

IM K-5 MATH™ by Kendall Hunt

Grade 1

UNIT 1

Virtual Manipulatives

[Connecting Cubes](#)

[Pattern blocks](#)

[Counters](#)

[5-frame and counters](#)

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[Dot Cube](#)

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Lesson	Required Materials	Required Preparation	Blackline Masters	MLRs	Instructional Routines	Link to Preparation Notes with Presentation Slides
1.1.1	Collections of objects Dot cubes 10-Frame Standard (BLM) Counting Collections Stages 1 and 2 Recording Sheet (BLM) Number Race Stage 3 Gameboard (BLM)	Activity 1: Create one collection of up to 20 objects such as buttons, counters, connecting cubes, paper clips, square tiles for each group of 2.	BLM Lesson 1	MLR8	What Do You Know About ____?	Preparation Notes
1.1.2	10-frames Dot cubes Two-color counters Check It Off Stage 1 Recording Sheet Grade 1 (BLM) Number Cards (0-10) (BLM)	Activity 2: Create a set of cards from the blackline master for each group of 2.	BLM Lesson 2	MLR8	Choral Count	Preparation Notes

1.1.3	<p>10-frames</p> <p>Materials from previous centers</p> <p>Number cards 0–10</p> <p>Two-color counters</p> <p>Five in a Row Addition and Subtraction Stages 1 and 2</p> <p>Gameboard (BLM)</p>	<p>Activity 1:</p> <p>Each group of 2 needs a set of Number Cards 0–10.</p> <p>Activity 2:</p> <p>Gather materials from previous centers:</p> <p>Counting Collections, Stage 1</p> <p>Number Race, Stage 3</p> <p>Check it Off, Stage 1</p> <p>Five in a Row: Addition and Subtraction, Stage 1</p>	BLM Lesson 3	MLR7	How Many Do You See?	Preparation Notes
1.1.4	<p>10-frames</p> <p>Materials from a previous activity</p> <p>Materials from previous centers</p> <p>Number cards 0–10</p> <p>Two-color counters</p>	<p>Activity 1:</p> <p>Each group of 2 needs a set of number cards 0–10.</p> <p>Each group of 2 needs a Five in a Row game board from the previous lesson.</p> <p>Activity 2:</p> <p>Gather materials from:</p> <p>Counting Collections, Stage 1</p> <p>Number Race, Stage 3</p> <p>Check it Off, Stage 1</p> <p>Five in a Row: Addition and Subtraction, Stage 1 and 2</p>		MLR8	Number Talk	Preparation Notes
1.1.5	<p>10-frames</p>	<p>Activity 1:</p>	BLM Lesson 5	MLR8	Number Talk	Preparation Notes

	<p>Materials from previous centers</p> <p>Number cards 0–10</p> <p>Two-color counters</p> <p>Check It Off Stage 2</p> <p>Recording Sheet (BLM)</p>	<p>Each group of 2 needs a set of Number Cards 0-10.</p> <p>Activity 2:</p> <p>Gather materials from previous centers:</p> <p>Counting Collections, Stage 1</p> <p>Number Race, Stage 3</p> <p>Check it Off, Stage 1</p> <p>Five in a Row: Addition and Subtraction, Stage 1 and 2</p>				
1.1.6	<p>10-frames</p> <p>Materials from previous centers</p> <p>Number cards 0–10</p> <p>Two-color counters</p> <p>Find the Pair Stage 2</p> <p>Recording Sheet (BLM)</p>	<p>Activity 1:</p> <p>Each group of 2 needs a set of Number Cards 0-10.</p> <p>Activity 2:</p> <p>Gather materials from previous centers:</p> <p>Counting Collections, Stage 1</p> <p>Number Race, Stage 3</p> <p>Check it Off, Stage 1 and 2</p> <p>Five in a Row: Addition and Subtraction, Stage 1 and 2</p> <p>Find the Pair, Stage 2</p>	BLM Lesson 6	MLR8	Which One Doesn't Belong?	Preparation Notes
1.1.7	<p>Inch tiles</p> <p>Materials from a previous activity</p> <p>Materials from previous centers</p>	<p>Activity 1:</p> <p>Each group of 2 needs a bag of math tools (with a small handful of inch tiles, pattern blocks, and two-color counters).</p>	BLM Lesson 7	MLR2	Notice and Wonder	Preparation Notes

	<p>Pattern blocks</p> <p>Two-color counters</p> <p>Two-Column Table (BLM)</p> <p>Three-Column Table (BLM)</p>	<p>Activity 2: The math tool sorts from the previous activity are needed for this gallery walk.</p> <p>Activity 3: Gather materials from previous centers: Counting Collections, Stage 1 Number Race, Stage 3 Check it Off, Stage 1 and 2 Five in a Row: Addition and Subtraction, Stage 1 and 2 Find the Pair, Stage 2</p>				
1.1.8	<p>Colored pencils or crayons</p> <p>Materials from a previous activity</p> <p>Shape Cards (BLM)</p>	<p>Activity 1: Create a set of shape cards from the blackline master for each group of 2. Have extra copies of the three-column table from a previous lesson available for students.</p> <p>Activity 2: Have extra copies of the three-column table from a previous lesson available for students.</p> <p>Activity 3:</p>	BLM Lesson 8	MLR8	Which One Doesn't Belong?	Preparation Notes

		Display students' representations of their shape sorts on tables or walls so they are easily seen as students walk around.				
1.1.9	Colored pencils or crayons Connecting cubes Materials from a previous activity	<p>Activity 1: Each group of 2 needs access to red, blue, and yellow connecting cubes.</p> <p>Activity 2: Have extra copies of the three-column table from a previous lesson available for students.</p> <p>Activity 3: Students need their representations from the previous activity.</p>		MLR2	How Many Do You See?	Preparation Notes
1.1.10	10-frames Connecting cubes Materials from previous centers Two-color counters What's Behind My Back Stage 2 Recording Sheet Grade 1 (BLM)	<p>Activity 1: Each group of 2 needs 10 connecting cubes.</p> <p>Activity 2: Gather materials from previous centers: What's Behind My Back, Stage 2 Five in a Row: Addition and Subtraction, Stages 1 and 2</p>	BLM Lesson 10	MLR8	Choral Count	Preparation Notes

		Check it Off , Stages 1 and 2 Find the Pair , Stage 2				
1.1.11	Materials from previous centers	Activity 3: Gather materials from previous centers: What's Behind My Back , Stage 2 Check it Off , Stages 1 and 2 Five in a Row: Addition and Subtraction , Stages 1 and 2 Find the Pair , Stage 2		MLR8	Notice and Wonder	Preparation Notes
1.1.12	Connecting cubes Data Represented with Numbers (BLM) Data Represented with Tally Marks (BLM)		BLM Lesson 12	MLR2	Choral Count	Preparation Notes
1.1.13	Connecting cubes Materials from a previous activity Favorite Special Class Data (BLM)	Activity 3: Required preparation: Display the list of questions from the synthesis in the previous activity.	BLM Lesson 13	MLR8	Number Talk	Preparation Notes
1.1.14	Collections of objects Materials from previous centers Sort and Display Stage 1 Recording Sheet (BLM)	Activity 1: Make collections of 10–20 objects with up to three attributes by which to sort for each group. Activity 2: Gather materials from previous centers:	BLM Lesson 14		Number Talk	Preparation Notes

		What's Behind My Back , Stage 2 Number Race , Stage 3 Check it Off , Stages 1 and 2 Five in a Row: Addition and Subtraction , Stages 1 and 2 Find the Pair , Stage 2				
1.1.15	Materials from a previous activity Tools for creating a visual display	Activity 2: Students need access to the data they collected in the previous activity. Activity 3: Students need access to their data and questions from the previous activities.		MLR8	Notice and Wonder	Preparation Notes

IM K-5 MATH™ by Kendall Hunt <h1>Grade 1</h1> UNIT 2			<div> 10-frame and counters Counters Connecting Cubes </div> <h2>Virtual Manipulatives</h2>			
Lesson	Required Materials	Required Preparation	Blackline Masters	MLRs	Instructional Routines	Link to Preparation Notes with

						Presentation Slides
1.2.1	10-frames Connecting cubes or two-color counters			MLR8	Notice and Wonder	Preparation Notes
1.2.2	10-frames Connecting cubes or two-color counters			MLR6	Number Talk	Preparation Notes
1.2.3	10-frames Connecting cubes or two-color counters Materials from previous centers	Activity 3: Gather materials from previous centers: Sort and Display , Stage 1 Check it Off , Stages 1 and 2 What's Behind My Back , Stage 2		MLR7	Notice and Wonder	Preparation Notes
1.2.4	10-frames Connecting cubes or two-color counters Tools for creating a visual display			MLR8	True or False	Preparation Notes
1.2.5	Materials from previous centers Math Stories Stage 1 and 4 Pictures (BLM) Math Stories Stage 4 Recording Sheet (BLM)	Activity 2: Gather materials from previous centers: Sort and Display , Stage 1 Math Stories , Stage 4 Find the Pair , Stage 2	BLM Lesson 5		Notice and Wonder	Preparation Notes
1.2.6	10-frames Connecting cubes or two-color counters	Activity 3:			Notice and Wonder	Preparation Notes

	Materials from previous centers	Gather materials from previous centers: Math Stories , Stage 4 Find the Pair , Stage 2 What's Behind My Back , Stage 2				
1.2.7	10-frames Cups Two-color counters Shake and Spill Stage 3 Recording Sheet Grade 1 (BLM)	Activity 1: Each group of 2 needs 10 two-color counters and a cup (at least 8 oz).	BLM Lesson 7	MLR8	How Many Do You See?	Preparation Notes
1.2.8	10-frames Cups Two-color counters Shake and Spill Stage 4 and 5 Recording Sheet (G1 and 2) (BLM)	Activity 1: Each group of 2 needs 10 two-color counters and a cup (at least 8 oz).	BLM Lesson 8	MLR8	Choral Count	Preparation Notes
1.2.9	10-frames Connecting cubes or two-color counters Materials from a previous activity Tools for creating a visual display	Activity 2: Each group will need the visual displays they created in the previous activity.		MLR8	Number Talk	Preparation Notes
1.2.10	10-frames Colored pencils or crayons Connecting cubes or two-color counters	Activity 2: Gather materials from previous centers: Math Stories , Stage 4 Shake and Spill , Stages 3 and 4	BLM Lesson 10	MLR8	Number Talk	Preparation Notes

	Materials from previous centers Number cubes Capture Squares Stage 1 Gameboard (BLM)	Capture Squares , Stage 1				
1.2.11	Connecting cubes in towers of 10 and singles	<p>Activity 1: Create a tower of 9 blue connecting cubes and a tower of 5 red connecting cubes. Each group of 2 needs 4 towers of 10 connecting cubes.</p> <p>Activity 2: Gather 1 red tower of 8 connecting cubes, 1 yellow tower of 3 connecting cubes, and a handful of yellow cubes. Each group of 2 needs 4 towers of 10 connecting cubes.</p>		MLR8	Notice and Wonder	Preparation Notes
1.2.12	Connecting cubes or two-color counters			MLR7	Notice and Wonder	Preparation Notes
1.2.13	Connecting cubes or two-color counters			MLR8	Notice and Wonder	Preparation Notes
1.2.14	Connecting cubes or two-color counters Materials from previous centers	<p>Activity 3: Gather materials from previous centers: Math Stories, Stage 4 Shake and Spill, Stages 3 and 4 Capture Squares, Stage 1</p>		MLR2	True or False	Preparation Notes

1.2.15	Connecting cubes or two-color counters Materials from previous centers	Activity 3: Gather materials from previous centers: Capture Squares , Stage 1 Shake and Spill , Stages 3 and 4 What's Behind My Back , Stage 2		MLR8	Which One Doesn't Belong?	Preparation Notes
1.2.16	Colored pencils or crayons Connecting cubes or two-color counters Materials from previous centers Number cards 0–10 Capture Squares Stage 2 Gameboard (BLM)	Activity 2: Gather materials from previous centers: Math Stories , Stage 4 Shake and Spill , Stages 3 and 4 What's Behind My Back , Stage 2	BLM Lesson 16	MLR2	Number Talk	Preparation Notes
1.2.17	Tools for creating a visual display Story Problem Cards Grade 1 (BLM)	Activity 2: Create one set of Story Problem Cards from the blackline master.	BLM Lesson 17	MLR2	Which One Doesn't Belong?	Preparation Notes
1.2.18	Connecting cubes or two-color counters Materials from a previous lesson Story Problem Cards Grade 1 (BLM) Equation Cards Grade 1 (BLM)	Activity 1: Create a set of Story Problem Cards and Equation Cards for each group of 2.	BLM Lesson 18	MLR6	Notice and Wonder	Preparation Notes
1.2.19	Connecting cubes or two-color counters			MLR6	Choral Count	Preparation Notes

1.2.20	Connecting cubes or two-color counters Materials from a previous centers	Activity 3: Gather materials from previous centers: Capture Squares , Stages 1 and 2 Shake and Spill , Stages 3 and 4 What's Behind My Back , Stage 2		MLR7	How Many Do You See?	Preparation Notes
1.2.21	Materials from previous centers Number Puzzles Addition and Subtraction Stage 1 Gameboard (BLM) Number Puzzles Digit Cards (BLM)	Activity 1: Create a set of Number Puzzles Cards from the blackline master for each group of 2. Activity 2: Gather materials from previous centers: Capture Squares , Stages 1 and 2 Math Stories , Stage 4 What's Behind My Back , Stage 2	BLM Lesson 21		Number Talk	Preparation Notes
1.2.22	Materials from a previous activity Materials from a previous lesson Revisit Data (BLM)	Activity 1: Gather survey data from the last lesson in the previous unit, Animals in the Jungle. Activity 2: Students need access to the survey data used in the previous activity.	BLM Lesson 22		Notice and Wonder	Preparation Notes

IM K-5 MATH™ by Kendall Hunt

Grade 1

UNIT 3

Virtual Manipulatives

[Counters](#)
[Connecting Cubes](#)
[10-frames and counters](#)

Lesson	Required Materials	Required Preparation	Blackline Masters	MLRs	Instructional Routines	Link to Preparation Notes with Presentation Slides
1.3.1	Bags (brown paper) Bags or envelopes Scissors Compare Stage 1 Addition Cards to 10 (BLM)		BLM Lesson 1	MLR8	Notice and Wonder	Preparation Notes
1.3.2	10-frames Connecting cubes or two-color counters Materials from a previous lesson Two-color counters	Each student needs their addition expression cards from a previous lesson to use during the lesson synthesis. Activity 1: Each group of 2 needs 10 two-color counters. Have one cup available to demonstrate Shake and Spill.		MLR6	Number Talk	Preparation Notes

1.3.3	Connecting cubes or two-color counters Materials from a previous lesson	Activity 1: Each student needs their addition expression cards from a previous lesson.		MLR8	How Many Do You See?	Preparation Notes
1.3.4	10-frames Crayons Cups Materials from previous centers Two-color counters Shake and Spill Stage 3 Recording Sheet Grade 1 (BLM)	Activity 3: Gather materials from previous centers: Number Puzzles , Stage 1 Check It Off , Stages 1 and 2 Find the Pair , Stage 2	BLM Lesson 4	MLR8	True or False	Preparation Notes
1.3.5	Connecting cubes or two-color counters				Number Talk	Preparation Notes
1.3.6	10-frames Connecting cubes or two-color counters			MLR7	Notice and Wonder	Preparation Notes
1.3.7	Connecting cubes or two-color counters Materials from previous centers Compare Stage 1 Subtraction Cards to 10 (BLM) Compare Stage 1 Addition Cards to 10 (BLM)	Activity 1: Create a set of Addition Fact Cards to 10 and Subtraction Fact Cards to 10 from the blackline master for each group of 2. Activity 2: Gather materials from previous centers: Number Puzzles , Stage 1 Find the Pair , Stage 2	BLM Lesson 7	MLR8	Choral Count	Preparation Notes

		Compare , Stage 1				
1.3.8	10-frames Bags Connecting cubes Counting Collections Stages 1 and 2 Recording Sheet (BLM)	Activity 1: Each group of 2 needs a bag of 16 single connecting cubes.	BLM Lesson 8	MLR7	Which One Doesn't Belong?	Preparation Notes
1.3.9	Connecting cubes or two-color counters Double 10-frames Double 10-Frame – Standard (BLM) Number Cards 11-20 (BLM)	Activity 1: Create a set of Number Cards (11-20) from the blackline master for each group of 2.	BLM Lesson 9	MLR8	Notice and Wonder	Preparation Notes
1.3.10	Connecting cubes or two-color counters Double 10-frames			MLR6	Number Talk	Preparation Notes
1.3.11	Connecting cubes or two-color counters Double 10-frames Materials from previous centers	Activity 3: Gather materials from previous centers: Number Puzzles , Stage 1 Find the Pair , Stage 2 Compare , Stage 1		MLR7	True or False	Preparation Notes
1.3.12	Connecting cubes or two-color counters Cups Double 10-frames Two-color counters		BLM Lesson 12	MLR8	Choral Count	Preparation Notes

	Shake and Spill Stage 4 and 5 Recording Sheet (G1 and 2) (BLM)					
1.3.13	Connecting cubes or two-color counters Double 10-frames Materials from previous centers	Activity 3: Gather materials from previous centers: Shake and Spill , Stages 3-5 Compare , Stage 1 Number Puzzles , Stage 1		MLR2	Number Talk	Preparation Notes
1.3.14	Materials from previous centers Number Puzzles Addition and Subtraction Stage 2 Gameboard (BLM)	Activity 1: Each group of 2 needs one set of Number Puzzle Digit Cards from stage 1 of this center. Activity 2: Gather materials from previous centers: Number Puzzles , Stages 1 and 2 Shake and Spill , Stages 3-5 Compare , Stage 1	BLM Lesson 14	MLR8	True or False	Preparation Notes
1.3.15	Connecting cubes or two-color counters Double 10-frames			MLR6	How Many Do You See?	Preparation Notes
1.3.16	Connecting cubes or two-color counters Double 10-frames			MLR2	Number Talk	Preparation Notes
1.3.17	Connecting cubes or two-color counters Double 10-frames	Activity 1: Each group of 2 needs a set of Number Cards (0-10).		MLR7	How Many Do You See?	Preparation Notes

	Number cards 0–10					
1.3.18	Connecting cubes or two-color counters Double 10-frames Materials from previous centers Tools for creating a visual display Compare Stage 2 Addition Cards to 20 (BLM)	Activity 1: Create a set of Compare Stage 2 Addition Cards to 20 from the blackline master for each group of 3. Activity 3: Gather materials from previous centers: Number Puzzles , Stages 1 and 2 Shake and Spill , Stages 3-5 Compare , Stage 1	BLM Lesson 18	MLR7	How Many Do You See?	Preparation Notes
1.3.19	Connecting cubes or two-color counters Double 10-frames Materials from a previous lesson	Activity 2: Each group needs a set of the Compare Stage 2 Addition Cards cards from the previous lesson.		MLR8	Number Talk	Preparation Notes
1.3.20	Connecting cubes or two-color counters Double 10-frames			MLR6	Number Talk	Preparation Notes
1.3.21	Connecting cubes or two-color counters Double 10-frames Number cards 0–10 Two-color counters Five in a Row Addition and Subtraction Stage 3 Gameboard (BLM)		BLM Lesson 21	MLR8	What Do You Know About ____?	Preparation Notes

	How Close? Stage 1 Recording Sheet (BLM)					
1.3.22	Connecting cubes or two-color counters Double 10-frames Materials from a previous lesson Number cards 0–10 Tools for creating a visual display	Activity 2: Each group of 2 needs a set of Number Cards 0–10 and a set of Number Cards 11–20 used in a previous lesson.			Number Talk	Preparation Notes
1.3.23	Connecting cubes or two-color counters Double 10-frames Materials from a previous lesson Number cards 0–10	Activity 1: Each group of 2 needs a set of Number Cards 0 - 10 and a set of Number Cards 11-20 used in a previous lesson.		MLR8	Number Talk	Preparation Notes
1.3.24	Connecting cubes or two-color counters Double 10-frames			MLR7	Choral Count	Preparation Notes
1.3.25	Connecting cubes or two-color counters Double 10-frames			MLR8	Choral Count	Preparation Notes
1.3.26	Connecting cubes or two-color counters Double 10-frames Tools for creating a visual display			MLR6	Number Talk	Preparation Notes
1.3.27	Connecting cubes or two-color counters	Activity 2:	BLM Lesson 27		Number Talk	Preparation Notes

	Double 10-frames Materials from a previous lesson Materials from previous centers Number cards 0–10 How Close? Stage 2 Recording Sheet (BLM) Compare Stage 2 Subtraction Cards to 20 (BLM)	Create a set of Compare Stage 2 Subtraction Cards for each group of 2. Each group of 2 needs a set of Compare Stage 2 Addition Cards from a previous lesson. Gather materials from previous centers: Compare , Stage 1 How Close? Stages 1 and 2 Five in a Row , Stages 1-3				
1.3.28	Connecting cubes or two-color counters Double 10-frames Tools for creating a visual display			MLR7	Notice and Wonder	Preparation Notes

IM K-5 MATH™ by Kendall Hunt <h1>Grade 1</h1> UNIT 4			<div> <div>Virtual Manipulatives</div> <div> Connecting Cubes Counters 10-frame and counters </div> </div>			
Lesson	Required Materials	Required Preparation	Blackline Masters	MLRs	Instructional Routines	Link to Preparation

						Notes with Presentation Slides
1.4.1	Bags Collections of objects Cups Double 10-frames Materials from a previous activity Materials from previous centers Paper plates Counting Collections Stages 1 and 2 Recording Sheet (BLM)	Activity 1: Each group of 2 students needs one bag of 40 objects. Activity 2: Each student will need the blackline master from the previous activity. Create 1 set of the following 6 bags of objects for each group of 12 students: Bag A: 20 objects Bag B: 40 objects Bag C: 50 objects Bag D: 60 objects Bag E: 30 objects Bag F: 10 objects Activity 3: Gather materials from previous centers: How Close , Stages 1 and 2 Five in a Row , Stages 1-3 Number Puzzles , Stages 1 and 2	BLM Lesson 1	MLR2	Choral Count	Preparation Notes
1.4.2	Connecting cubes	Activity 1:	BLM Lesson 2	MLR8	Estimation Exploration	Preparation Notes

	It's a Match (10-90) words, numbers, pictures (BLM) Representations of Tens (BLM)	Create a set of cards from the blackline master for the class. Each student will only need one card. Create a large chart titled "Representations of Tens" at the top. Draw three columns. Label columns "Number," "Number of Tens," and "Drawing."				
1.4.3	Connecting cubes in towers of 10 and singles Materials from previous centers Two-color counters Number Cards, Multiples of 10 (0-90) (BLM) Five in a Row Addition and Subtraction Stage 4 Gameboard (BLM)	Activity 2: Create a set of cards from the blackline master for each group of 2. Activity 3: Gather materials from previous centers: How Close , Stages 1 and 2 Five in a Row , Stages 1-4 Number Puzzles , Stages 1 and 2	BLM Lesson 3	MLR8	How Many Do You See?	Preparation Notes
1.4.4	Connecting cubes in towers of 10 and singles Double 10-frames			MLR6	Number Talk	Preparation Notes
1.4.5	Connecting cubes in towers of 10 and singles Materials from previous centers Number Cards, Multiples of 10 (0-90) (BLM)	Activity 1: Create a set of cards from the blackline master for each group of 2. Activity 2:	BLM Lesson 5	MLR8	Which One Doesn't Belong?	Preparation Notes

	Check It Off Stage 3 Recording Sheet (BLM)	Gather materials from previous centers: How Close , Stages 1 and 2 Five in a Row , Stages 1-4 Number Puzzles , Stages 1 and 2				
1.4.6	Bags Connecting cubes Connecting cubes in towers of 10 and singles Cups Double 10-frames Materials from previous centers Paper plates Counting Collections Stages 1 and 2 Recording Sheet (BLM)	Activity 1: Each group of 2 needs 1 bag of 52 single connecting cubes. Activity 3: Gather materials from previous centers: Check It Off , Stages 1–3 Five in a Row , Stages 1–4 Number Puzzles , Stages 1 and 2	BLM Lesson 6	MLR8	Choral Count	Preparation Notes
1.4.7	Connecting cubes in towers of 10 and singles Materials from previous centers Number cards 0–10 Make It, Two-Digit Numbers Recording Sheet Number, Drawing, Words (BLM)	Create a poster with the number 6 in the tens place and a sticky note to the right of the 6 for the Lesson Synthesis. Activity 3: Gather materials from previous centers: Shake and Spill , Stages 3–5 How Close , Stages 1 and 2 Check It Off , Stages 1–3	BLM Lesson 7	MLR8	Notice and Wonder	Preparation Notes

1.4.8	Base-ten blocks Connecting cubes in towers of 10 and singles Representations of Tens and Ones (BLM) Grab and Count Stage 2 Recording Sheet (BLM)	Activity 2: Create a set of cards from the blackline master for each group of 2–4.	BLM Lesson 8	MLR7	Estimation Exploration	Preparation Notes
1.4.9	Connecting cubes in towers of 10 and singles Materials from a previous activity Materials from previous centers Number cards 0–10	Activity 2: Students' collections from the previous activity are needed for the gallery walk. Activity 3: Gather materials from previous centers: Grab and Count , Stage 2 Shake and Spill , Stages 3–5 Check It Off , Stages 1–3			Which One Doesn't Belong?	Preparation Notes
1.4.10	Connecting cubes in towers of 10 and singles Dry erase markers Sheet protectors Write the Number Stage 1 Gameboard (BLM)	Activity 2: Put each gameboard in a sheet protector.	BLM Lesson 10	MLR8	Notice and Wonder	Preparation Notes
1.4.11	Connecting cubes in towers of 10 and singles			MLR8	True or False	Preparation Notes
1.4.12	Dry erase markers Sheet protectors	Activity 1: Put each gameboard in a sheet protector.	BLM Lesson 12	MLR8	Number Talk	Preparation Notes

	Write the Number Stage 2 Gameboard (BLM)					
1.4.13	Materials from previous centers	<p>Activity 1: Gather materials from previous centers: Grab and Count, Stage 2 Five in a Row, Stages 1–4 Check It Off, Stages 1–3</p> <p>Activity 2: Gather materials from previous centers: How Close, Stages 1 and 2 Number Puzzles, Stages 1 and 2 Shake and Spill, Stages 3–5</p>			Number Talk	Preparation Notes
1.4.14	Connecting cubes in towers of 10 and singles Materials from previous centers Paper clips	<p>Activity 3: Gather materials from previous centers: Write Numbers, Stages 1 and 2 Grab and Count, Stage 2 Five in a Row, Stages 1–3</p>		MLR8	Choral Count	Preparation Notes
1.4.15	Connecting cubes in towers of 10 and singles	<p>Activity 1: Write $78 > 45$ and $45 < 78$ on a piece of chart paper.</p>		MLR7	Number Talk	Preparation Notes
1.4.16	Connecting cubes in towers of 10 and singles Number cards 0–10		BLM Lesson 16	MLR8	Notice and Wonder	Preparation Notes

	Greatest of Them All Stage 1 Recording Sheet (BLM)					
1.4.17	Connecting cubes in towers of 10 and singles Ordering Cards: Tens and Ones (BLM)	Activity 1: Create a set of cards from the blackline master for each group of 2.	BLM Lesson 17	MLR2	Which One Doesn't Belong?	Preparation Notes
1.4.18	Dry erase markers Materials from previous centers Number cards 0–10 Sheet protectors Get Your Numbers in Order Stage 1 Gameboard (BLM)	Activity 1: Put each gameboard in a sheet protector. Activity 2: Gather materials from previous centers: Greatest of Them All , Stage 1 Grab and Count , Stage 2 Write Numbers , Stages 1 and 2	BLM Lesson 18		Number Talk	Preparation Notes
1.4.19	Bags Connecting cubes in towers of 10 and singles Materials from previous centers	Activity 1: Each group of 3–4 needs a bag of connecting cubes in 5 towers of 10 and 4 or 5 handfuls of singles. Activity 3: Gather materials from previous centers: Greatest of Them All , Stage 1 Get Your Numbers in Order , Stage 1 Grab and Count , Stage 2		MLR7	Which One Doesn't Belong?	Preparation Notes

1.4.20	Connecting cubes in towers of 10 and singles			MLR8	Estimation Exploration	Preparation Notes
1.4.21	Connecting cubes in towers of 10 and singles			MLR7	Number Talk	Preparation Notes
1.4.22	Materials from previous centers Number cards 0–10 Mystery Number Stage 1 Directions (BLM)	Activity 2: Gather materials from previous centers: Mystery Number , Stage 1 Greatest of Them All , Stage 1 Get Your Numbers in Order , Stage 1	BLM Lesson 22		True or False	Preparation Notes
1.4.23	Bags Collections of objects Estimating Quantities Card Sort (BLM)	Activity 1: Each group of 2 needs a bag of a collection of small objects. Activity 2: Create a set of cards from the blackline master for each group of 2.	BLM Lesson 23	MLR8	Estimation Exploration	Preparation Notes

IM K-5 MATH™ by Kendall Hunt

Grade 1

UNIT 5

Virtual
Manipulatives

[Connecting Cubes](#)
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Lesson	Required Materials	Required Preparation	Blackline Masters	MLRs	Instructional Routines	Link to Preparation Notes with Presentation Slides
1.5.1	Connecting cubes in towers of 10 and singles Number cards 0–10 Paper clips (2-inch)			MLR2	How Many Do You See?	Preparation Notes
1.5.2	Connecting cubes in towers of 10 and singles Paper clips Two-color counters Five in a Row Addition and Subtraction Stage 5 Gameboard (BLM)		BLM Lesson 2	MLR8	Choral Count	Preparation Notes
1.5.3	Connecting cubes in towers of 10 and singles			MLR7	Number Talk	Preparation Notes
1.5.4	Materials from previous centers Number Puzzles Addition and Subtraction Stage 3 Gameboard (BLM)	Activity 1: Each group of 2 needs a set of digit cards from the previous center, Number Puzzles. Activity 2: Gather materials from previous centers: Number Puzzles , Stages 1-3 Five in a Row , Stages 1-5 Greatest of Them All , Stage 1	BLM Lesson 4	MLR8	Notice and Wonder	Preparation Notes

1.5.5	Connecting cubes in towers of 10 and singles Add Em' Up Cards (2-digit and 1-digit numbers to 100) (BLM)	Activity 2: Create a set of cards from the blackline master for the class.	BLM Lesson 5	MLR8	How Many Do You See?	Preparation Notes
1.5.6	Connecting cubes in towers of 10 and singles Number cards 0–10 Target Numbers Stage 1 Recording Sheet (BLM)		BLM Lesson 6	MLR7	Number Talk	Preparation Notes
1.5.7	Connecting cubes in towers of 10 and singles			MLR6	Which One Doesn't Belong?	Preparation Notes
1.5.8	Connecting cubes in towers of 10 and singles Materials from previous centers Number cards 0–10 Target Numbers Stage 2 Recording Sheet (BLM)	Activity 2: Gather materials from previous centers: Target Numbers , Stages 1 and 2 Number Puzzles , Stages 1-3 Five in a Row , Stages 1-5	BLM Lesson 8	MLR8	Number Talk	Preparation Notes
1.5.9	Connecting cubes in towers of 10 and singles			MLR7	Number Talk	Preparation Notes
1.5.10	Connecting cubes in towers of 10 and singles Materials from previous centers Number Puzzles Addition Stage 4 Gameboard (BLM)	Activity 2: Create two separate posters that show base-ten drawings of 34 and 57. Leave space to write equations underneath the drawings. Activity 3:	BLM Lesson 10	MLR2	How Many Do You See?	Preparation Notes

		Each group of 2 needs a set of digit cards from the previous center, Number Puzzles.				
1.5.11	Connecting cubes in towers of 10 and singles Tools for creating a visual display			MLR7	True or False	Preparation Notes
1.5.12	Connecting cubes in towers of 10 and singles			MLR8	Number Talk	Preparation Notes
1.5.13	Connecting cubes in towers of 10 and singles Materials from previous centers Number cubes Paper clips Two-color counters Five in a Row Addition and Subtraction Stage 6 Gameboard (BLM) Target Numbers Stage 3 Recording Sheet (BLM)	Activity 1: Gather materials from previous centers: Target Numbers , Stages 1-2 Number Puzzles , Stages 1-4 Mystery Number , Stage 1 Activity 2: Gather materials from previous centers: Five in a Row , Stages 1-6 Get Your Numbers in Order , Stage 1 Grab and Count , Stage 2	BLM Lesson 13		Choral Count	Preparation Notes
1.5.14	Connecting cubes in towers of 10 and singles			MLR8	Estimation Exploration	Preparation Notes

IM K-5 MATH™ by Kendall Hunt

Grade 1

UNIT 6

Virtual Manipulatives

[Connecting Cubes](#)
[Base-ten Blocks](#)

Lesson	Required Materials	Required Preparation	Blackline Masters	MLRs	Instructional Routines	Link to Preparation Notes with Presentation Slides
1.6.1	Connecting cubes Materials from a previous activity Materials from previous centers Objects of various lengths	<p>Activity 1: Each group of 4 needs 10-12 objects to measure (thin classroom objects like pencils, crayons, paper clips, toothpicks, markers) including connecting cube towers of 3, 5, and 8.</p> <p>Activity 2: Each group of 4 needs the collection of objects from the previous activity.</p> <p>Activity 3: Gather materials from:</p>		MLR2	Notice and Wonder	Preparation Notes

		Target Numbers , Stages 1–3 Five in a Row , Stages 1–6 Get Your Numbers in Order , Stage 1				
1.6.2	Materials from a previous lesson Pencils Scissors String	<p>Activity 1: Each group of 4 students needs access to the materials from the previous lesson and one unsharpened pencil. Create a two-column chart with the headings “longer” and “shorter” for the synthesis.</p> <p>Activity 2: Each group of 2 needs a piece of string longer than the length of the side of the students’ desks shown in the activity.</p>		MLR8	Number Talk	Preparation Notes
1.6.3	Connecting cubes in towers of 10 and singles Materials from a previous activity Pencils Scissors String	<p>Activity 1: Each group of 2 needs: Connecting cubes in singles and towers of 10 6-inch and 10-inch piece of string Unsharpened pencil Scissors</p> <p>Activity 2:</p>		MLR8	Notice and Wonder	Preparation Notes

		Each group needs measuring materials from the previous activity.				
1.6.4	Materials from previous centers Number cards 0–10 How Close? Stage 3 Recording Sheet (BLM)	Activity 2: Gather materials from: Target Numbers , Stages 1–3 Five in a Row , Stages 1–6 Get Your Numbers in Order , Stage 1	BLM Lesson 4		Number Talk	Preparation Notes
1.6.5	Connecting cubes Materials from previous centers Lengths of Creepy, Crawly Things (BLM) More Creepy, Crawly Things (BLM)	Activity 3: Gather materials from: How Close? Stages 1–3 Target Numbers , Stages 1–3 Five in a Row , Stages 1–6	BLM Lesson 5	MLR8	Notice and Wonder	Preparation Notes
1.6.6	Paper clips (1-inch) Tape (painter's or masking) Measure with Paper Clips (BLM)	Activity 1: Each group of 2 needs about 30 1-inch paper clips. Activity 3: Put strips of tape of the designated lengths on the floor. Label each strip. There should be one strip of tape per group. Tape A: 18 inches Tape B: 16 inches Tape C: 12 inches Tape D: 20 inches	BLM Lesson 6	MLR8	Estimation Exploration	Preparation Notes

		Tape E: 22 inches Tape F: 25 inches				
1.6.7	Base-ten blocks Connecting cubes Paper clips (1-inch) Paper clips (2-inch) Tape (painter's or masking)	Activity 1: Create sets of 30 connecting cubes, 50 base-ten cubes (centimeter cubes), twenty 2-inch paper clips, and twenty 1-inch paper clips for each group. Put 18-inch strips of tape on the floor for each group.		MLR8	Notice and Wonder	Preparation Notes
1.6.8	Base-ten blocks Scissors String Representations of Numbers Over 80 (BLM)	Activity 1: Each group needs 120 base-ten cubes. Activity 2: Create a set of cards from the backline master for each group of 2.	BLM Lesson 8	MLR8	Choral Count	Preparation Notes
1.6.9	Base-ten blocks Tape (painter's or masking) Tools for creating a visual display	Activity 1: Put strips of tape on the floor, 2–3 of each length. Label with the animal name. There should be one length of tape for each group of 3. Beaver: 95 centimeters Snake: 105 centimeters Giant Anteater: 120 centimeters Dog: 110 centimeters Raccoon: 100 centimeters		MLR2	Choral Count	Preparation Notes

		Red Fox: 115 centimeters Make bags or buckets of about 125 base-ten cubes per group of 3.				
1.6.10	Base-ten blocks Connecting cubes Materials from previous centers Objects of various lengths Paper clips (2-inch) Estimate and Measure Stage 1 Recording Sheet (BLM)	Activity 1: Gather or identify objects of various lengths that are less than 20 connecting cubes long (pencils, markers, books, glue, scissors, shoe, tape dispenser). Activity 2: Gather materials from: How Close? Stages 1–3 Target Numbers , Stages 1–3 Five in a Row , Stages 1–6	BLM Lesson 10	MLR8	True or False	Preparation Notes
1.6.11	Connecting cubes in towers of 10 and singles			MLR6	Notice and Wonder	Preparation Notes
1.6.12	Connecting cubes in towers of 10 and singles Dry erase markers Sheet protectors Write the Number Stage 3 Gameboard (BLM)	Create a poster for the Lesson Synthesis with the problems from Activity 1 and Activity 2 and this unlabeled diagram shown two times: (Use Preparation Notes link to see the Diagram) Activity 3: Put each gameboard in a sheet protector.	BLM Lesson 12	MLR8	Notice and Wonder	Preparation Notes

1.6.13	Connecting cubes in towers of 10 and singles	Create a poster of the unlabeled diagram shown three times: (Use Preparation Notes link to see the Diagram)		MLR8	Number Talk	Preparation Notes
1.6.14	Connecting cubes in towers of 10 and singles Story Problem Cards, Unknowns in All Positions (BLM)	Activity 1: Create a set of cards from the blackline master for each group of 2.	BLM Lesson 14	MLR8	Which One Doesn't Belong?	Preparation Notes
1.6.15	Connecting cubes in towers of 10 and singles Tools for creating a visual display				Estimation Exploration	Preparation Notes
1.6.16	10-frames Collections of objects Cups Materials from previous centers Paper plates Counting Collections Stage 3 Recording Sheet (BLM)	Activity 1: Create a collection of up to 120 objects per group of 2 students (buttons, two-color counters, linking cubes, paper clips, pattern blocks, square tiles). Activity 2: Gather materials from: Write Numbers , Stages 1–3 Estimate and Measure , Stage 1	BLM Lesson 16	MLR8	Number Talk	Preparation Notes
1.6.17	Colored pencils, crayons, or markers Connecting cubes Construction paper Glue	Activity 1: Each group of 2 needs at least 20 paper triangles. Activity 2:	BLM Lesson 17	MLR8	Notice and Wonder	Preparation Notes

	Materials from a previous activity Origami Triangles: Puppies and Tulips (BLM)	Each group needs their origami stories from the previous activity.				
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IM K-5 MATH™ by Kendall Hunt <h1>Grade 1</h1> UNIT 7			<h2>Virtual Manipulatives</h2> <div> Geoblocks Virtual Solid Shapes Pattern blocks Counters </div>			
Lesson	Required Materials	Required Preparation	Blackline Masters	MLRs	Instructional Routines	Link to Preparation Notes with Presentation Slides
1.7.1	Bags (brown paper) Geoblocks Materials from a previous activity Solid shapes	Activity 1: Each group of 2 students needs about 15 different geoblocks and solid shapes, including different-sized cubes, cylinders, cones, spheres, rectangular prisms, and triangular prisms. Activity 2:			Which One Doesn't Belong?	Preparation Notes

		Place one solid shape (sphere, cone, cylinder, cube, triangular prism, and rectangular prism) in each bag. Each group of 2 needs 1 bag. Consider making 1-2 more so there are extra bags if students finish a bag. The chart made during the previous activity should be displayed for all to see.				
1.7.2	Geoblocks Geoblocks Solid shapes			MLR8	Notice and Wonder	Preparation Notes
1.7.3	Materials from a previous activity Flat Shape Cards Grade 1 (BLM)	Activity 1: Create a set of Flat Shape Cards from the blackline master for each group of 2. Activity 2: Display each group's work from the previous activity.	BLM Lesson 3	MLR7	Which One Doesn't Belong?	Preparation Notes
1.7.4	Materials from a previous activity Materials from a previous lesson Materials from previous centers	Activity 1: Each group of 2 needs the Flat Shape Cards from a previous lesson. Activity 2:	BLM Lesson 4		Notice and Wonder	Preparation Notes

	Centimeter Dot Paper – Standard (BLM)	<p>Each group of 4 needs a set of Flat Shape Cards from the previous activity.</p> <p>Activity 3: Gather materials from previous centers: Capture Squares, Stages 1 and 2 Compare, Stage 1 How Close, Stages 1-3</p>				
1.7.5	<p>Materials from a previous activity</p> <p>Materials from a previous lesson</p> <p>Materials from previous centers</p> <p>Centimeter Dot Paper – Standard (BLM)</p>	<p>Activity 1: Each group of 2 needs a set of Flat Shape Cards from a previous lesson.</p> <p>Activity 2: Each group needs a set of Flat Shape Cards from the previous activity.</p> <p>Activity 3: Gather materials from previous centers: Geoblocks, Stage 3 How Are They the Same?, Stage 1 Compare, Stage 1 How Close, Stages 1-3</p>	BLM Lesson 5	MLR8	Which One Doesn't Belong?	Preparation Notes

1.7.6	<p>Chart paper</p> <p>Materials from a previous activity</p> <p>Materials from a previous lesson</p> <p>Centimeter Dot Paper – Standard (BLM)</p>	<p>Activity 1: Each group of 2 needs a set of Flat Shape Cards from a previous lesson.</p> <p>Activity 2: Each group of 2 needs a set of Flat Shape Cards from the previous activity.</p>	BLM Lesson 6	MLR7	Number Talk	Preparation Notes
1.7.7	<p>Pattern blocks</p> <p>Picture books</p> <p>Flat Shapes Puzzles (BLM)</p> <p>Picture Books Stage 3</p> <p>Recording Sheet (BLM)</p>	<p>Create a chart titled, “What We’ve Learned About Shapes” for the Lesson Synthesis.</p> <p>Activity 1: Consider making the Flat Shapes Puzzles blackline master into a packet for each student.</p> <p>Activity 3: Each group of 2 needs at least one picture book that shows a variety of shapes throughout the book.</p>	BLM Lesson 7	MLR8	Notice and Wonder	Preparation Notes
1.7.8	<p>Folders</p> <p>Geoblocks</p> <p>Materials from previous centers</p> <p>Solid shapes</p>	<p>Activity 2: Gather materials from previous centers: Picture Books, Stage 2 How Are They the Same?., Stage 1</p>			Number Talk	Preparation Notes

		Capture Squares , Stages 1 and 2				
1.7.9	Scissors Circles and Squares (BLM) Pieces of Circles (BLM)	Activity 1: Cut out the pieces of the circles on the blackline master. Each copy has enough pieces for 8 students. Activity 2: Consider having extra shapes cut from the blackline masters for students who may need more than one of each shape.	BLM Lesson 9	MLR8	Which One Doesn't Belong?	Preparation Notes
1.7.10	Colored pencils or crayons Shaded Parts Cards (BLM)	Activity 2: Create a set of Shaded Parts Cards for each group of 2.	BLM Lesson 10	MLR2	Which One Doesn't Belong?	Preparation Notes
1.7.11	Bags Colored pencils or crayons Geoblocks Scissors	Activity 3: Place 4–6 different geoblocks into a bag that is not see-through for each group of 2 students.		MLR7	Choral Count	Preparation Notes
1.7.12	Materials from a previous lesson Materials from previous centers Centimeter Dot Paper – Standard (BLM)	Activity 1: Each group of 2 needs a set of Flat Shape Cards from a previous lesson. Activity 2: Gather materials from previous centers: Picture Books Stage 2	BLM Lesson 12		How Many Do You See?	Preparation Notes

		Match Mine , Stage 2 Capture Squares , Stages 1 and 2 Target Numbers , Stages 1-3				
1.7.13	Materials from a previous activity Scissors Clock Cards Hour (BLM)	Activity 2: Each student needs the clock cards they created in the previous activity.	BLM Lesson 13	MLR8	Notice and Wonder	Preparation Notes
1.7.14	Colored pencils, crayons, or markers Materials from a previous activity Materials from a previous lesson Scissors Clock Cards Half Past (BLM)	Activity 1: Each student needs their clock cards from the previous lesson. Activity 2: Each student needs red and blue colored pencils, crayons, or markers. Activity 3: Each student needs their Half Past Clock Cards from a previous activity.	BLM Lesson 14	MLR2	Number Talk	Preparation Notes
1.7.15	Materials from a previous lesson	Activity 2: Each student needs their Half Past Clock Cards from a previous lesson.		MLR8	True or False	Preparation Notes
1.7.16	Materials from a previous lesson	Activity 1: Each student needs both the Hour Clock Cards and Half Hour Clock Cards from previous lessons.		MLR8	Number Talk	Preparation Notes

1.7.17	Materials from previous centers Two-color counters Which One Stage 2 Gameboard (BLM)	Activity 2: Gather materials from previous centers: Can You Draw It , Stage 1 Match Mine , Stage 2 Capture Squares , Stages 1 and 2 Target Numbers , Stages 1-3	BLM Lesson 17		Which One Doesn't Belong?	Preparation Notes
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IM K-5 MATH™ by Kendall Hunt <h1>Grade 1</h1> UNIT 8			<h2>Virtual Manipulatives</h2> Connecting Cubes 10-frame and counters			
Lesson	Required Materials	Required Preparation	Blackline Masters	MLRs	Instructional Routines	Link to Preparation Notes with Presentation Slides
1.8.1	Colored pencils Index cards Materials from previous centers	Activity 2: Gather materials from previous centers: Check It Off , Stage 1		MLR8	How Many Do You See?	Preparation Notes

		Number Puzzles , Stage 1 Capture Squares , Stage 1				
1.8.2	Colored pencils Connecting cubes Index cards	Activity 1: Create a tower of connecting cubes with 4 cubes of one color and 3 cubes of another color.		MLR2	Number Talk	Preparation Notes
1.8.3	Connecting cubes in towers of 10 and singles Number cards 0–10 Tools for creating a visual display			MLR8	Number Talk	Preparation Notes
1.8.4	Connecting cubes in towers of 10 and singles			MLR8	How Many Do You See?	Preparation Notes
1.8.5	Connecting cubes in towers of 10 and singles			MLR8	True or False	Preparation Notes
1.8.6	Connecting cubes in towers of 10 and singles			MLR2	Which One Doesn't Belong?	Preparation Notes
1.8.7	Collections of objects Cups Double 10-frames Paper plates	Activity 1: Prepare a chart with these start and stop numbers: Use Preparation Notes Link to see image) Activity 2: Create collections of between 90 and 120 objects, such as connecting cubes, counters, centimeter cubes, paper clips,		MLR7	What Do You Know About ____?	Preparation Notes

		pattern blocks, or other objects, for each group of 2 students.				
1.8.8	Connecting cubes in towers of 10 and singles Materials from a previous activity Materials from previous centers Paper	<p>Activity 2: Display student work from the previous activity for the gallery walk.</p> <p>Activity 3: Gather materials from: Compare, Stage 2 How Close, Stages 1 and 2 Write Numbers, Stages 1-3</p>		MLR7	Estimation Exploration	Preparation Notes
1.8.9	Bags or envelopes Connecting cubes in towers of 10 and singles Number Riddle Cards (BLM)	<p>For the lesson synthesis, create a chart with clues. Leave a few lines in between each clue. Fold the chart paper so that only the first clue is showing.</p> <p>My number has more than 6 tens.</p> <p>My number is less than 100.</p> <p>My number has 8 tens.</p> <p>My number is the sum of $51 + 32$.</p> <p>Activity 2: Create enough riddles from the Number Riddle Cards so each group of 2 students can have a different riddle. Fold the gray</p>	BLM Lesson 9	MLR8	True or False	Preparation Notes

		cards. Place each set of clues in a bag or envelope and label based on the letter of the riddle.				
1.8.10	Bags or envelopes Connecting cubes in towers of 10 and singles Index cards Materials from a previous activity	Activity 2: Each group of 2 needs to begin with a riddle envelope from the previous activity.		MLR8	True or False	Preparation Notes