-0440

www.dpi.state.nd.us
701-298-4637 (voice)
701-328-2277 (voice)
701-328-4920 (TDD)
701-328-4149 (Fax)

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This resource is the result of a collaborative effort of North Dakota Teachers, the Dynamics Learning Maps Alternate Assessment Consortium materials, the North Dakota Curriculum Initiative project, and the North Dakota Department of Public Instruction. We would like to thank the following educators for their dedication and diligence in working on these instructional materials to provide tools to help special education teachers whose students will take the alternate assessment based on alternate achievement standards and the Common Core State Standards.

North Dakota Educators:

Beth Jones

Special Education Coordinator
Bismarck Public Schools

Ruth Carnal

Secondary Transition Teacher
Fargo Public Schools

Karen Thompson

Special Education Consultant
Dickinson Public Schools

Susan Dopp

Middle School Special Education Teacher
Lisbon Public Schools

Dan Juve

Special Education Coordinator
Grand Forks Public Schools

Annette Kost

School Psychologist
Morton Sioux Special Education Unit

Victoria Sculley

Special Education Teacher
Pembina Special Education Unit

Mike Cerkowniak

Special Education Teacher
Griggs-Steele-Trail Special Education Unit

Sheryl Nesseth

4th Grade Teacher
Grand Forks Public Schools

Ann Durbin

5th Grade Teacher
Fargo Public Schools

Karen Hess

Special Education Coordinator
Jamestown Special Education Unit

Danica Nelson

High School Special Education Teacher
Bismarck Public Schools

Carlene Gustafson

Middle School Special Education Teacher
West Fargo Public Schools

Cindy Creviston

High School Special Education Teacher
Sheyenne Valley Special Education Unit

Lucilla Barth

Elementary Teacher
Mandan Public Schools

Pam Aman

Literacy Specialist
Junior High Dickinson Public Schools

Traci Peterson

Education Specialist - School Psychologist
Standing Rock Special Education Unit

Pam Aadnes

High School Special Education Teacher
Bismarck Public Schools

Gary Jackson

Math and Visual Impairments Teacher
Valley-Edinburg Public Schools

Toni Gredesky

High School Library Sciences
Wahpeton Public Schools

Laura Mildenberger

Secondary Transition Teacher
Bismarck Public Schools

Marsha Knutson

Special Education Director
Northern Plains Special Education Unit

Pat Drege

Elementary Teacher
Fargo Public Schools

Linsey Schott

Special Education Coordinator
James River Special Education Unit

Project Manager:

Doreen Strode, Assistant Director - Alternate Assessments
North Dakota Department of Public Instruction
State of North Dakota

Resources:

- **Common Core State Standards** documents at http://www.dpi.state.nd.us/standard/common_core.shtm
- **North Dakota Curriculum Initiative** documents at http://ndcurriculuminitiative.org/common_core
- **Dynamic Learning Maps**<http://dynamiclearningmaps.org/>
Common Core Essential Elements and Assessment Achievement Level Descriptors
Dynamic Learning Maps Essential Elements Versions 1 and 2
- **Kansas State Education Department** website: <http://www.ksde.org/>
- **Microsoft Office Clip Art**

Document Description:

This document is arranged by grade level so that teachers can access a single grade or multiple grades as needed. These materials are based on the Common Core State Standards and align with the Dynamic Learning Maps Essential Elements. North Dakota is a member of the Dynamic Learning Maps (DLM) Consortium of states creating the next generation of alternate assessments based on alternate achievement standards for assessing students with severe cognitive disabilities.

These materials are created by North Dakota teachers, for teachers, to assist them in accessing the Common Core State Standards in a meaningful fashion. Our goal was to provide teachers of students with severe cognitive disabilities with tools to get them started with the Common Core. They are intended to be tools for teachers to start with and build upon within their own local curriculum. They are not mandatory, but because they are linked to the DLM Essential Elements, they may be helpful in teaching the new standards which will begin to be assessed in 2014-15.

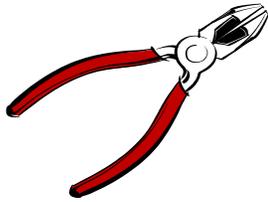
These tools are:

- ✓ Resources for teachers to use to access the Common Core State Standards (CCSS)
- ✓ Linked to the Dynamic Learning Maps (DLM) "Essential Elements"
- ✓ Ideas for learning activities based on CCSS
- ✓ Ideas on how to collect data on student performance
- ✓ Ideas on how to plan collaboration activities with general educators
- ✓ Resources to plan for "Communication Opportunities" for students who are learning a communication mode

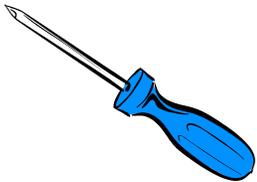
These tools are not:

- ✓ Not meant for test preparation purposes
- ✓ Not mandatory for use by educators
- ✓ Not meant to serve as curriculum

TOOLS FOR TEACHERS



Element Cards - A collection of Common Core State Standards materials specific to the Dynamic Learning Maps Essential Elements at each grade. These are meant to provide you with instructional ideas, key vocabulary, real world connections, and mapping of the concept the grade before and the grade after.



Educator Collaboration Plan - Planning sheets to prepare students for communication needs and for data collection in general education settings. Communication is key in teaching and assessing all students and especially those with severe cognitive disabilities. If a student does not have a consistent and reliable means of communicating what he/she knows and is able to do, it is very difficult to measure progress. More importantly, lack of a consistent communication system (high tech, low tech, or no tech) will affect the student's entire life in a negative way.



"I Can" Checklist - data sheet template for teacher use.



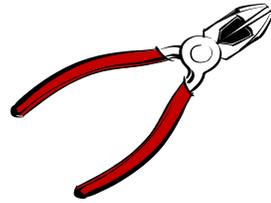
Website Resources - lists of web addresses where a variety of educational ideas can be found.

Element Card-Tool #1

Grade 6 ELA

Strand: Reading Literature

Cluster: Key Ideas and Details



(Element card number) **RL.6.1**

| | |
|--|--|
| Standard RL.6.1: Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. (This is the grade level Common Core State Standard for this concept) | Essential Element: Analyze the text to determine what it says explicitly and what inferences must be drawn. (An Essential Element is a term used by Dynamic Learning Maps Consortium identifying 'specific knowledge and skills linked to the grade-level expectations identified in the Common Core State Standards') |
| Grade 5 Expectations: (What is related to this standard in the prior grade) | Grade 7 Expectations: (What is related to this standard in the next grade) |
| I Can Statements: (Statements of measures of specific skills related to this standard) | |
| Key Vocabulary: (Grade level vocabulary related to specific content in this standard) | Supports (specific to student): (IEP accommodations, assistive technology, communication system, visual aids, templates, active board, highlighters, etc.) |
| Instructional Examples: (Examples of activities that can be done to address this skill such as modeling, small group discussions, etc.) | |
| Real World Connections: (Activities from everyday life that relate to the content of this standard) | |
| Resources: (Educational materials or websites that can be accessed for ideas that may support this standard) | |

Note: If the Essential Element says "Not Applicable" that means that the Dynamic Learning Maps Consortium did not address this Essential Element.

If the Essential Element says "See EE of a different number" (e.g. S-ID.2) that means that there is another Element Card that addresses some of this standard.

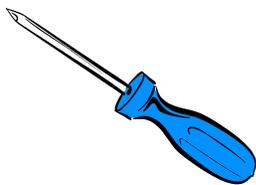
The Essential Elements are highlighted to indicate the importance of their focus.

These are the **Dynamic Learning Maps Claims and Conceptual Areas in Mathematics**.

This document was used by ND teachers who worked on these Tools. The Element cards may correlate or in some cases may not. High School divided the math documents into Consumer Math (measurement and data analysis and number sense), Algebra, and Geometry.

| | |
|-----------------------|---|
| <p>Claim 1</p> | <p>Number Sense: Students demonstrate increasingly complex understanding of number sense.</p> <p>Conceptual Areas in the Dynamic Learning Map:</p> <p>MC 1.1 Understand number structures (counting, place value, fraction) <i>Essential Elements Included:</i> K.CC.1.4 ,5; 1.NBT.1a-b; 2.NBT.2a-b,3; 3.NBT.1,2,3; 4.NBT.3; 3.NF.1-3; 4.NF.1-2,3; 5.NF.1,2; 6.RP.1; 7.RP.1-3; 7.NS.2.c-d; M.EE.8.NS.2.a</p> <p>MC 1.2 Compare, compose, and decompose numbers and sets <i>Essential Elements Included:</i> K.CC.6; 1.NBT.2, 3, 4, 6; 2.NBT.1, 4, 5b; 4.NBT.1, 2; 5.NBT.1, 2, 3, 4; 6.NS.1, 5-8; 7.NS.3; 8.NS.2.b; 8.EE.1-4</p> <p>MC 1.3 Calculate accurately and efficiently using simple arithmetic operations <i>Essential Elements Included:</i> 2.NBT.5.a, 6-7; 3.OA.4; 4.NBT.4, 5, 6-7; 6.NS.2, 3; 7.NS.1, 2a, 2b; 8.NS.1;8.EE.1; HS.N-CN.2, 2.a, 2.b; HS.N-RN.1; HS.S-CP.1-5; HS.S-IC.1-22</p> |
| <p>Claim 2</p> | <p>Geometry: Students demonstrate increasingly complex spatial reasoning and understanding of geometric principles.</p> <p>Conceptual Areas in the Dynamic Learning Map:</p> <p>MC 2.1 Understand and use geometric properties of two- and three-dimensional shapes <i>Essential Elements Included:</i> K.MD.1; K.G.2-3; 1.G.1, 2; 2.G.1; 3.G.1; 4.G.1, 2, 2a, 2b; 5.G.1-4; 5.MD.3; 7.G.1, 2, 3, 5; 8.G.1, 2, 4, 5; HS.G-CO.1, 4-5; 6-8; HS.G-GMD.1-3, 4</p> <p>MC 2.2 Solve problems involving area, perimeter, and volume <i>Essential Elements Included:</i> 1.G.3; 3.G.2; 4.G.3; 4.MD.2; 5.MD.4-5; 6.G.1, 2; 7.G.4, 6; 8.G.9; HS.G-GMD.1-3; HS.G-GPE.7</p> |
| <p>Claim 3</p> | <p>Measurement Data and Analysis: Students demonstrate Increasingly complex understanding of measurement, data, and analytic procedures.</p> <p>Conceptual Areas in the Dynamic Learning Map:</p> <p>MC 3.1 Understand and use measurement principles and units of measure <i>Essential Elements Included:</i> 1.MD.1-2, 3a, 3b, 3c, 3d; 2.MD.1, 3-4, 5, 6, 7, 8; 3.MD.1, 2, 4; 4.MD.1, 2a, 2b, 2c, 2e; 5.MD.1a, 1b, 1c; HS.N-Q.1-3</p> <p>MC 3.2 Represent and interpret data displays <i>Essential Elements Included:</i> 1.MD.4; 2.MD.9-10; 3.MD.3; 4.MD.4a, 4b; 5.MD.2; 6.SP.1-2, 5; 7.SP.1-2, 3, 5-7; 8.SP.4; HS.S-ID. 1-2, 3, 4</p> |
| <p>Claim 4</p> | <p>Algebraic and functional reasoning: Students solve increasingly complex mathematical problems, making productive use of algebra and functions.</p> <p>Conceptual Areas in the Dynamic Learning Map:</p> <p>MC 4.1. Use operations and models to solve problems <i>Essential Elements Included:</i> K.OA.1, 1a, 1b, 2, 5a, 5b; 2.OA.1, 3, 4; 3.OA.1-2, 8; 4.OA.1-2, 3, 4; 6.EE.1-2, 3, 5-7; 7.EE.1-2, 4; 8.EE.7; HS.A-CED.1, 2-4; HS.A-SSE.1, 3</p> <p>MC 4.2 Understand patterns and functional thinking <i>Essential Elements Included:</i> 3.OA.9; 4.OA.5; 5.OA.3; 7.EE.3; 8.EE.5-6; 8.F.1-3, 4, 5; HS.A-REI.10-12; HS.A-SSE.4; HS.F-BF.1, 2; HS.F-IF.1-3, 4-6; HS.F-LE.1</p> |

A-CED= creating equations; A-SSE = seeing structure in equations BF= building functions; CC= counting & cardinality; EE = expressions & equations; F-BF = basic fractions; F-IF = interpreting functions; G = geometry; G-GMD=geometric measurement & dimension; G-GPE = general properties & equations: MD= measurement & data; NBT= numbers and operations in base ten; N-CN=complex number system; NF= numbers & operations - fractions; N-RN=real number system; NS= number systems; N-Q= number & quantity; OA = operations & algebraic thinking; RP = ratios & proportional relationships; S-IC- statistics & probability - making inferences/justifying conclusions; S-ID=statistics & probability – interpreting categorical & quantitative data: SP = statistics & probability



Tool # 2 - Educator Collaboration Plan:

This plan is a tool that can be utilized to prepare students and their paraprofessionals for fuller participation in general education classes and an increased communication expectation.

Remember - If communication is planned for, it is much more likely to happen.

Keep the student's Speech Pathologist in the loop so he/she can support and participate in these collaboration efforts.

Suggested Use of this tool:

Meet with the general education teacher once a week (maybe the Thursday before) and identify what concepts he/she will be covering the following week.

1. Fill in the first box (Monday through Friday) with the gen. ed. class lesson plan concepts. (See Sample)
2. Discuss Common Core State Standards (CCSS) being covered. Fill in box two. (See Sample)
3. Communication Plan: Identify the concepts and key words that will be covered in each lesson and identify what you want the student to be able to communicate in class. (See Sample)

Discuss with gen. ed. teacher which concepts student needs to answer during class. Identify (for example) two specific questions he/she will ask the student so the teacher knows ahead of time. If the plan is that the student needs to answer two questions during class every day and the questions are determined ahead of time (so the answers can be made available for the student to use) then expecting student participation becomes second nature.

Talker: preprogram it and allow student to practice ahead of time.

Pictures: prepare the pictures prior to class and practice.

Switches: program choices ahead of time and practice.

4. Identify what accommodations are listed in IEP to be used in the educational setting and make sure the student has them available. (See Sample)
5. Data Collection: Para collects data on the concepts. This can be a plus or minus per questions or item in this section. (See Sample)
6. Para or student brings an extra copy of the plan at the beginning of class on Monday. Para keeps the other copy as a working copy for the week. The copy needs to be brought back to you (special education teacher) so that you are aware of both the success and have data to work with. You will also be able to

see where the student excels or may be struggling. Share this data with the student's Speech Pathologist so he/she is aware of progress and possible problems.

7. Notes section allows Para to identify anything that needs to be brought to your attention. For example, student was distracted, or ill, or something interfered with the lesson getting finished. Para: Don't be afraid to remind the teacher in case he/she forgets to ask a question (even after the class has ended) rather than "just skipping it". Students need to be able to demonstrate their competence and it is not ok to have lower expectations for some students than others.

Educator Collaboration Plan

Gen. Ed. Contact: _____

Name: _____ Week Of: _____

Subject: _____

Gen Ed. Concepts Planned:

Mon.

Tues.

Wed.

Thurs.

Fri.

CCSS Addressed:

Communication Plan:

Mon.

Tues.

Wed

Thurs

Fri.

Accommodations in IEP:

Data Collection:

Mon. _____

Tues. _____

Wed. _____

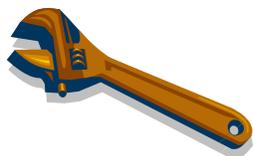
Thurs. _____

Fri. _____

Notes:

Educator Collaboration PlanName: SampleWeek Of: Oct. 7 to 11, 2013Gen. Ed. Contact: Mrs. JonesSubject: Math

| | | |
|--|--|---|
| <p>Gen Ed. Concepts Planned:</p> <p>Mon. Fractions – whole, half, quarter</p> <p>Tues. Fractions – quarters, thirds 1/3, 2/3, 3/3 1/4, 2/4, 3/4, 4/4</p> <p>Wed. Halves, quarters, thirds review</p> <p>Thurs. Fractions project (demonstrate understanding of "equal parts" of a whole)</p> <p>Fri. Quiz on whole, halves, thirds, & quarters</p> | <p>CCSS Addressed:</p> <p>1.G.3 Partition circles and rectangles into two and four equal shares using the words halves, fourths, and quarters.</p> | <p>Communication Plan: Pre-program Alpha Talker daily before class (allow student to practice before class).</p> <p>Mon. "That is a whole" "whole" "That is a half" "one-half" That is a quarter" "one-quarter"</p> <p>Tues. " That is" "One-third" "two-thirds" "whole" "One-fourth" "one-half" "three-quarters"</p> <p>Wed. Same as Mon and Tues</p> <p>Thurs. "I have two fractions in my demonstration." "One half, and half of that is one fourth."</p> <p>Fri. Use words from Mon. and Tuesday for Quiz.</p> |
| <p>Accommodations in IEP:</p> <p>Alpha Talker is communication mode and requires that specific terms and sentences are programmed into the device prior to class.</p> <p>Para will accompany student to class and will be responsible to pre-program Talker with two specific answers according to the Collaboration Plan.</p> <p>Data will be collected on comm. performance and accuracy by Para.</p> | <p>Data Collection:</p> <p>Mon. whole__ half __ quarter__</p> <p>Tues. whole__ half__ 1/4__ 1/3__ 2/3__ 3/4__</p> <p>Wed. whole__ half__ 1/4__ 1/3__ 2/3__ 3/4__</p> <p>Thurs. half__ 1/4__ Used both sentences in demo __</p> <p>Fri. whole__ half__ 1/4__ 1/3__ 2/3__ 3/4__</p> | <p>Notes:</p> <p>Quiz (Friday) may need to be taken in an area where other students cannot hear the answers.</p> <p>Para writes student's answers and gen. ed. teacher corrects quiz.</p> |



Tool # 4 - Resources

A Few Communication Resources (See also Resources at end of each grade)

1. <http://www.designtolearn.com>: A good site for introducing communication systems—knowing which ones to use, etc.
2. <http://www.alltogetherwecan.com/2008/06/02/ablenet-how-to-videos-step-by-step-with-levels/>: A set of videos on how to set up communication systems
3. http://www2.edc.org/NCIP/tour/Resources_PictureSym.html: A good overview of how to set up picture communication systems.
4. <http://www.pdictionary.com>: A large, easily searchable library of various pictures for instruction. This website may be used for students of various communication levels.
5. <http://www.tsbvi.edu/component/content/article/53/1116-tactile-symbols-directory-to-standard-tactile-symbol-list>: From Texas School for the Blind and Visually Impaired. This site offers information on developing and using tactile symbols.
6. <http://bookbuilder.cast.org/>: From cast.org—a free resource that allows you or your students to build books online. It provides text to speech and animation for the books so your students can listen to and watch the book. Can also access books others have written. Great if you are creating a modified version of a grade level text.
7. <http://aex.intellitools.com/>: Collection of free IntelliKeys activities posted by other teachers.
8. <http://teachinglearnerswithmultipleneeds.blogspot.com/2008/02/free-boardmaker-boards-and-activities.html>: Collection of free Boardmaker boards. Excellent if you already have Boardmaker. Not all of the links work though.
9. <http://zacbrowser.com/>: An internet engine designed for children with autism.



Tool # 3 - I Can Statements Checklist

Grade 2 Math “I Can” Statements Checklist

Instructions: These checklists are meant to provide a visual to record progress toward Common Core Standard Skills.

| Domain: Operations and Algebraic Thinking | Cluster: Work with equal groups of objects to gain foundations for multiplication | Standard: EE.2.OA.3 | | | | | | | | | |
|---|---|---------------------|--|--|--|--|--|--|--|--|--|
| I can make two groups of two. | Date | | | | | | | | | | |
| | DATA | | | | | | | | | | |
| I can separate objects into two groups. | Date | | | | | | | | | | |
| | DATA | | | | | | | | | | |
| I can equally distribute even numbers of objects between two groups. | Date | | | | | | | | | | |
| | DATA | | | | | | | | | | |
| I can determine that a quantity of objects is even or odd by separating them into two groups. | Date | | | | | | | | | | |
| | DATA | | | | | | | | | | |

Grade 2 Math

2.OA.1 Element Card

Domain: Operations and Algebraic Thinking

Cluster: Represent and solve problems involving addition and subtraction

Standard 2.OA.1: Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

Essential Element EE.2.OA.1: Begins in grade 3 (EE.3.OA.4)

Grade 1 Essential Element:

- Not addressed

Grade 3 Essential Element EE.3.OA.4:

- Solve addition and subtraction problems when result is unknown, limited to operands and results within 20.

I Can Statements:

Key Vocabulary:

Supports (specific to student): (e.g., assistive technology, communication system, visual aids, templates, active board, highlighters, graphic organizers, task analysis, manipulatives, real world materials, modeling)

Instructional Examples:

Real World Connections:

Resources:

Grade 2 Math

2.OA.2 Element Card

Domain: Operations and Algebraic Thinking

Cluster: Add and subtract within 20

Standard 2.OA.2: Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.

Essential Element EE.2.OA.2: N/A (See EE.2.NBT.6-7 and EE.3.OA.4)

Grade 1 Essential Element:

- Not addressed

Grade 3 Essential Element EE.3.OA.4:

- Solve addition and subtraction problems when result is unknown, limited to operands and results within 20.

I Can Statements:

Key Vocabulary:

Supports (specific to student): (e.g., assistive technology, communication system, visual aids, templates, active board, highlighters, graphic organizers, task analysis, manipulatives, real world materials, modeling)

Instructional Examples:

Real World Connections:

Resources:

Grade 2 Math

2.OA.3 Element Card

Domain: Operations and Algebraic Thinking

Cluster: Work with equal groups of objects to gain foundations for multiplication

Standard 2.OA.3: Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.

Essential Element EE.2.OA.3: Equally distribute even numbers of objects between two groups.

Grade 1 Essential Element EE.1.OA.1.b:

- Recognize two groups that have the same or equal quantity.

Grade 3 Essential Element EE.3.OA.1-2:

- Use repeated addition to find the total number of objects and determine the sum.

I Can Statements:

- I can make two groups of two.
- I can separate objects into two groups.
- I can equally distribute even numbers of objects between two groups.
- I can determine that a quantity of objects is even or odd by separating them into two groups.

Key Vocabulary:

- quantity
- even
- odd

Supports (specific to student): (e.g., assistive technology, communication system, visual aids, templates, active board, highlighters, graphic organizers, task analysis, manipulatives, real world materials, modeling)

- sorting objects
- counting cubes

Instructional Examples:

- Given a group of four objects (e.g., two balls and two boxes), the student will separate them into two groups with like objects in each group.
- Given counting cubes in two sizes, the student will sort them into two piles.
- The student will divide 10 crayons into two equal collection cans.
- Given an “X” quantity of objects, the student will distribute them into two groups. If there are leftovers, the student will indicate that the quantity is odd and if there are no leftovers, the number is even.

Real World Connections:

- The student will be able to assist in selecting matching clothes for the day.

Resources:

- <http://www.scholastic.com/clifford/play/sortitout/sortitout.htm>

Grade 2 Math

2.OA.4 Element Card

Domain: Operations and Algebraic Thinking

Cluster: Work with equal groups of objects to gain foundations for multiplication

Standard 2.OA.4: Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.

Essential Element EE.2.OA.4: Use addition to find the total number of objects arranged within equal groups up to a total of 10.

Grade 1 Essential Element EE.1.OA.1.a:

- Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), or acting out situations.

Grade 3 Essential Element EE.3.OA.4:

- Solve addition and subtraction problems when result is unknown, limited to operands and results within 20.

I Can Statements:

- I can differentiate same/different when presented with two objects.
- I can recognize that two groups are made up of equal quantities up to a total of less than 10.
- I can use addition to find the total number of objects arranged within equal groups up to a total of 10.
- I can use addition to find the total number of objects arranged within equal groups beyond 10.

Key Vocabulary:

- addition
- equal
- group
- match

Supports (specific to student): (e.g., assistive technology, communication system, visual aids, templates, active board, highlighters, graphic organizers, task analysis, manipulatives, real world materials, modeling)

- counting objects
- sorting items

Instructional Examples:

- Given a variety of items, the student will match two like items.
- Given three sets of objects, the student will find the sets that contain equal amounts and state the number.
- The student will add two equal groups of counting bears to get a total.
- Using paper plates, the student will put an equal amount of objects on each plate (1-6) and combine and solve for total number of objects.

Real World Connections:

- The student will be able to add items to determine how many.

Resources:

- www.fun4thebrain.com/addition.html

Grade 2 Math

2.NBT.1 Element Card

Domain: Number and Operations in Base Ten

Cluster: Understand place value

Standard 2.NBT.1: Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:

- a. 100 can be thought of as a bundle of ten tens—called a “hundred.”
- b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).

Essential Element EE.2.NBT.1: Represent numbers up to 30 with sets of tens and ones using objects in columns or arrays.

Grade 1 Essential Element EE.1.NBT.1.b:

- Count as many as 10 objects and represent the quantity with the corresponding numeral.

Grade 3 Essential Element EE.3.NBT.1:

- Use decade numbers (10, 20, 30) as benchmarks to demonstrate understanding of place value for numbers 0-30.

I Can Statements:

- I can demonstrate one-to-one correspondence.
- I can indicate that 10 ones equal one 10 and zero ones (base 10).
- I can represent numbers through 30 with sets of tens and ones using objects in columns or arrays.
- I can put numbers through 30 into sets of tens and ones.

Key Vocabulary:

- set
- ones
- number
- tens

Supports (specific to student): (e.g., assistive technology, communication system, visual aids, templates, active board, highlighters, graphic organizers, task analysis, manipulatives, real world materials, modeling)

- sorting objects
- straight-line grid
- place value chart

Instructional Examples:

- Given five objects and five boxes, the student will place one object in each box.
- Given 10 objects (i.e., 10 paperclips, 10 discs), the student will place them on a straight-line grid.
- Given popsicle sticks less than or equal to 30, the student will make groups of tens and ones.
- Given a place value chart and the prompt, “Show me ‘20,’” the student will indicate that the “2” goes in the tens column and the “0” goes in the ones column.

Grade 2 Math

2.NBT.1 Element Card

Domain: Number and Operations in Base Ten

Cluster: Understand place value

Real World Connections:

- The student will be able to hand out one item to one classmate.

Resources:

- <http://www.learningbox.com/base10/catchten.html>

Grade 2 Math

2.NBT.2.a Element Card

Domain: Number and Operations in Base Ten

Cluster: Understand place value

| | |
|--|---|
| Standard 2.NBT.2: Count within 1000; skip-count by 5s, 10s, and 100s. | Essential Element EE.2.NBT.2.a: Count from 1 to 30 (count with meaning; cardinality). |
| Grade 1 Essential Element EE.1.NBT.1.a: <ul style="list-style-type: none">Count by ones to 30. | Grade 3 Essential Element EE.3.NBT.3: <ul style="list-style-type: none">Count by tens using models such as objects, base ten blocks, or money. |
| I Can Statements: <ul style="list-style-type: none">I can repeat numbers 1 to 30.I can count numbers 1 to 20, without skipping numbers or repeating.I can count from 1 to 30 (count with meaning; cardinality).I can count beyond 30 (count with meaning; cardinality). | |
| Key Vocabulary: <ul style="list-style-type: none">count | Supports (specific to student): (e.g., assistive technology, communication system, visual aids, templates, active board, highlighters, graphic organizers, task analysis, manipulatives, real world materials, modeling) <ul style="list-style-type: none">counting cubescalendar |
| Instructional Examples: <ul style="list-style-type: none">During calendar time, the student will repeat the date.The student will count 1-20 using manipulatives.The student will count to 30 using counting cubes.During calendar time, the student will count up to 31 days on the calendar. | |
| Real World Connections: <ul style="list-style-type: none">The student will be able to count items up to 30 (e.g., the number of classmates eating lunch). | |
| Resources: <ul style="list-style-type: none">http://www.bbc.co.uk/cbeebies/tikkabilla/games/tikkabilla-tambasabacus/ | |

Grade 2 Math

2.NBT.2.b Element Card

Domain: Number and Operations in Base Ten

Cluster: Understand place value

| | |
|--|--|
| Standard 2.NBT.2: Count within 1000; skip-count by 5s, 10s, and 100s. | Essential Element EE.2.NBT.2.b: Name the next number in a sequence between 1 and 10. |
| Grade 1 Essential Element EE.1.NBT.1.a: <ul style="list-style-type: none">Count by ones to 30. | Grade 3 Essential Element EE.3.NBT.3: <ul style="list-style-type: none">Count by tens using models such as objects, base ten blocks, or money. |
| I Can Statements: <ul style="list-style-type: none">I can communicate a number.I can indicate the higher number in a progression of numbers (with or without gaps).I can name the next number in a sequence between 1 and 10.I can count forward beginning from a given number within the known sequence 2 to 10 (instead of having to begin at one). | |
| Key Vocabulary: <ul style="list-style-type: none">numbersequence | Supports (specific to student): (e.g., assistive technology, communication system, visual aids, templates, active board, highlighters, graphic organizers, task analysis, manipulatives, real world materials, modeling) <ul style="list-style-type: none">number linecalendar |
| Instructional Examples: <ul style="list-style-type: none">When numbering off into groups, the student will respond with any number when it's his or her turn.Given a number, the student will pick a higher number.Given a sequence of numbers, the student will respond with the next number in the sequence (e.g., 5, 6, 7, name 8).During calendar time, the student will start on the day's date and count forward up to 10. | |
| Real World Connections: <ul style="list-style-type: none">The student will be able to respond when the teacher calls his or her number.The student will be able to count on instead of having to start at one when counting items. | |
| Resources: <ul style="list-style-type: none">http://resources.oswego.org/games/spookyseq/spookyseq.htmlhttp://www.ictgames.com/whackAMole/index.html | |

Grade 2 Math

2.NBT.3 Element Card

Domain: Number and Operations in Base Ten

Cluster: Understand place value

Standard 2.NBT.3: Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.

Essential Element EE.2.NBT.3: Identify numerals 1 to 30.

Grade 1 Essential Element EE.1.NBT.1.a:

- Count by ones to 30.

Grade 3 Essential Element EE.3.NBT.3:

- Count by tens using models such as objects, base ten blocks, or money.

I Can Statements:

- I can differentiate between numbers and letters.
- I can identify number symbols 1-10.
- I can identify number symbols 1 to 30.
- I can express number symbols beyond 30.

Key Vocabulary:

- number
- symbol

Supports (specific to student): (e.g., assistive technology, communication system, visual aids, templates, active board, highlighters, graphic organizers, task analysis, manipulatives, real world materials, modeling)

- BINGO
- calendar

Instructional Examples:

- When presented with a letter and a number, the student will pick out the number.
- Given number symbols written on the board, the student will identify number symbols from 1 to 10.
- The student will play a game that requires number symbol recognition from 1 to 30 (e.g., BINGO).
- Given a calendar and asked to identify a date, the student will correctly identify the date.

Real World Connections:

- The student will be able to identify numbers in their environment (e.g., ordering a number 3 value meal at a fast food restaurant).

Resources:

- <http://kinderwebgames.com/one.html>

Grade 2 Math

2.NBT.4 Element Card

Domain: Number and Operations in Base Ten

Cluster: Understand place value

Standard 2.NBT.4: Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.

Essential Element EE.2.NBT.4: Compare sets of objects and numbers using appropriate vocabulary (more, less, equal).

Grade 1 Essential Element EE.1.NBT.4:

- Compose numbers less than or equal to five in more than one way.

Grade 3 Essential Element EE.3.NBT.2:

- Demonstrate understanding of place value to tens.

I Can Statements:

- I can match groups of objects.
- I can determine equality of sets of objects using appropriate vocabulary (equal).
- I can compare sets of objects and numbers using appropriate vocabulary (more, less, equal).
- I can compare sets of objects and numbers using appropriate vocabulary as equal or more or less when two or fewer units apart.

Key Vocabulary:

- compare
- more
- set
- equal
- less

Supports (specific to student): (e.g., assistive technology, communication system, visual aids, templates, active board, highlighters, graphic organizers, task analysis, manipulatives, real world materials, modeling)

- sorting objects
- counters

Instructional Examples:

- Given two sets of objects the student will match like groups.
- Given sets of two bears and two apples, the student will indicate that the sets are equal.
- Given two groups of three red counters, the student will determine that they are equal.
- Given two sets of objects, a box with 10 and a box of nine, the student will identify that the box with 10 has one more and associate the numeral.

Real World Connections:

- The student will be able to hand out equal shares to peers.

Resources:

- <http://www.ictgames.com/mucky.html>

Grade 2 Math

2.NBT.5.a Element Card

Domain: Number and Operations in Base Ten

Cluster: Use place value understanding and properties of operations to add and subtract

Standard 2.NBT.5: Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.

Essential Element EE.2.NBT.5.a: Identify the meaning of the “+” sign (i.e., combine, plus, add), “-” sign (i.e., separate, subtract, take), and the “=” sign (equal).

Grade 1 Essential Element:

- Not addressed

Grade 3 Essential Element:

- Not addressed

I Can Statements:

- I can match the “+” and “=” signs.
- I can recognize the “+” and “=” signs.
- I can identify the meaning of the “+” sign (i.e., combine, plus, add), and the “=” sign (equal).
- I can identify the meaning of the “+” sign (i.e., combine, plus, add), the “=” sign (equal), and the “-” sign (minus, take away, less).

Key Vocabulary:

- add
- combine
- minus
- plus
- equal
- take away

Supports (specific to student): (e.g., assistive technology, communication system, visual aids, templates, active board, highlighters, graphic organizers, task analysis, manipulatives, real world materials, modeling)

- +, -, = cards

Instructional Examples:

- Given a cue, the student will match the plus sign (e.g., The teacher shows a “+” sign and an “=” then points to the “+” sign. The teacher says, “This is a plus sign. Pick the one that is the same.”).
- Shown a group of symbols, the student will point to/identify the plus/equal sign when prompted by the teacher.
- Given an equation, the student will point to the plus or equal sign in an equation.
- Given three groups of objects representing a subtraction equation, the student will identify the correct sign to use.

Real World Connections:

- The student will be able to use a calculator.

Resources:

- <http://www.k-5mathteachingresources.com/addition-and-subtraction-activities.html>
- http://www.ehow.com/how_8549557_teach-addition-kindergarten.html

Grade 2 Math

2.NBT.5.b Element Card

Domain: Number and Operations in Base Ten

Cluster: Use place value understanding and properties of operations to add and subtract

Standard 2.NBT.5: Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.

Essential Element EE.2.NBT.5.b: Using concrete examples, compose and decompose numbers up to 10 in more than one way.

Grade 1 Essential Element EE.1.NBT.4:

- Compose numbers less than or equal to five in more than one way.

Grade 1 Essential Element EE.1.NBT.6:

- Decompose numbers less than or equal to five in more than one way.

Grade 3 Essential Element:

- Not addressed

I Can Statements:

- I can recognize that groups of objects can be put together or taken apart.
- I can compose and decompose numbers up to five in at least one way using concrete examples,
- I can compose and decompose numbers up to 10 in more than one-way using concrete examples.
- I can compose and decompose numbers up to 10 in more than one-way using numbers or representations.

Key Vocabulary:

- compose
- decompose
- put together
- take away

Supports (specific to student): (e.g., assistive technology, communication system, visual aids, templates, active board, highlighters, graphic organizers, task analysis, manipulatives, real world materials, modeling)

- dominos

Instructional Examples:

- Shown four objects and one taken away, the student will count the one taken away to find how many were taken away.
- Shown groups of dots for an amount up to five (e.g., dominos), the student will recognize (without counting) the quantity they represent and identify the numeral.
- Shown groups of dots for an amount up to 10, the student will recognize (without counting) the quantity it represents.
- Shown the number five, the student will indicate that it is made up of one and four, or two and three.

Real World Connections:

- The student will be able to solve simple addition problems efficiently by making ten.

Resources:

- <http://exchange.smarttech.com/details.html?id=391c58e1-62bf-42eb-ba2f-1df01de02ef9>

Grade 2 Math

2.NBT.6-7 Element Card

Domain: Number and Operations in Base Ten

Cluster: Use place value understanding and properties of operations to add and subtract

Standard 2.NBT.6: Add up to four two-digit numbers using strategies based on place value and properties of operations.

Standard 2.NBT.7: Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.

Essential Element EE.2.NBT.6-7: Use objects, representations, and numbers (0–20) to add and subtract.

Grade 1 Essential Element EE.1.NBT.4:

- Compose numbers less than or equal to five in more than one way.

Grade 1 Essential Element EE.1.NBT.6:

- Decompose numbers less than or equal to five in more than one way.

Grade 3 Essential Element EE.3.OA.8:

- Solve one-step real-world problems using addition or subtraction within 20.

I Can Statements:

- I can count objects 1-10.
- I can use objects, representations, and numbers (0-10) to add.
- I can use objects, representations, and numbers (0-20) to add and subtract.
- I can use objects, representations, and numbers beyond 20 to add and subtract.

Key Vocabulary:

- number
- add
- count
- subtract

Supports (specific to student): (e.g., assistive technology, communication system, visual aids, templates, active board, highlighters, graphic organizers, task analysis, manipulatives, real world materials, modeling)

- counting cubes

Instructional Examples:

- Given three counting cubes, the student will count one, two, three.
- Given three counting cubes, the student will determine how many more are needed to make six.
- The student will add two sets of objects with sums up to 20.
- Given 12 counting cubes, the student will count eight more beginning from twelve (e.g., 12, 13, 14, 15, . . . 20).

Grade 2 Math

2.NBT.6-7 Element Card

Domain: Number and Operations in Base Ten

Cluster: Use place value understanding and properties of operations to add and subtract

Real World Connections:

- The student will be able to go shopping and retrieve all items on the list.

Resources:

- <http://www.sheppardsoftware.com/mathgames/earlymath/bugabalooShoes.htm>

Grade 2 Math

2.NBT.8-9 Element Card

Domain: Number and Operations in Base Ten

Cluster: Use place value understanding and properties of operations to add and subtract

| | |
|--|---|
| <p>Standard 2.NBT.8: Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.</p> <p>Standard 2.NBT.9: Explain why addition and subtraction strategies work, using place value and the properties of operations. (Explanations may be supported by drawings or objects.)</p> | <p>Essential Element EE.2.NBT.8: N/A</p> <p>Essential Element EE.2.NBT.9: N/A</p> |
|--|---|

| | |
|--|--|
| <p>Grade 1 Essential Element:</p> <ul style="list-style-type: none">N/A | <p>Grade 3 Essential Element:</p> <ul style="list-style-type: none">N/A |
| <p>I Can Statements:</p> | |
| <p>Key Vocabulary:</p> | <p>Supports (specific to student): (e.g., assistive technology, communication system, visual aids, templates, active board, highlighters, graphic organizers, task analysis, manipulatives, real world materials, modeling)</p> |
| <p>Instructional Examples:</p> | |
| <p>Real World Connections:</p> | |
| <p>Resources:</p> | |

Grade 2 Math

2.MD.1 Element Card

Domain: Measurement and Data

Cluster: Measure and estimate lengths in standard units

Standard 2.MD.1: Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.

Essential Element EE.2.MD.1: Measure the length of objects using non-standard units.

Grade 1 Essential Element EE.1.MD.1-2:

- Compare lengths to identify which is longer/shorter, taller/shorter.

Grade 3 Essential Element EE.3.MD.3:

- Use picture or bar graph data to answer questions about data.

I Can Statements:

- I can match objects of like length.
- I can begin to measure from an end point using a non-standard tool.
- I can measure the length of objects using non-standard units.
- I can measure the length of objects using standard tools, such as rulers, yardsticks, and meter sticks, by repeating the use of the measurement tool/unit.

Key Vocabulary:

- measure
- length

Supports (specific to student): (e.g., assistive technology, communication system, visual aids, templates, active board, highlighters, graphic organizers, task analysis, manipulatives, real world materials, modeling)

- counting cubes
- ruler

Instructional Examples:

- Given three pieces of paper of different length (two short, one long), the student will match the two similar length objects.
- The student will lay nine cubes end-to-end next to a book to see how long the book is.
- The student will count the tiles on the floor to see how many there are from the door of the classroom to the drinking fountain.
- The student will measure the top of the desk with a ruler by repeating the ruler from end to end.

Real World Connections:

- The student will be able to measure his or her height.

Resources:

- <http://pbskids.org/dinosaurtrain/games/howbigareyou.html>

Grade 2 Math

2.MD.2 Element Card

Domain: Measurement and Data

Cluster: Measure and estimate lengths in standard units

| | |
|---|---|
| Standard 2.MD.2: Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen. | Essential Element EE.2.MD.2: N/A |
| Grade 1 Essential Element: <ul style="list-style-type: none">N/A | Grade 3 Essential Element: <ul style="list-style-type: none">N/A |
| I Can Statements: | |
| Key Vocabulary: | Supports (specific to student): (e.g., assistive technology, communication system, visual aids, templates, active board, highlighters, graphic organizers, task analysis, manipulatives, real world materials, modeling) |
| Instructional Examples: | |
| Real World Connections: | |
| Resources: | |

Grade 2 Math

2.MD.3-4 Element Card

Domain: Measurement and Data

Cluster: Measure and estimate lengths in standard units

Standard 2.MD.3: Estimate lengths using units of inches, feet, centimeters, and meters.

Standard 2.MD.4: Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.

Essential Element EE.2.MD.3-4: Order by length using non-standard units.

Grade 1 Essential Element EE.1.MD.1-2:

- Compare lengths to identify which is longer/shorter, taller/shorter.

Grade 3 Essential Element EE.3.MD.3:

- Use picture or bar graph data to answer questions about data.

I Can Statements:

- I can compare an item to a model that is shorter or longer.
- I can compare two non-standard units of length and determine which is shorter and which is longer.
- I can order by length using non-standard units.
- I can use non-standard units (i.e., paperclips, blocks) to measure length of objects.

Key Vocabulary:

- measure
- order
- length
- compare

Supports (specific to student): (e.g., assistive technology, communication system, visual aids, templates, active board, highlighters, graphic organizers, task analysis, manipulatives, real world materials, modeling)

- measuring tools
- measurement items

Instructional Examples:

- The student will compare a yardstick to a ruler, identifying that the yardstick is longer.
- Given a paperclip and an index card, the student will determine which is shorter.
- Given a classroom of students, the student will order them from shortest to tallest (brick walls help).
- Determine how many handprints it will take to measure the length across a desktop.

Real World Connections:

- The student will be able to arrange items in an organized manner (e.g., books on a bookshelf).

Resources:

- http://www.eduplace.com/math/mw/practice/1/practice/17_1.pdf

Grade 2 Math

2.MD.5 Element Card

Domain: Measurement and Data

Cluster: Relate addition and subtraction to length

Standard 2.MD.5: Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.

Essential Element EE.2.MD.5: Increase or decrease length by adding or subtracting unit(s).

Grade 1 Essential Element EE.1.MD.1-2:

- Compare lengths to identify which is longer/shorter, taller/shorter.

Grade 3 Essential Element EE.3.MD.2:

- Identify the appropriate measurement tool to solve one-step word problems involving mass and volume.

I Can Statements:

- I can compare two objects and determine which is longer.
- I can increase length by adding a single unit.
- I can increase or decrease length by adding or subtracting unit(s).
- I can increase or decrease length by adding or subtracting multiple units.

Key Vocabulary:

- increase
- decrease
- add
- subtract

Supports (specific to student): (e.g., assistive technology, communication system, visual aids, templates, active board, highlighters, graphic organizers, task analysis, manipulatives, real world materials, modeling)

- paper strips
- counting cubes

Instructional Examples:

- Given a short strip of paper and a long strip of paper, the student will determine which is longer.
- Given counting cubes, the student will increase the length by adding one more to the stack.
- Given a group of three counting cubes, the student will add one to make it longer (a group of four).
- Given a paper chain, the student will increase the length by adding two links.

Real World Connections:

- The student will be able to use a paper chain to count down the days until a holiday.

Resources:

- http://pbskids.org/curiousgeorge/games/how_tall/how_tall.html

Grade 2 Math

2.MD.6 Element Card

Domain: Measurement and Data

Cluster: Relate addition and subtraction to length

Standard 2.MD.6: Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.

Essential Element EE.2.MD.6: Use a number line to add one more unit of length.

Grade 1 Essential Element:

- Not addressed

Grade 3 Essential Element EE.3.MD.4:

- Measure length of objects using standard tools, such as rulers, yardsticks, and meter sticks.

I Can Statements:

- I can indicate one more number on a number line and track left to right.
- I can count forward on a number line to 10 showing units of length.
- I can use a number line to add one more unit of length.
- I can use a number line to add more than one unit of length.

Key Vocabulary:

- number line
- one more

Supports (specific to student): (e.g., assistive technology, communication system, visual aids, templates, active board, highlighters, graphic organizers, task analysis, manipulatives, real world materials, modeling)

- number line
- counting cubes

Instructional Examples:

- The student will tell the distance between two numbers on the number line.
- Given a number line, the student will start on the left and move to the right.
- Given a number line and 10 cubes, the student will place a cube on each number as it is counted.
- Given a number line and a starting point on the floor, the student will add one more.

Real World Connections:

- The student will be able to measure items to rearrange his or her room or to see if an item will fit into his or her backpack.

Resources:

- <http://www.mathsisfun.com/number-line.html>

Grade 2 Math

2.MD.7 Element Card

Domain: Measurement and Data

Cluster: Work with time and money

Standard 2.MD.7: Tell and write time from analog and digital clocks to the nearest five minutes, using *a.m.* and *p.m.*

Essential Element EE.2.MD.7: Identify on a digital clock the hour that matches a routine activity.

Grade 1 Essential Element EE.1.MD.3.c:

- Identify activities that come before, next, and after.

Grade 3 Essential Element EE.3.MD.1:

- Tell time to the hour on a digital clock.

I Can Statements:

- I can indicate that a clock is used to tell time.
- I can indicate the relationship between a clock and my daily schedule.
- I can indicate which digit(s) tells the hour on a digital clock.
- I can tell time to the hour on a digital and analog clock.

Key Vocabulary:

- digital clock
- hour
- time
- number

Supports (specific to student): (e.g., assistive technology, communication system, visual aids, templates, active board, highlighters, graphic organizers, task analysis, manipulatives, real world materials, modeling)

- digital clock
- picture schedule

Instructional Examples:

- Given a digital clock, the student will indicate the number(s) in the hour position.
- The student will select a clock showing noon when given two clocks (one set at 6:30 and one set at noon) and asked, "When do we go to lunch?"
- Using a picture schedule, the student will match the hour of one activity to the correct picture of a digital clock.
- Shown two digital clocks and asked to indicate the one that shows 5:00, the student will select the correct clock.

Real World Connections:

- The student will be able to use a digital clock to determine when an activity is coming up.

Resources:

- <http://classroom.jc-schools.net/basic/math-time.html>

Grade 2 Math

2.MD.8 Element Card

Domain: Measurement and Data

Cluster: Work with time and money

Standard 2.MD.8: Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. *Example: If you have 2 dimes and 3 pennies, how many cents do you have?*

Essential Element EE.2.MD.8: Recognize that money has value.

Grade 1 Essential Element:

- N/A

Grade 3 Essential Element:

- N/A

I Can Statements:

- I can understand that goods (items) have value.
- I can sort money from other objects.
- I can recognize that money has value.
- I can recognize that money is used in exchange for goods.

Key Vocabulary:

- money
- coin
- value
- dollar

Supports (specific to student): (e.g., assistive technology, communication system, visual aids, templates, active board, highlighters, graphic organizers, task analysis, manipulatives, real world materials, modeling)

- real or play money (coins and bills)

Instructional Examples:

- Given a reward box, the student will make a desired selection.
- Given three objects, the student will select the dollar.
- Given blocks and quarters and asked, "If you want to buy a juice, which would you use?" the student will indicate quarters.
- The student will purchase goods with a predetermined amount of money.

Real World Connections:

- The student will be able to understand that money has value to avoid being taken advantage of.
- The student will be able to use money to make a purchase.

Resources:

- <http://www.gpbkids.org/countonit/kindergarten/money/>

Grade 2 Math

2.MD.9-10 Element Card

Domain: Measurement and Data

Cluster: Represent and interpret data

Standard 2.MD.9: Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.

Standard 2.MD.10: Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.

Essential Element EE.2.MD.9-10: Create picture graphs from collected measurement data.

Grade 1 Essential Element EE.1.MD.4:

- Organize data into categories by sorting.

Grade 3 Essential Element EE.3.MD.3:

- Use picture or bar graph data to answer questions about data.

I Can Statements:

- I can contribute to data collection.
- I can create picture graphs from collected measurement data using a model.
- I can create picture graphs from collected measurement data.
- I can organize, represent, and interpret length/height data using concrete objects to create picture graphs.

Key Vocabulary:

- data
- measure
- picture graph
- organize

Supports (specific to student): (e.g., assistive technology, communication system, visual aids, templates, active board, highlighters, graphic organizers, task analysis, manipulatives, real world materials, modeling)

- sorting items
- picture graph models

Instructional Examples:

- Given an array of items, the student will sort the items into two groups (e.g., small/big, red/yellow).
- Given a model, the student will create a picture graph using different shapes sorted into groups.
- Given pictures of lunch choices, the student will place his or her selection on a graph (with pictures from other students who are making the same selection) to form a picture graph.
- The student will compare data (e.g., The teacher draws a mark on the wall at 3.5 feet and asks, “How many people are taller/shorter than this mark?”).

Real World Connections:

Grade 2 Math

2.MD.9-10 Element Card

Domain: Measurement and Data

Cluster: Represent and interpret data

- The student will be able to help create/use a visual schedule.

Resources:

- <http://www.turtlediary.com/grade-1-games/math-games/graph-and-tally.html>

Grade 2 Math

2.G.1 Element Card

Domain: Geometry

Cluster: Reason with shapes and their attributes

Standard 2.G.1: Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. (Sizes are compared directly or visually, not compared by measuring.) Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.

Essential Element EE.2.G.1: Identify common two-dimensional shapes: square, circle, triangle, and rectangle.

Grade 1 Essential Element EE.1.G.3:

- Put together two pieces to make a shape that relates to the whole (i.e., two semicircles to make a circle, two squares to make a rectangle).

Grade 3 Essential Element EE.3.G.1:

- Describe attributes of two-dimensional shapes.

I Can Statements:

- I can explore shapes.
- I can sort shapes.
- I can identify two-dimensional shapes: square, circle, triangle, and rectangle.
- I can describe attributes of two-dimensional shapes.

Key Vocabulary:

- shape
- square
- triangle
- attribute
- circle
- rectangle

Supports (specific to student): (e.g., assistive technology, communication system, visual aids, templates, active board, highlighters, graphic organizers, task analysis, manipulatives, real world materials, modeling)

- shape objects

Instructional Examples:

- The student will play a game called “Same or Different” where the teacher holds up two objects and asks if the objects are exactly the same or different.
- The student will pull out all of the circles from a bowl of circles and squares.
- The student will play “I Spy” and find items in the environment with the shape of a circle.
- After the teacher places shapes into a bag, the student will feel one of the shapes and tell whether it is a square, circle, rectangle, or rectangle.

Real World Connections:

- The student will be able to identify circles in their environment (e.g., door-opening buttons).

Resources:

- <http://pbskids.org/games/shapes.html>
- <http://www.sheppardsoftware.com/preschool/ngames/shapes.htm>

Grade 2 Math

2.G.2-3 Element Card

Domain: Geometry

Cluster: Reason with shapes and their attributes

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|---|--|
| <p>Standard 2.G.2: Partition a rectangle into rows and columns of same-size squares, and count to find the total number of them.</p> <p>Standard 2.G.3: Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words <i>halves</i>, <i>thirds</i>, <i>half of</i>, <i>a third of</i>, etc., and describe the whole as <i>two halves</i>, <i>three thirds</i>, <i>four fourths</i>. Recognize that equal shares of identical wholes need not have the same shape.</p> | <p>Essential Element EE.2.G.2: N/A</p> <p>Essential Element EE.2.G.3: Begins in grade 4 (EE.4.G.3 and EE.4.NF.1-2)</p> |
| <p>Grade 1 Essential Element EE.1.G.3:</p> <ul style="list-style-type: none">Put together two pieces to make a shape that relates to the whole (i.e., two semicircles to make a circle, two squares to make a rectangle). | <p>Grade 3 Essential Element:</p> <ul style="list-style-type: none">N/ABegins in grade 4 (EE.4.G.3 and EE.4.NF.1-2) |
| <p>I Can Statements:</p> | |
| <p>Key Vocabulary:</p> | <p>Supports (specific to student): (e.g., assistive technology, communication system, visual aids, templates, active board, highlighters, graphic organizers, task analysis, manipulatives, real world materials, modeling)</p> |
| <p>Instructional Examples:</p> | |
| <p>Real World Connections:</p> | |
| <p>Resources:</p> | |

Resources for Grades K, 1, 2

Kindergarten:

<http://www.coolmath-games.com/0-findthepair/>

http://www.glencoe.com/sites/common_assets/mathematics/ebook_assets/vmf/VMF-Interface.html

Grade One:

<http://pbskids.org/curiousgeorge/busyday/allie/>

- Counting with Allie, counting game

www.softschools.com/grades/kindergarten/

- measurement games

http://www.iptv.org/kids/story.cfm/video/sesa_20110607_yesterday_today_tomorrow/video

- Video using yesterday, tomorrow, today

http://www.dailymotion.com/video/xlmly2_time-of-day-morning-afternoon-evening-and-night-kids-learning-series_funy

- video using morning, noon, night

<http://pbskids.org/games/counting.html>

- PBS counting games

www.softschools.com/math/games/fun/math_lines/add_up_to_5/

- game to add numbers up to five

www.sheppardsoftware.com/mathgames/popup/popup_subtraction.htm

- Pearl Search, easy subtraction game

<http://illuminations.nctm.org/ActivityDetail.aspx?ID=218>

<http://exchange.smarttech.com/details.html?id=0ac067b9-72cb-4558-a783-64cdf58c2094>

http://www.glencoe.com/sites/common_assets/mathematics/ebook_assets/vmf/VMF-Interface.html

http://www.abcya.com/comparing_number_values_jr.htm

<http://homeschoolparent.blogspot.com/2010/10/number-tile-cards.html>

<http://www.turtlediary.com/kindergarten-games/esl-efl-games/opposite-adjectives.html>

- Games

Grade Two:

<http://pbskids.org/games/shapes.html>

- shape games

<http://www.sheppardsoftware.com/preschool/ngames/shapes.htm>

- Purpy's shapes

www.fun4thebrain.com/addition.html

- addition games

<http://www.bbc.co.uk/cbeebies/tikkabilla/games/tikkabilla-tambasabacus/>

- Tamba's Abacus-counting game

<http://resources.oswego.org/games/spookyseq/spookyseq.html>

- Spooky Sequences-find the sequence in numbers

<http://www.ictgames.com/whackAMole/index.html>

- Whack-a- Mole- number sequence

<http://kinderwebgames.com/one.html>

- recognizing numbers

<http://www.ictgames.com/mucky.html>

- Mucky Monsters- using more, less

<http://www.k-5mathteachingresources.com/addition-and-subtraction-activities.html>

- activities for teaching + and –

http://www.ehow.com/how_8549557_teach-addition-kindergarten.html

- information on teaching addition using the +symbol

<http://exchange.smarttech.com/details.html?id=391c58e1-62bf-42eb-ba2f-1df01de02ef9>

- game to compose and decompose numbers

<http://www.sheppardsoftware.com/mathgames/earlymath/bugabalooShoes.htm>

- Bugabaloo- online game for addition

<http://pbskids.org/dinosaurtrain/games/howbigareyou.html>

- How Big are You?- measuring using non-standard units

http://www.internet4classrooms.com/common_core/order_three_objects_length_compare_lengths_measurement_data_first_1st_grade_math_mathematics.htm

- online games for measuring

<http://www.gpbkids.org/countonit/kindergarten/money/>

- Count on it- money game

<http://classroom.ic-schools.net/basic/math-time.html>

- telling time games

<http://pbskids.org/sesame/games/tellyShapes.html>

- Telly's Shape Garden

<http://www.turtlediary.com/grade-1-games/math-games/graph-and-tally.html>

- graph and tally online game