



## User's Guide

More than 200 engaging, research-based, online math activities for grades Pre-K through 8.



Mystery Pictures 1

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These materials were based upon work supported in part by the National Science Foundation under Grant No. ESI-9730804 to Clements, D. H. and Sarama, J., "***Building Blocks***- Foundations for Mathematical Thinking, Pre-Kindergarten to Grade 2: Research-based Materials Development." Work on the research was also supported in part by the Interagency Educational Research Initiative (NSF, DOE, and NICHD) Grant No. REC-0228440, "Scaling Up the Implementation of a Pre-Kindergarten Mathematics Curricula: Teaching for Understanding with Trajectories and Technologies." Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the funding agencies.



For more information about ***Building Blocks*** research, visit <http://www.triadscaleup.org/>.

## Minimum System Requirements

Category	Minimum Requirements (PC)	Minimum Requirements (Mac)
Javascript	Enabled	Enabled
Browser Cookies	Enabled	Enabled
Adobe Flash	Flash 11.8+	Flash 11.8+
Adobe AIR	AIR 14.0+	AIR 14.0+
Unity Web Player	Unity Web Player 3.5+	Unity Web Player 3.5+
Internet Browser	Internet Explorer 9+ Firefox 23+ Safari 5.1.9+ Chrome 33+	Safari 5.1.9+ Firefox 23+ Chrome 33+
Operating System	Windows XP+	OS 10.6+
Screen Resolution	1024 x 768	1024 x 768
Popup Windows	Unblocked	Unblocked
MP3	Unblocked	Unblocked
Flash Video	Unblocked	Unblocked
Java	Java 1.6.0.31+	Jave 1.6.0.31+
Native XML HTTP Support	Enabled	Enabled

## Mobile Minimum System Requirements

Category	Minimum Requirements (ConnectED Web for iPad)	Minimum Requirements (ConnectED Web for Android Tablets)	Minimum Requirements (ConnectED Mobile App for iPad)	Minimum Requirements (ConnectEd Mobile App for Android Tablets)
Internet Browser	Safari	Default		
Operating System	iOS 4.3+	Android 2.2+	iOS 5.0+	Android 2.2+
Screen Resolution	All	1024 x 768	All	7 inch screen

## Customer Support

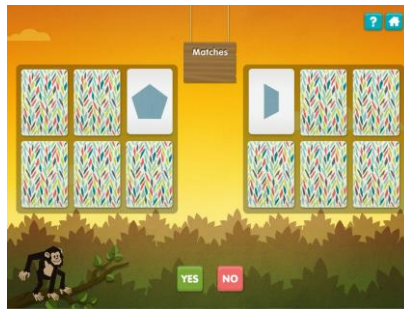
Toll Free Support 1-800-437-3715; email support [epgtech@mheducation.com](mailto:epgtech@mheducation.com).

# Building Blocks

## The Main Ingredients

### ***Building Blocks*** Activities

Math activities are the core of the ***Building Blocks*** program. The activities are fun developmental experiences that build math understanding and skill.



**Memory Geometry 3**

***Building Blocks*** Drills target specific skills and concepts, including basic computation and identifying geometric figures.

***Building Blocks*** Practice activities are engaging experiences that provide opportunities to practice key skills and concepts.

***Building Blocks*** Free Explores are open-ended versions of the activities that give students a chance to develop their own shapes or play around with concepts. Free Explores are accessible after students have completed a series of related activities.



**Dinosaur Shop Free Explore**

## Learning Trajectories

**Building Blocks** develops mathematical understanding along the strands of learning trajectories in number and geometry, which are the developmental steps children take to develop math understanding.

Curriculum research has identified the developmental learning progressions and sequences of activities that are effective in guiding students through these levels of thinking. These developmental paths are called *learning trajectories*. Each learning trajectory has levels of understanding, each more sophisticated than the last. **Building Blocks** was built to develop the following mathematical learning trajectories in the lower grades:

- Counting
- Comparing and Ordering Numbers
- Subitizing (Instantly Recognizing Quantities)
- Composing Number
- Adding and Subtracting
- Multiplying and Dividing
- Classifying
- Measuring
- Recognizing Geometric Shapes
- Composing Geometric Shapes
- Comparing Geometric Shapes
- Spatial Sense and Motions
- Patterns and Algebraic Thinking

Building Blocks activities for the upper grade levels continue development of mathematical understanding by guiding students along learning paths for these additional standards-based subjects:

- Area, Perimeter, and Volume
- Rational Numbers
- Angle Measurement
- Probability and Statistics
- Exponents and Roots

# Teacher Dashboard

This dashboard gives you access to the tools you need to use *Building Blocks* with your students.

The navigation menu is divided into three sections: **Classroom Setup**, **Reports**, and **Activity List**.

- To assign activities to students or classes, click Learning Paths under **Classroom Setup**.
- Use the drop down menus in the **Reports** section to view whole class or individual student reports by topic, trajectory, activity, or standards proficiency.
- Use the **Activity List** to sort and search the library of *Building Blocks* Activities, Free Explores, and Practices to find one appropriate for your needs.



Use the at-a-glance features of your dashboard to get a snapshot of the activity in each of your classes. Choose a class from the drop-down menu to see:

- **Top 4** lists the top 4 activities that have been assigned to and/or completed by students in the selected class. An apple will appear if the activity was teacher assigned.
- **Action Items** lists students in the selected class who are struggling and gives a description of the concepts they are struggling with.
- **Teacher-Assigned Activities** lists the activities you've assigned to the class, organized by date.

## Classroom Setup

Use the profile settings located in the **My Classes** section of the **Classroom Setup** page to manage the curriculum for a single student or an entire class. To set the curriculum start point for a student or class:

1. Select the class you want to work with from the drop-down menu at the top of the page.
2. To edit profile settings for an entire class at once, select **Edit Class** on the right-hand side of the screen. To edit settings for a single student, select **Profile** next to the student's name.
3. In the **Profile** popup box, click the **Building Blocks Settings** bar at the bottom of the box to expand the options.

The screenshot shows a window titled "Edit Student Profile Information". It has a blue header with a close button. Below the header, there are two main sections: "Profile Settings" (collapsed) and "Building Blocks Settings" (expanded). Under "Building Blocks Settings", there are several settings: "Curriculum Grade" (Grade Level 3), "Curriculum StartPoint" (Clean the Plates), "Allow Access to" (Free Explorer checked), "Speed of Drill Questions" (Medium), and "Language" (English). To the right of these settings is a light blue box containing: "Topic: Division", "Sub-Topic: Division Strategies: Skip-Counting", "Trajectory: Multiplying and Dividing", "Trajectory Level: Skip Counter X/÷", and "Description: Students skip count by 10s, 5s, 2s, and 3s to a target number." At the bottom right of the window are "Save" and "Cancel" buttons.

4. Under **Curriculum Grade** in the middle column, choose the grade level for the student(s).
5. Under **Curriculum Start Point**, choose the start point activity (note that the available activities are based on the Curriculum Grade chosen).
6. **Optional:** To disable Free Explores, uncheck the **Free Explores** checkbox.

**Note:** Free Explore activities are part of the **Building Blocks** curriculum. They offer students open-ended exploration of the concepts they are learning. Students have access to Free Explores outside of the scope and sequence, and they are not counted toward mastery of a topic or trajectory.

**Tip:** See more detail and try Activities, Free Explores, and Practices on the **Activity List** page. You can access this page from the main navigation menu.

7. Choose the speed at which you want students to respond in order to get credit for their responses under **Speed of Drill Questions**.

**Note:** All questions will be displayed for a predetermined amount of time. This setting allows you to control how much time is offered to the student to get credit for the question. For example, a question may be displayed for 10 seconds. However, you may allot 6 seconds of the 10 as the maximum allowed time for a credited response.

8. Choose English or Spanish.
9. Click **Save** to submit your changes or **Cancel** to withdraw your changes.

## Make Assignments

Set assignments for students to complete in addition to their regular curriculum in the **Learning Paths** section of the **Classroom Setup**.

1. Select the class you want to work with from the drop-down menu at the top of the page.
2. Click **Assign an Activity**.
3. On the class list, click the button next to **Students** to make assignments for all your students at once, or click the button next to the name of the student you want to make an assignment for.

**Note:** If a student's row lists an activity, that student has not yet completed the previous assignment. Assigning a new activity will override the old one.

Student	Grade	Assigned
<input type="checkbox"/> Abigail Alcantar	Pre K	[A] Mystery Pictures 1
<input checked="" type="checkbox"/> James Brooks	2	[P] Number Compare 4
<input type="checkbox"/> MIREYA C GONZALES	1	[A] Before and After Math
<input type="checkbox"/> MISHEL RAMIREZ	4	[A] Word Problems 9
<input type="checkbox"/> PAWEL LLUTSYK	1	[A] Before and After Math
<input type="checkbox"/> Rebecca Barnes	1	[A] Before and After Math
<input type="checkbox"/> Steven Hall	1	[A] Before and After Math
<input type="checkbox"/> Tammy Roberts	1	[A] Before and After Math

4. Under **Grade**, choose the activity grade level for the student(s).
  - a. If you chose **Pre K**, under **Trajectory/Subject**, choose either **All Packages** or a specific week.
    - i. If you choose **All Packages** use the **Activity** drop-down menu to choose the activity you want the student(s) to complete next.

**Tip:** See more detail and try Activities, Free Explores, and Practices on the **Activity List** page.
    - ii. If you choose a specific week, under **Activity** choose either **Entire Package** to assign all of the activities used in that week, or choose an individual activity to assign just one activity.
    - iii. Click on **Assign** to save the assignment.
  - b. If you chose **K** through **8**, under **Trajectory/Subject** choose **All Trajectories and Subjects** or the specific learning trajectory or subject you want the student(s) to focus on.

**Note:** The trajectory or subject chosen will also affect the list of activities under **Activity**. The list includes all activities within the grade band that includes the selected grade. If an entire trajectory is assigned, students will receive only the activities that are introduced in the selected grade.

**Tip:** See more detail and try Activities, Free Explores, and Practices on the **Activity List** page.

- c. Under **Activity**, choose the activity you want the student(s) to complete next.



- d. Click on **Assign** to save the assignment.

**Note:** Only one assignment can be made at a time. Making a new assignment overrides the previously created assignment. Students will automatically return to their personal activity sequence at the completion of an assignment.

### **Delete an Assignment/Restore the Scope and Sequence for a Student**

1. Select the class you want to work with from the drop-down menu at the top of the page.
2. Click **Unassign** in the last column.

## Reports

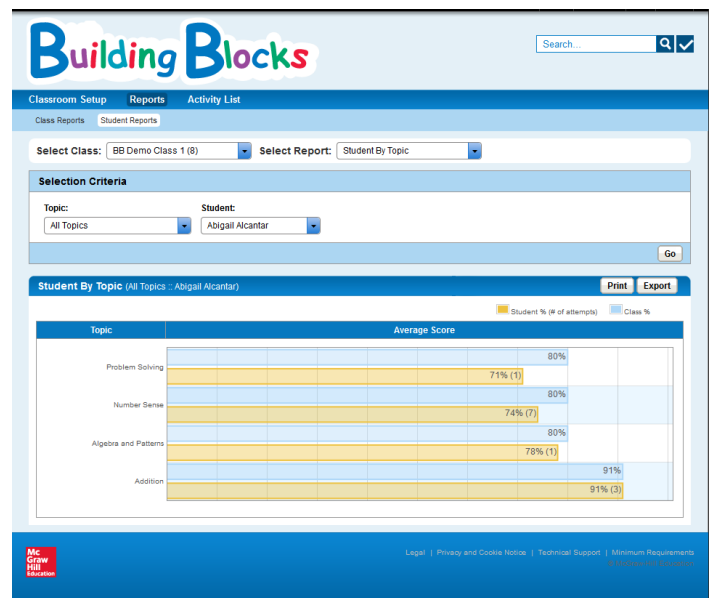
The **Building Blocks** teacher management system provides a wide range of data reports that show student, class, and building level progress through the **Building Blocks** activities. These clear, concise reports provide powerful analytical tools for teachers, principals, and other school officials. (Note: Access to building-level reports is available only to Master Code Holders.)

## Student Reports

### Student Reports by Topic

To see a student report broken down by topic:

1. Navigate to the **Reports** page.
2. Select **Student Reports** in the second level menu bar.
3. Select the class you want to work with from the drop-down menu at the top of the page.
4. Select **Student By Topic** in the **Select Report** drop-down menu.
5. Choose either **All Topics** or one specific topic in the **Topic** drop-down menu.
6. Choose the student for whom you want to see information in the **Student** drop-down menu.
7. Click **Go**.



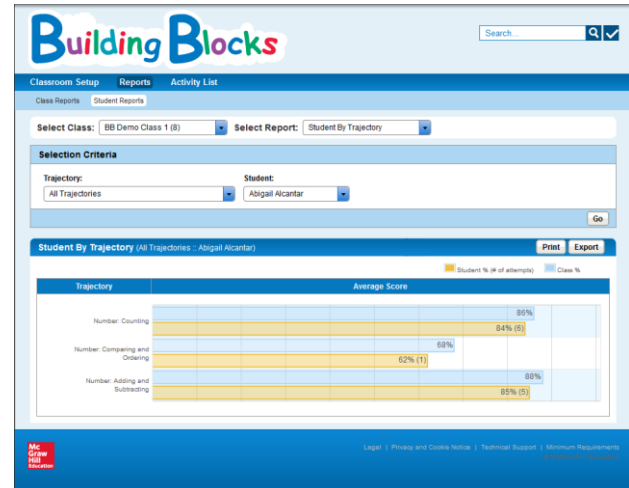
### Interpreting the Results

Results appear in a bar chart that shows a composite percentage score for the activities that the selected student has completed as compared to the score of the whole class for the same activities. The chosen student's score appears in gold, and the class's average appears in blue. The chart also shows the number of activities the student has completed in the specific topic area.

## Student Reports by Trajectory

To see a student report broken down by trajectory:

1. Navigate to the **Reports** page.
2. Select **Student Reports** in the second level menu bar.
3. Select the class you want to work with from the drop-down menu at the top of the page.
4. Select **Student By Topic** in the **Select Report** drop-down menu.
5. Choose either **All Trajectories** or a specific trajectory in the **Trajectory** menu.
6. Select a student in the **Student** menu.
7. Click **Go**.



### Interpreting the Results

Results will appear in a bar chart that shows a composite percentage score for the trajectories that the selected student has practiced as compared to the score of the whole class in the same trajectories. The chosen student's score appears in gold, and the class's average appears in blue. The chart also shows the number of activities the student has completed in the specific trajectory.

## Student Reports by Activity

Student reports are available for Learning Activities, Drills, Practices, and Free Explores.

### Learning Activities Report

The Learning Activities Report lists the activities the student has completed, including the activity's Trajectory/Subject, Trajectory Level, Topic, Score, and the date the activity was completed. Learning Activities are listed in chronological order, starting from the most recent. A learning activity with a red apple indicates it was teacher assigned.

To access this report:

1. Navigate to the **Reports** page.
2. Select **Student Reports** in the second level menu bar.
3. Select the class you want to work with from the drop-down menu at the top of the page.
4. Select **Student by Activity** in the **Select Report** drop-down menu.
5. Choose **Learning Activity** in the **Activity Type** menu.
6. Select a student in the **Student** menu.
7. Click **Go**.

The screenshot shows the 'Building Blocks' software interface. At the top, there is a search bar and navigation tabs for 'Classroom Setup', 'Reports', and 'Activity List'. The 'Reports' tab is active, and 'Student Reports' is selected. Below this, there are dropdown menus for 'Select Class' (set to 'BB Demo Class 1 (8)') and 'Select Report' (set to 'Student By Activity'). A 'Selection Criteria' section allows filtering by 'Activity Type' (set to 'Learning Activ...') and 'Student' (set to 'Abigail Alcantar'). A 'Go' button is present. Below the filters, the report title 'Student Report By Activity (Learning Activities - Abigail Alcantar)' is shown, along with 'Print' and 'Export' buttons. A table displays the report data, with a 'Teacher Assigned' indicator (red apple icon) in the top right corner of the table area.

Activity	Trajectory/Subject	Trajectory Level	Topic	Score	Date Completed
Before and After Math	Counting	Counter from N (0-1, N-1)	Number Sense	80%	10/02/2014
Rocket Blast 1	Comparing and Ordering	Mental Number Line to 10	Number Sense	62%	04/30/2014
Word Problems 2	Adding and Subtracting	Find Change +/- / Find Result +/-	Problem Solving	71%	04/30/2014
Tire Recycling	Counting	Skip Counter by 5s and 2s	Number Sense	100%	04/30/2014
Tidal Tally	Counting	Counter of Imagined Items	Algebra and Patterns	78%	04/30/2014
Math-O-Scope	Counting	Counter Forward and Back	Number Sense	86%	04/23/2014
Tire Recycling	Counting	Skip Counter by 5s and 2s	Number Sense	80%	04/23/2014

### Tips:

- Learning activities the student has completed are listed in order of completion.
- If a student completed a learning activity more than once, it will appear more than once in the report.
- You can click a learning activity to get detailed information on which questions the student got right or wrong. Click **Return** at the bottom of the page to return to the full report.

## Drills Report

The Drills Report Lists the drill activities the student has completed. The report details the topic covered by each drill, the student's score, the number of questions answered by the student, the speed at which the questions were delivered, and the date on which the drill was completed.

To access this report:

1. Navigate to the **Reports** page.
2. Select **Student Reports** in the second level menu bar.
3. Select the class you want to work with from the drop-down menu at the top of the page.
4. Select **Student by Activity** in the **Select Report** drop-down menu.
5. Choose **Drills** in the **Activity Type** menu.
6. Select a student in the **Student** menu.
7. Click **Go**.

The screenshot shows the 'Building Blocks' interface. At the top, there is a search bar and navigation tabs for 'Classroom Setup', 'Reports', and 'Activity List'. Under 'Reports', 'Student Reports' is selected. The 'Select Class' dropdown is set to 'BB Demo Class 1 (B)' and 'Select Report' is 'Student By Activity'. In the 'Selection Criteria' section, 'Activity Type' is 'Drills' and 'Student' is 'James Brooks'. A 'Go' button is present. Below this is the 'Student Report By Activity (Drills - James Brooks)' section, which includes a 'Print' button, an 'Export' button, and a 'Mastery' checkbox. A table displays the following data:

Activity	Topic	Score	# Answered	Speed	Date Completed
Repeat Addition - One Factor is 0-4	Multiplication	96	51	Medium	11/05/2014
Factor of 1 or 2	Multiplication	96 ✓	57	Medium	10/30/2014
Factor of 1 or 2	Multiplication	100	45	Medium	10/30/2014

### Tips:

- Click the name of an activity to see the questions and whether or not the student answered each question correctly. Click Return at the bottom of the page to return to the full report.
- Students achieve mastery by answering at least 90 percent of the items correctly twice to move on to the next drill. Scores are highlighted in green if the student has answered at least 90 percent of the questions correctly. When a student successfully passes two consecutive attempts, a green check mark appears to indicate completion of the drill.
- To make the question pace slower for students who need help or faster for students who need a greater challenge, click **Classroom Setup** on the main navigation menu and choose the class you want to edit. Click **Profile** next to the student's name and click the **Building Blocks Settings** bar at the bottom of the **Profile** box to see and change speed settings.

## Practice Report

Practice Activities focus on the skills of recognizing and comparing numbers and shapes. These activities do not require mastery. Students complete a Practice by answering all questions. The Practices Report lists the most recent Practices completed by each student and details the Trajectory/Subject, the Trajectory Level, and the Topic the activity covers; the student's percentage score; and the date each activity was completed. The red apple icon indicates activities that were assigned by the teacher.

To access this report:

1. Navigate to the **Reports** page.
2. Select **Student Reports** in the second level menu bar.
3. Select the class you want to work with from the drop-down menu at the top of the page.
4. Select **Student by Activity** in the **Select Report** drop-down menu.
5. Choose **Practices** in the **Activity Type** menu.
6. Select a student in the **Student** menu.
7. Click **Go**.

The screenshot shows the Building Blocks interface for a Student Report By Activity. The page title is "Student Report By Activity (Practices - James Brooks)". The "Activity Type" is set to "Practices" and the "Student" is "James Brooks". The report table is as follows:

Activity	Trajectory/Subject	Trajectory Level	Topic	Score	Date Completed
Number Compare 4	Comparing and Ordering	Place Value Comparer	Number Sense	95%	07/14/2014
Number Compare 5	Multiplying and Dividing	Array Quantifier	Number Sense	90%	04/30/2014

## Free Explore Report

The Free Explore Report lists the ten most recently completed Free Explore Activities for each student. Available information includes the Trajectory/Subject area and Topic of each activity, the time the student spent on the activity, and the last date on which the activity was accessed.

To access this report:

1. Navigate to the **Reports** page.
2. Select **Student Reports** in the second level menu bar.
3. Select the class you want to work with from the drop-down menu at the top of the page.
4. Select **Student by Activity** in the **Select Report** drop-down menu.
5. Choose **Free Explore** in the **Activity Type** menu.
6. Select a student in the **Student** menu.
7. Click **Go**.

The screenshot shows the Building Blocks interface for a Student Report By Activity. The page title is "Student Report By Activity (Free Explore - James Brooks)". The "Activity Type" is set to "Free Explore" and the "Student" is "James Brooks". The report table is as follows:

Activity	Trajectory/Subject	Topic	Time Spent	Last Date Used
Party Time Free Explore	Comparing and Ordering	Number Sense	2.66 seconds	10/30/2014
Patterns Free Explore	Patterning	Algebra and Patterns	3.83 seconds	10/30/2014

## Student Activity Standards Proficiency

The Student Activity Standards Proficiency Report details the standards in a particular grade level that a student has encountered. The report includes the student's average score on activities that cover each standard and the class's average score on those activities.

To access this report:

1. Navigate to the **Reports** page.
2. Select **Student Reports** in the second level menu bar.
3. Select the class you want to work with from the drop-down menu at the top of the page.
4. Select **Student Activity Standards Proficiency** in the **Select Report** drop-down menu.
5. Select a student in the **Student** menu.
6. Select **All Grades** or a specific grade in the **Standard Grade** drop-down.
7. Click **Go**.

The screenshot shows the Building Blocks interface for a Student Activity Standards Proficiency report. The page title is "Student Activity Standards Proficiency (James Brooks)". The report displays a table with the following data:

Standard	Student Average %	Class Average %
1.A Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. They consider analogous problems, and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to get the information they need. Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Younger students might rely on using concrete objects or pictures to help conceptualize and solve a problem. Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, "Does this make sense?" They can understand the approaches of others to solving complex problems and identify correspondences between different approaches.	87 %	82 %
2.4 Students describe and analyze shapes by examining their sides and angles. Students investigate, describe, and reason about decomposing and combining shapes to make other shapes. Through building, drawing, and analyzing two- and three-dimensional shapes, students develop a foundation for understanding area, volume, congruence, similarity, and symmetry in later grades.	80 %	77 %
2.G.2 Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.	77 %	77 %
2.G.3 Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.	95 %	95 %
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.	87 %	82 %

## Class Reports

### Class Report by Topic

The page shows an aggregated report of the entire class' progress through the *Building Blocks* software based on topic.

To access this report:

1. Navigate to the **Reports** page.
2. Select **Class Reports** in the second level menu bar.
3. Select the class you want to work with from the drop-down menu at the top of the page.
4. Select **Class By Trajectory** in the **Select Report** drop-down menu.

The screenshot displays the 'Building Blocks' software interface. At the top, there is a search bar and navigation tabs for 'Classroom Setup', 'Reports', and 'Activity List'. Below the tabs, the 'Class Reports' section is active, showing 'Student Reports' for 'Demo Class2 (2)'. The 'Select Report' dropdown is set to 'Class By Topic'. The main report area is titled 'Class By Topic' and includes 'Print' and 'Export' buttons. The report table has columns for 'Student' and 23 topics (numbered 1-23). Two students are listed: Jeremy Ward and Michelle Cook. Jeremy Ward has scores of 64 for topic 10 and 72 for topic 15. Michelle Cook has a score of 79 for topic 15. A legend at the bottom maps topic numbers to names: 1 Addition, 2 Algebra and Patterns, 3 Classifying, 4 Communication, 5 Computation, 6 Connections, 7 Decimals, 8 Division, 9 Fractions, 10 Geometry, 11 Manipulatives, 12 Measurement, 13 Money, 14 Multiplication, 15 Number Sense, 16 Probability, 17 Problem Solving, 18 Ratio, Proportion, and Percent, 19 Reasoning, 20 Statistics and Graphing, 21 Subtraction, 22 Technology, 23 Time. The McGraw Hill Education logo is in the bottom left, and legal information is in the bottom right.

Student	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Jeremy Ward										64					72								
Michelle Cook															79								

**Legend**

1 Addition	9 Fractions	17 Problem Solving
2 Algebra and Patterns	10 Geometry	18 Ratio, Proportion, and Percent
3 Classifying	11 Manipulatives	19 Reasoning
4 Communication	12 Measurement	20 Statistics and Graphing
5 Computation	13 Money	21 Subtraction
6 Connections	14 Multiplication	22 Technology
7 Decimals	15 Number Sense	23 Time
8 Division	16 Probability	

### Interpreting the results

Students are listed in the Students column alphabetically, with their scores appearing to the right, broken down by topic. Each topic has an associated number. To view the topic name, mouse over the topic number, or use the legend at the bottom. Any students who have moved out of the class will be shown at the bottom of the report with an asterisk by their names, indicating that they are no longer active. You may need to scroll down to view all the students in the class.



## Class Reports by Trajectory

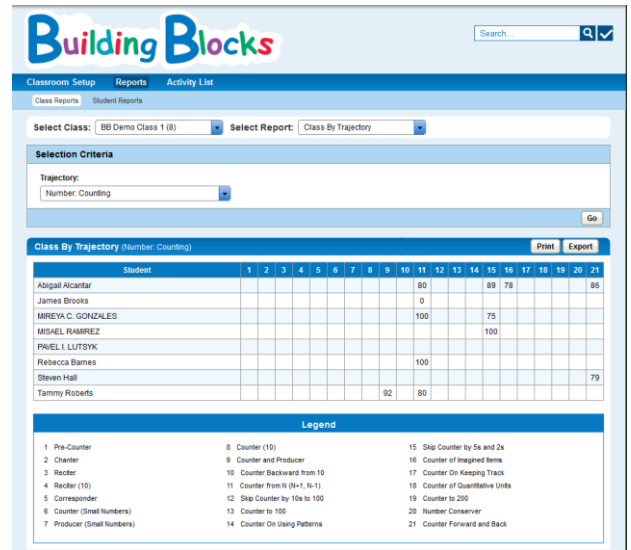
The page shows an aggregated report of the entire class' progress through the *Building Blocks* software based on trajectory.

To access this report:

1. Navigate to the **Reports** page.
2. Select **Class Reports** in the second level menu bar.
3. Select the class you want to work with from the drop-down menu at the top of the page.
4. Select **Class By Trajectory** in the **Select Report** drop-down menu.
5. **Optional:** To view by trajectory level, choose a specific topic in the **Trajectory** drop down menu.
6. Click **Go**.

### Interpreting the Results

Student scores are broken down by trajectory (or trajectory level). The Legend at the bottom of the page explains what each column stands for.



The screenshot shows the Building Blocks software interface. At the top, there is a search bar and navigation tabs for 'Classroom Setup', 'Reports', and 'Activity List'. The 'Reports' tab is active, and the 'Class Reports' sub-tab is selected. The 'Select Class' dropdown is set to 'BB Demo Class 1 (8)' and the 'Select Report' dropdown is set to 'Class By Trajectory'. The 'Trajectory' dropdown is set to 'Number: Counting'. The 'Go' button is visible.

The main report is titled 'Class By Trajectory (Number: Counting)'. It features a table with columns for trajectory levels (1-21) and rows for student names. The scores are as follows:

Student	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
Abigail Alcantar											80				89	78					86	
James Brooks										0												
MIREYA C. GONZALES										100					75							
MISHEL RAMIREZ															100							
PAHEL I LUTSYK																						
Rebecca Blanes										100												
Steven Hall																						79
Tammy Roberts									92		80											

Below the table is a legend with 21 items:

Legend		
1 Pre-Counter	8 Counter (10)	15 Skip Counter by 5s and 2s
2 Chantier	9 Counter and Producer	16 Counter of Imagined Items
3 Racter	10 Counter Backward from 10	17 Counter On Keeping Track
4 Racter (15)	11 Counter from 10 to 100	18 Counter of Quantitative Units
5 Corresponder	12 Skip Counter by 10s to 100	19 Counter to 200
6 Counter (Small Numbers)	13 Counter to 100	20 Number Conservator
7 Producer (Small Numbers)	14 Counter On Using Patterns	21 Counter Forward and Back

## Class Reports by Activity

The page shows an aggregated report of the entire class' progress through the *Building Blocks* software based on activity and trajectory.

To access this report:

1. Navigate to the **Reports** page.
2. Select **Class Reports** in the second level menu bar.
3. Select the class you want to work with from the drop-down menu at the top of the page.
4. Select **Class By Activity** in the **Select Report** drop-down menu.
5. In the **Selection Criteria** box, choose the Grade Level and Trajectory you'd like to review.
6. Click **Go**.

The screenshot shows the Building Blocks software interface. At the top, there is a search bar and navigation tabs for 'Classroom Setup', 'Reports', and 'Activity List'. Under 'Reports', there are sub-tabs for 'Class Reports' and 'Student Reports'. The 'Class Reports' section is active, showing a 'Select Class' dropdown set to 'BB Demo Class 1 (8)' and a 'Select Report' dropdown set to 'Class By Activity'. Below this is a 'Selection Criteria' box with 'Grade' set to 'Grade Level 1' and 'Trajectory' set to 'Number: Counting'. A 'Go' button is located to the right of the 'Trajectory' dropdown. The main content area is titled 'Class By Activity (Trajectory - Number: Counting)' and includes 'Print' and 'Export' buttons. A legend at the top right of the table area defines the status icons: a green square for 'Completed', a yellow square for 'In Progress', a grey square for 'Not Started', a red square for 'Action Item', and a white circle for 'Teacher Assigned'. The table has columns for 'Student' and four activity columns labeled '1', '2', '3', and '4'. The rows list the following students: Abigail Alcantar, James Brooks, MIREYA C. GONZALES, MISAEL RAMIREZ, PAVEL I. LUTSYK, Rebecca Barnes, Steven Hall, and Tammy Roberts. The progress is as follows: Abigail Alcantar (1: Completed), James Brooks (1: Completed), MIREYA C. GONZALES (1: Completed, 2: In Progress), MISAEL RAMIREZ (1: Completed), PAVEL I. LUTSYK (1: Completed), Rebecca Barnes (1: Completed), Steven Hall (1: Completed), and Tammy Roberts (1: Completed). The legend at the bottom identifies the activities: 1 [A] Before and After Math, 2 [A] School Supply Shop, 3 [A] Book Stacks, and 4 [A] Bright Idea.

Student	1	2	3	4
Abigail Alcantar	Completed			
James Brooks	Completed			
MIREYA C. GONZALES	Completed	In Progress		
MISAEL RAMIREZ	Completed			
PAVEL I. LUTSYK	Completed			
Rebecca Barnes	Completed			
Steven Hall	Completed			
Tammy Roberts	Completed			

**Legend**  
1 [A] Before and After Math      3 [A] Book Stacks  
2 [A] School Supply Shop      4 [A] Bright Idea

## Interpreting the results

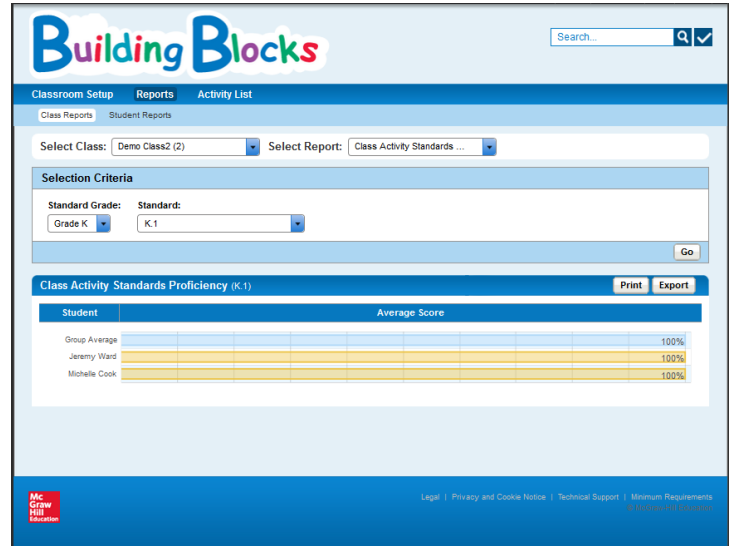
The report shows each student's progress on the activities within the chosen trajectory. The Legend below the table shows the names of the activities. To assign an activity to a specific student or to the entire class, click on its name in the **Legend** at the bottom of the page.

## Class Activity Standards Proficiency

The Class Activity Standards Proficiency Report details the standards in a particular grade level that students have encountered. The report includes the each student's average score on activities that cover each standard and the class's average score on those activities.

To access this report:

1. Navigate to the **Reports** page.
2. Select **Class Reports** in the second level menu bar.
3. Select the class you want to work with from the drop-down menu at the top of the page.
4. Select **Class Activity Standards Proficiency** in the **Select Report** drop-down menu.
5. In the **Selection Criteria** box, choose the Grade Level and Standard you'd like to review.
6. Click **Go**.



The screenshot displays the Building Blocks software interface. At the top, there is a search bar and a navigation menu with options for Classroom Setup, Reports, and Activity List. The Reports menu is expanded, showing Class Reports and Student Reports. Below this, there are dropdown menus for 'Select Class' (set to 'Demo Class2 (2)') and 'Select Report' (set to 'Class Activity Standards ...'). A 'Selection Criteria' section contains dropdowns for 'Standard Grade' (set to 'Grade K') and 'Standard' (set to 'K.1'), with a 'Go' button. Below the criteria, there is a table titled 'Class Activity Standards Proficiency (K.1)' with 'Print' and 'Export' buttons. The table has two columns: 'Student' and 'Average Score'. The data rows are:

Student	Average Score
Group Average	100%
Jeremy Ward	100%
Michelle Cook	100%

At the bottom of the interface, there is a footer with the McHenry Hill Education logo and links for Legal, Privacy and Cookie Notice, Technical Support, and Minimum Requirements.

## Activity List

This page gives you access to all of the Activities, Free Explores, and Practices in *Building Blocks*.

To search the library, choose Activities, Free Explores, or Practices from the **Resource Type** menu. You can sort further by Scope and Sequence, Grade Level, Topic, Trajectory, or Curriculum Package, or you can sort alphabetically.



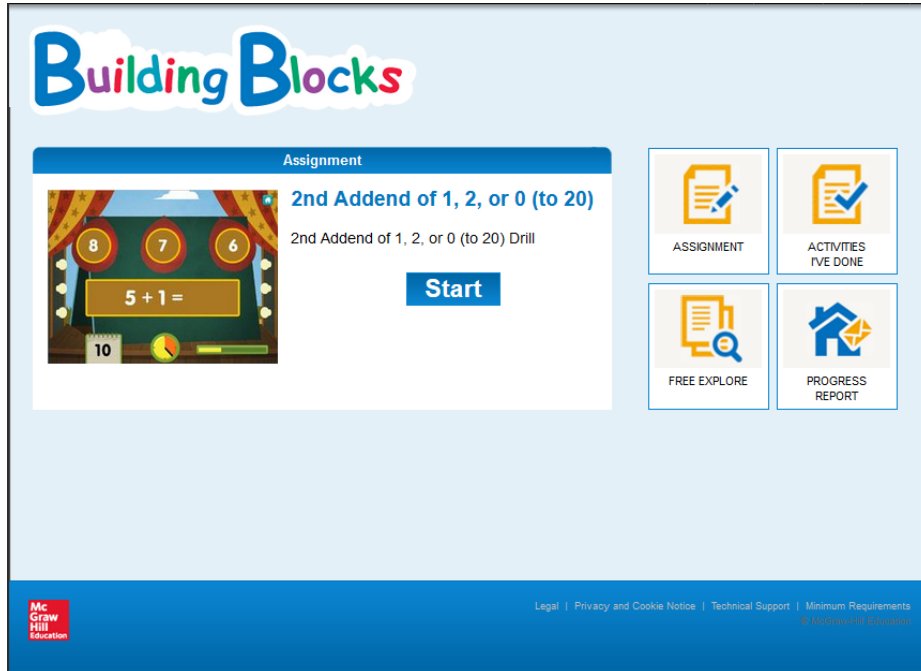
## Activity Menu

You can interact with the Activities on the Activity List in the following ways:

1. Click the image for an activity to launch it.
2. Click the Star icon to add the activity to your favorites. (To access your favorites, click on My Favorites in the blue bar above the search box.)
3. Click the box icon to add new notes or access existing notes about an activity
4. Click the cog icon to view the activity, access details about the activity, see which standards are associated with the activity, or to assign the activity to students.



## Student Dashboard



The Building Blocks Student Dashboard gives students access to the following options:

**Assignment** shows the current incomplete assignment.

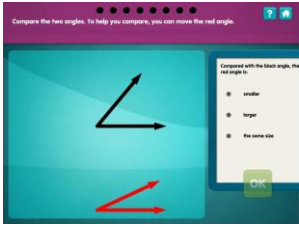
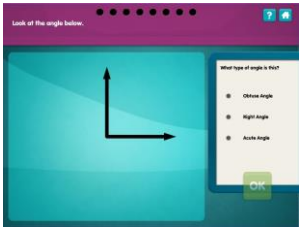

**Activities I've Done** allows students to review and revisit the activities they have already accessed.



**Free Explore** allows students to choose an activity from their curriculum area to work on (teacher can choose to allow or restrict access).




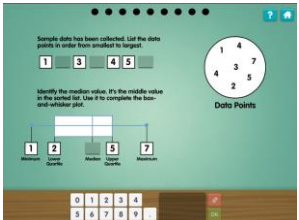
**Progress Report** shows the activities students have attempted and those the student has mastered.

## **Building Blocks Activities and Free Explores**


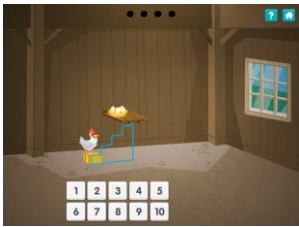
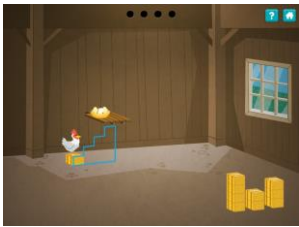
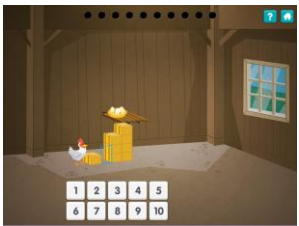
This list identifies all of the **Building Blocks** Activities and Free Explore Activities. Use it to determine developmentally appropriate activities that build specific skills and concepts for your students. “Age/Grade Range” indicates the typical age at which students reach the indicated Learning Trajectory Level.


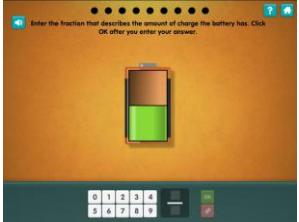
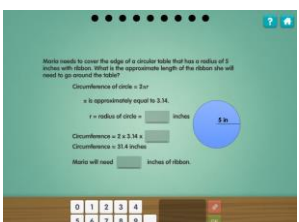
Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Angle Compare</b></p> <p>Students compare the size of angles by moving one angle on top of the other.</p> 	Geometry	Angle Measurement	Ages 8–11 Grades 4–6
<p><b>Angle Types</b></p> <p>Students determine if an angle is acute, right, or obtuse by being able to move the angle around the screen.</p> 	Geometry	Angle Measurement	Ages 8–11 Grades 4–6
<p><b>Animal Jump</b></p> <p>Students determine how many numbers on a number line an animal must go to be equal to another animal.</p> 	Algebra and Patterns	Patterns and Algebraic Thinking	Ages 6–8 Grades K–2




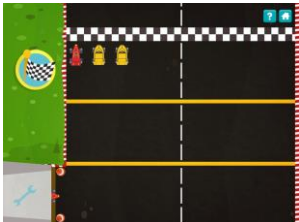
Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Area in a Rectangle</b></p> <p>Students find the areas of triangles and rectangles that are part of a larger rectangle.</p> 	Geometry	Area, Perimeter, and Volume	Ages 10–13 Grades 5–7
<p><b>Area with Unit Squares</b></p> <p>Students use unit squares to find the area of rectangles.</p> 	Geometry	Area, Perimeter, and Volume	Ages 9–12 Grades 3–5
<p><b>Arrays in Area</b></p> <p>Students use square tiles to find the area of various grids (or partial grids).</p> 	Multiplication	Multiplication/Division	Ages 8–11 Grades 2–4
<p><b>Barkley's Bones 1–10</b></p> <p>Students determine the missing addend in <math>X + \_ = Z</math> problems.</p> 	Algebra and Patterns	Addition and Subtraction	Ages 5–7 Grade K–1


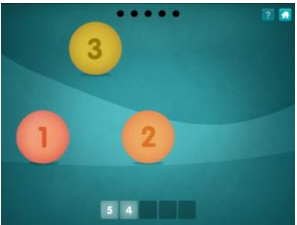

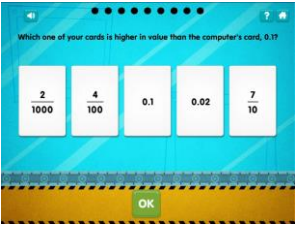
Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Barkley's Bones 1–20</b> Students determine the missing addend in <math>X + \_ = Z</math> problems.</p> 	Algebra and Patterns	Addition and Subtraction	Ages 6–8 Grade 1–3
<p><b>Before and After Math</b> Students identify and select numbers that come either just before or right after a target number.</p> 	Number Sense	Number: Counting (Verbal)	Ages 4–6 Grade K–2
<p><b>Book Stacks</b> Students "count on" (through one decade) from a given number as they load books onto a car.</p> 	Number Sense	Number: Counting (Objects)	Ages 6–8 Grade K–2
<p><b>Boxes, Boxes Everywhere</b> Students explore creating box-and-whisker plots.</p> 	Statistics and Graphing	Probability and Statistics	Ages 11–13 Grades 6–8

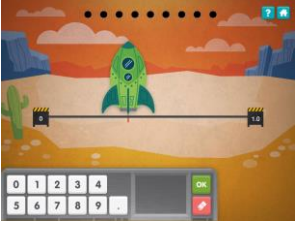
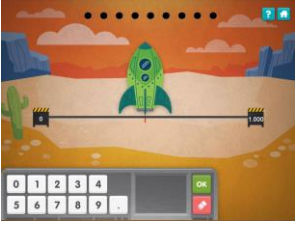

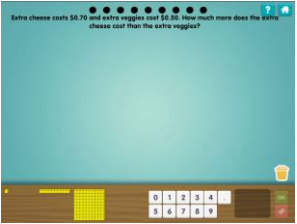


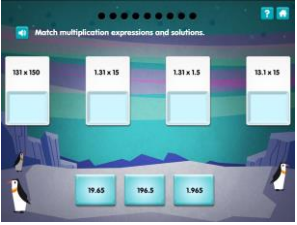



Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Bright Idea: Counting On Game</b></p> <p>Students count on from a numeral to identify number amounts, and then move forward a corresponding number of spaces on a game board.</p> 	Addition	Number: Counting (Strategies)	Ages 6–8 Grades K–2
<p><b>Build Stairs 1: Count Steps</b></p> <p>Students add stairs to a stair frame outline to reach a target height.</p> 	Number Sense	Number: Counting (Strategies)	Ages 4–6 Grades PreK–K
<p><b>Build Stairs 2: Order Steps</b></p> <p>Students identify the appropriate stacks of unit cubes to fill in a series of staircase steps.</p> 	Number Sense	Number: Counting (Strategies)	Ages 4–7 Grades PreK–K
<p><b>Build Stairs 3: Find the Missing Step</b></p> <p>Students identify the numeral that represents a missing number in a sequence.</p> 	Number Sense	Number: Counting (Strategies)	Ages 6–7 Grade PreK–K

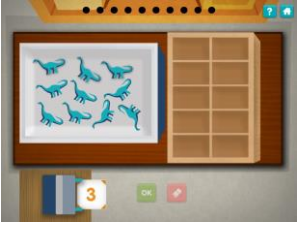



Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Build Stairs Free Explore</b> Students explore counting, sequencing, and ordering by building staircases.</p> 	Number Sense	Number: Counting (Strategies)	Ages 4–7 Grade PreK–K
<p><b>Charging Up</b> Students enter the fraction that describes the amount of charge remaining in a battery.</p> 	Fractions	Rational Numbers	Ages 6–8 Grades 2–4
<p><b>Circle the Area</b> Students use the formula for the area of a circle.</p> 	Measurement	Rational Numbers	Ages 11–14 Grades 6–8
<p><b>Circling Around</b> Students use the formula for the circumference of a circle.</p> 	Measurement	Rational Numbers	Ages 11–14 Grades 6–8




Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Clean the Plates</b> Students skip count by 10s, 5s, 2s, and 3s to a target number.</p> 	Division	Multiplication and Division	Ages 7–9 Grades 1–3
<p><b>Comic Book Shop</b> Students use skip counting to produce products that are multiples of 10s, 5s, 2s, and 3s.</p> 	Multiplication	Multiplication and Division	Ages 7–9 Grades 1–3
<p><b>Comparisons</b> Students are shown pictures of two objects and are asked to click on the one that fits the prompt (longer, shorter, heavier, etc.).</p> 	Measurement	Length Measurement	Ages 4–8 Grades PreK–K
<p><b>Count and Race</b> Students count up to 50 by adding cars to a racetrack one at a time.</p> 	Number Sense	Number: Counting (Verbal)	Ages 3–6 Grades PreK–K

Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Count and Race Free Explore</b> Students count up to 50 by adding cars to a racetrack one at a time.</p> 	Number Sense	Number: Counting (Verbal)	Ages 3–6 Grades PreK–K
<p><b>Countdown Crazy</b> Students click digits in sequence to count down from 10 to 0.</p> 	Number Sense	Number: Counting (Object)	Ages 5–7 Grades PreK–K
<p><b>Create a Scene</b> Students explore shapes by moving and manipulating them to make pictures.</p> 	Geometry	Composing Geometric Shapes	Ages 4–12 Grades K–1
<p><b>Decimal and Fraction Card Battle</b> Students select decimal or fractions card(s) that "beat" the computer's decimal or fraction card by choosing either cards that are lower or higher.</p> 	Decimals	Rational Numbers	Ages 10–12 Grades 5–7




Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Decimal Blast 1</b></p> <p>Students use a rocket-launching scenario to identify the decimals placed on a number line.</p> 	Decimals	Rational Numbers	Ages 10–12 Grades 5–7
<p><b>Decimal Blast 2</b></p> <p>Students use a rocket-launching scenario to identify the decimals placed on a number line.</p> 	Decimals	Rational Numbers	Ages 10–12 Grades 5–7
<p><b>Decimal Card Battle</b></p> <p>Students select decimal card(s) that "beat" the computer's decimal card by choosing either cards that are lower or higher.</p> 	Decimals	Rational Numbers	Ages 10–12 Grades 5–7
<p><b>Decimal Word Problems</b></p> <p>Students use a word problem scenario and decimal blocks to add and subtract decimals.</p> 	Problem Solving	Rational Numbers	Ages 10–12 Grades 5–7

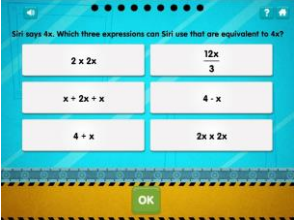
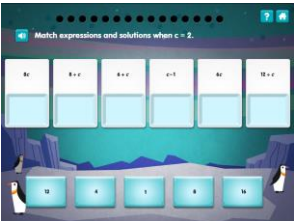
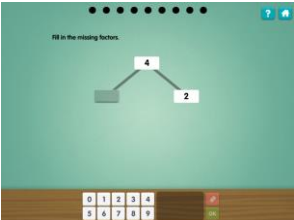

Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Deci-Multiply</b></p> <p>Students match decimal multiplication expression to the answer using the correct placement of the decimal.</p> 	Decimals	Rational Numbers	Ages 10–12 Grades 6–8
<p><b>Decomposing Area</b></p> <p>Students find the area of irregular shapes by decomposing the shape.</p> 	Geometry	Area, Perimeter, and Volume	Ages 9–12 Grades 4–6
<p><b>Deep Sea Compare</b></p> <p>Students compare the length of two objects by representing them with a third object.</p> 	Measurement	Length Measurement	Ages 5–7 Grades PreK–K
<p><b>Dinos Shop 1</b></p> <p>Students identify the numeral that represents a target number of dinosaurs in a number frame.</p> 	Number Sense	Number: Counting (Object)	Ages 4–6 Grades PreK–K

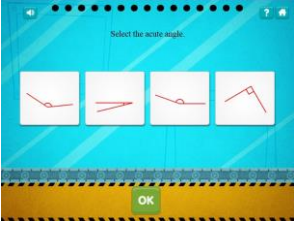
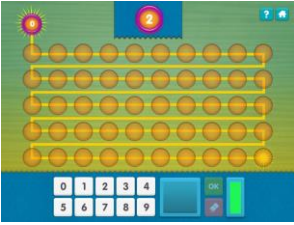

Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Dino Shop 2</b> Students add dinosaurs to a box to match target numerals.</p> 	Number Sense	Number: Counting (Object)	Ages 5–7 Grades PreK–K
<p><b>Dino Shop 3 (1–5)</b> Students add the contents of two boxes of toy dinosaurs (number frames) and identify a target numeral that represents the sum.</p> 	Addition	Addition and Subtraction	Ages 4–6 Grades PreK–K
<p><b>Dino Shop 3 (1–10)</b> Students add the contents of two boxes of toy dinosaurs (number frames) and identify a target numeral that represents the sum.</p> 	Addition	Addition and Subtraction	Ages 4–7 Grades PreK–K
<p><b>Dino Shop 4</b> Students start with <math>x</math> dinosaurs in a box and add <math>y</math> more to reach a total of <math>z</math> dinosaurs (up to 10).</p> 	Number Sense	Addition and Subtraction	Ages 5–7 Grades PreK–K

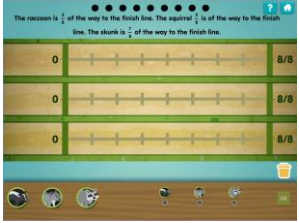
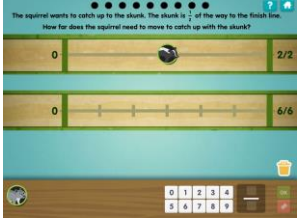
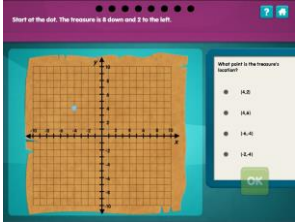

Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Dino Shop Free Explore</b></p> <p>Students explore counting and related number topics by adding toy dinosaurs to boxes.</p> 	Number Sense	Counting (Object)	Ages 4–7 Grades PreK–K
<p><b>Double Compare 1–10</b></p> <p>Students compare sums of cards to determine which sum is greater.</p> 	Number Sense	Addition and Subtraction	Ages 5–7 Grades K–2
<p><b>Double Compare 1–20</b></p> <p>Students compare sums of cards to determine which sum is greater.</p> 	Number Sense	Addition and Subtraction	Ages 5–7 Grades 1–3



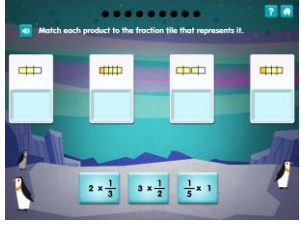



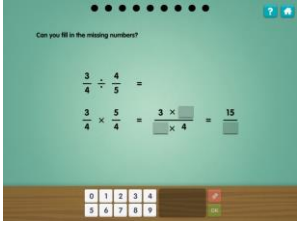

Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Easy as Pie</b></p> <p>Students identify numerals (zero through eight) and total number amounts (one through ten), then move forward a corresponding number of spaces on a game board.</p> 	Addition	Addition and Subtraction	Ages 6–8 Grades K–2
<p><b>Eggcellent</b></p> <p>Students choose numbers whose sums enable them to reach the final space on a game board in the fewest number of moves.</p> 	Addition	Addition and Subtraction	Ages 6–8 Grades 1–2
<p><b>Egg-stremely Equal</b></p> <p>Students divide large sets of eggs into several equal parts.</p> 	Fractions	Multiplication and Division	Ages 4–8 Grades K–2




Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Equivalent Expressions</b></p> <p>Students identify expressions equivalent to a given expression.</p> 	Algebra and Patterns	Patterns and Algebraic Thinking	Ages 11–13 Grades 6–8
<p><b>Evaluating Expressions</b></p> <p>Students match variable expressions, including expressions with multiple operations, to their values.</p> 	Algebra and Patterns	Patterns and Algebraic Thinking	Ages 11–13 Grades 6–8
<p><b>Factor Factory</b></p> <p>Students explore finding the prime factorization of whole numbers.</p> 	Number Sense	Multiplication and Division	Ages 9–11 Grades 4–6
<p><b>Field Trip</b></p> <p>Students solve multidigit multiplication problems in a field trip environment through the aid of manipulatives.</p> 	Multiplication	Multiplication and Division	Ages 8–11 Grades 3–5

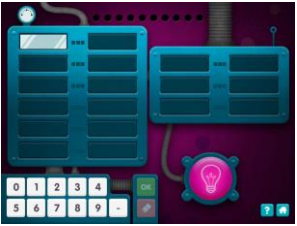


Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Figure Find</b></p> <p>Students select the correct figure by using classification information such as amount of sides and size of angles.</p> 	Geometry	Angle Measurement	Ages 9–12 Grades 4–6
<p><b>Figure the Fact</b></p> <p>Students add numeric values from one through ten to values from zero through ninety-nine, with sums ranging from one through one-hundred.</p> 	Addition	Addition and Subtraction	Ages 7–9 Grades 1–4
<p><b>Fill It Up</b></p> <p>Students fill to the line to show <math>\frac{1}{4}</math>, <math>\frac{1}{2}</math>, <math>\frac{3}{4}</math>, <math>\frac{4}{4}</math>, <math>\frac{1}{3}</math>, <math>\frac{2}{3}</math>, or <math>\frac{3}{3}</math> of a measuring cup.</p> 	Fractions	Rational Numbers	Ages 6–8 Grades 2–4

Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Forest Race 1</b></p> <p>Students tell which of three fractions is greatest, placing images on a number line to help in comparison.</p> 	Fractions	Rational Numbers	Ages 8–11 Grades 3–5
<p><b>Forest Race 2</b></p> <p>Students find equivalent fraction by using a number line.</p> 	Fractions	Rational Numbers	Ages 8–11 Grades 4–6
<p><b>Four Quadrant Treasure Trove</b></p> <p>Students choose the correct spot for buried treasure by following directions from their correct location on a four quadrant grid.</p> 	Algebra and Patterns	Patterns and Algebraic Thinking	Ages 9–11 Grades 4–7
<p><b>Fraction Bake 1</b></p> <p>Students follow a recipe that requires fractions of a whole by combining unit fractions to create representations of non-unit fractions.</p> 	Fractions	Rational Numbers	Ages 7–9 Grades 3–5

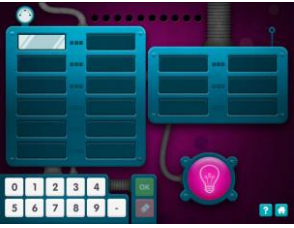
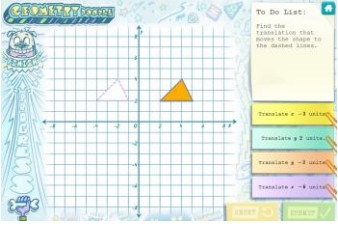
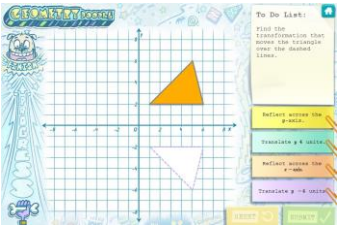
Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Fraction Bake 2</b></p> <p>Students follow a recipe that requires fractions of a whole by combining unit fractions to create representations of non-unit fractions greater than 1.</p> 	Fractions	Rational Numbers	Ages 8–11 Grades 3–5
<p><b>Fraction Blast</b></p> <p>Students use a rocket-launching scenario to identify the fractions placed on a number line.</p> 	Fractions	Rational Numbers	Ages 8–11 Grades 3–5
<p><b>Fraction by Fraction</b></p> <p>Match multiplication expressions involving fractions to representations.</p> 	Fractions	Rational Numbers	Ages 8–11 Grades 4–6

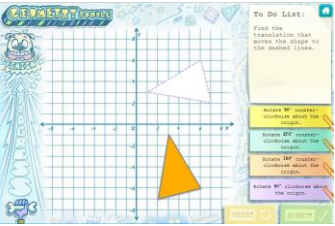
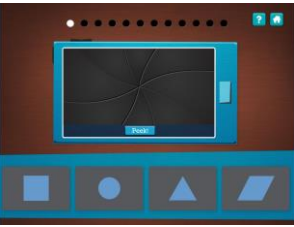
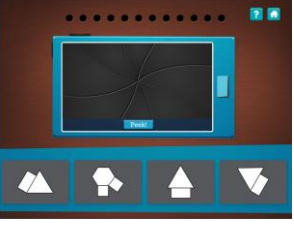
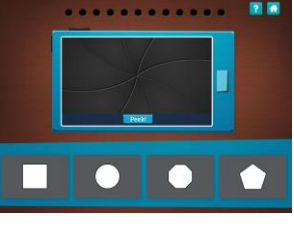
Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Fraction Dash</b></p> <p>Students use the knowledge of a fraction placed a number line to determine another fraction from its placement on the same number line.</p> 	Fractions	Rational Numbers	Ages 8–11 Grades 3–5
<p><b>Fraction Fracture</b></p> <p>Students explore the division of fractions and mixed numbers.</p> 	Fractions	Rational Numbers	Ages 10–12 Grades 5–7
<p><b>Fraction Word Problems 1</b></p> <p>Students use a word problem scenario and fraction bars to add and subtract fractions which have common denominators.</p> 	Problem Solving	Rational Numbers	Ages 8–11 Grades 4–6

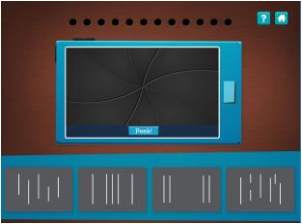

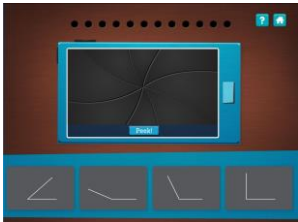
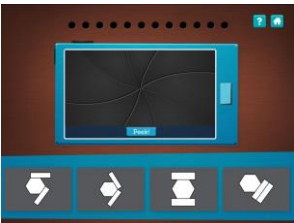
Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Fraction Word Problems 2</b></p> <p>Students use a word problem scenario and fraction tiles to add fractions which do not have common denominators.</p> 	Problem Solving	Rational Numbers	Ages 8–11 Grades 4–6
<p><b>Fraction Word Problems 3</b></p> <p>Students use a word problem scenario and fraction tiles to subtract fractions which do not have common denominators.</p> 	Problem Solving	Rational Numbers	Ages 8–11 Grades 4–6
<p><b>Function Machine 1</b></p> <p>Students identify a math function (rule) by observing a series of operations that apply a consistent addition or subtraction value (+ 2, - 5, etc.).</p> 	Algebra and Patterns	Addition and Subtraction	Ages 6–8 Grades 1–3

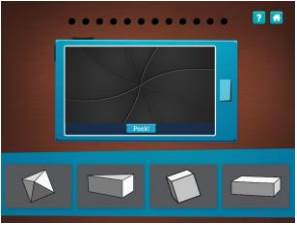
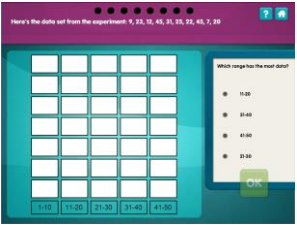

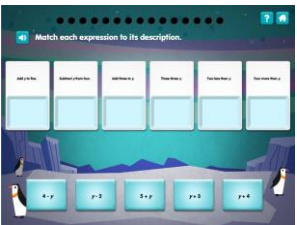
Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Function Machine 2</b></p> <p>Students identify a math function (rule) by observing a series of operations that apply a consistent multiplication, addition, or subtraction value (<math>\times 3</math>, <math>+ 2</math>, <math>- 5</math>, etc.).</p> 	Algebra and Patterns	Multiplication and Division	Ages 8–11 Grades 2–4
<p><b>Function Machine 3</b></p> <p>Students identify a math function (rule) by observing a series of operations that apply a consistent division, multiplication, addition, or subtraction value (<math>\div 4</math>, <math>\times 3</math>, <math>+ 2</math>, <math>- 5</math>, etc.).</p> 	Algebra and Patterns	Multiplication and Division	Ages 8–12 Grades 3–5
<p><b>Function Machine 4</b></p> <p>Students identify combined math functions (rules) by observing a series of operations that apply multiplication and addition or multiplication and subtraction values: <math>(x * n) + m</math>, or <math>(x * n) - m</math>.</p> 	Algebra and Patterns	Multiplication and Division	Ages 8–12 Grades 3–5





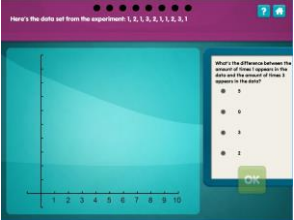



Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Function Machine 5</b></p> <p>Students identify math functions (rules) by observing a series of operations that apply division (<math>x \div p</math>), or multiplication and addition (<math>x * n) + m</math>, or multiplication and subtraction (<math>x * n) - m</math>. Variations include (<math>x * x) + x</math>, (<math>x * x) + (x * n)</math>, and (<math>x * x) - (x * n)</math>.</p> 	Algebra and Patterns	Multiplication and Division	Ages 9–12 Grades 4–6
<p><b>Geometry Doodle 1</b></p> <p>Students explore translations and find the coordinates of the vertices of a point after these translations.</p> 	Geometry	Spatial Sense and Motions	Ages 10–12 Grades 6–8
<p><b>Geometry Doodle 2</b></p> <p>Students explore reflections across the x- and y-axes and find the coordinates of the vertices of a point after these reflections.</p> 	Geometry	Spatial Sense and Motions	Ages 10–12 Grades 6–8

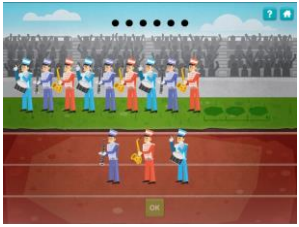


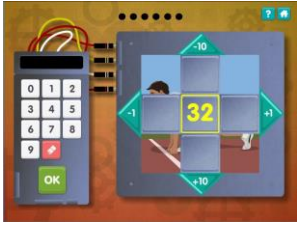
Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Geometry Doodle 3</b> Students explore rotations, both clockwise and counterclockwise and find the coordinates of the vertices of a point after these rotations.</p> 	Geometry	Spatial Sense and Motions	Ages 10–12 Grades 6–8
<p><b>Geometry Snapshots</b> Students identify an image that correctly matches a target image from four multiple-choice selections.</p> 	Geometry	Spatial Sense and Motions	Ages 5–7 Grades K–2
<p><b>Geometry Snapshots</b> Students identify an image that correctly matches a target image from four multiple-choice selections.</p> 	Geometry	Spatial Sense and Motions	Ages 5–7 Grades K–2
<p><b>Geometry Snapshots</b> Students identify an image that correctly matches a target image from four multiple-choice selections.</p> 	Geometry	Spatial Sense and Motions	Ages 5–7 Grades K–2


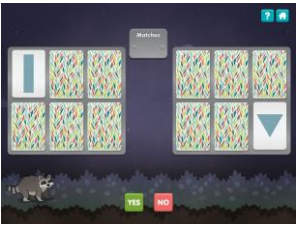
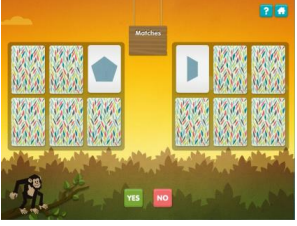
Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Geometry Snapshots</b> Students identify an image that correctly matches a target image from four multiple-choice selections.</p> 	Geometry	Spatial Sense and Motions	Ages 6–8 Grades 1–3
<p><b>Geometry Snapshots</b> Students identify an image that correctly matches a target image from four multiple-choice selections.</p> 	Geometry	Spatial Sense and Motions	Ages 7–11 Grades 3–5
<p><b>Geometry Snapshots</b> Students must match target image to the correct multiple-choice image.</p> 	Geometry	Spatial Sense and Motions	Ages 7–10 Grades 4–6
<p><b>Geometry Snapshots</b> Students identify an image that correctly matches a target image from four multiple-choice selections.</p> 	Geometry	Spatial Sense and Motions	Ages 8–11 Grades 4–6

Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Geometry Snapshots</b> Students identify an image that correctly matches a target image from four multiple-choice selections.</p> 	Geometry	Spatial Sense and Motions	Ages 8–12 Grades 4–6
<p><b>Histogram O Rama</b> Students create a histogram from a set of data in order to answer a question about the data.</p> 	Statistics and Graphing	Probability and Statistics	Ages 11–13 Grades 6–8
<p><b>I Spy and Multiply</b> Students select multiples of various numbers.</p> 	Multiplication	Multiplication and Division	Ages 9–11 Grades 4–6
<p><b>I Spy Expressions</b> Students match verbal expressions with numeric expressions.</p> 	Algebra and Patterns	Patterns and Algebraic Thinking	Ages 11–13 Grades 6–8




Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Inequality Graphs</b></p> <p>Students match inequalities to graphs on a number line.</p> 	Algebra and Patterns	Patterns and Algebraic Thinking	Ages 11–13 Grades 6–8
<p><b>Jungle Race</b></p> <p>Students identify fractions that describe points on a number line.</p> 	Fractions	Rational Numbers	Ages 7–9 Grades 3–5
<p><b>Kitchen Counter</b></p> <p>Students click on objects, one at a time, while the numbers from one to ten are counted aloud.</p> 	Number Sense	Counting (Verbal)	Ages 3–6 Grades PreK–K
<p><b>Legends of the Lost Shape</b></p> <p>Students identify target shapes using textual clues provided.</p> 	Geometry	Recognizing Geometric Shapes	Ages 8–12 Grades 4–6

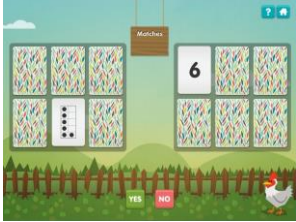


Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Line Plots</b> Students create a line plot from a set of data in order to answer a question about the data.</p> 	Statistics and Graphing	Probability and Statistics	Ages 11–13 Grades 4–6
<p><b>Lots O' Socks: Adding Game</b> Students identify numerals (one through ten) and number amounts (one through twenty), and then move forward a corresponding number of spaces on a game board.</p> 	Addition	Addition and Subtraction	Ages 6–8 Grades K–2
<p><b>Marching Patterns 1</b> Students extend a linear pattern by one repetition of the unit.</p> 	Algebra and Patterns	Patterns and Algebraic Thinking	Ages 5–7 Grades PreK–K
<p><b>Marching Patterns</b> Students extend a linear pattern by one repetition of the unit.</p> 	Algebra and Patterns	Patterns and Algebraic Thinking	Ages 5–7 Grades PreK–K


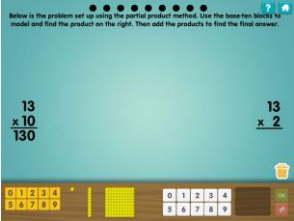

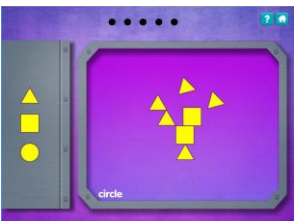
Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Marching Patterns</b></p> <p>Students extend a linear pattern by one repetition of the unit.</p> 	Algebra and Patterns	Patterns and Algebraic Thinking	Ages 5–7 Grades PreK–K
<p><b>Matching Expressions</b></p> <p>Students match equivalent expressions. Some using the commutative property.</p> 	Algebra and Patterns	Patterns and Algebraic Thinking	Ages 7–9 Grades 1–3
<p><b>Matching Fractions</b></p> <p>Students match equivalent fraction to one another.</p> 	Fractions	Rational Numbers	Ages 8–11 Grades 3–5
<p><b>Math–O–Scope</b></p> <p>Students identify numbers (representing values that are ten more, ten less, one more, or one less than a target number) within the hundreds chart to reveal a partially hidden photograph.</p> 	Number Sense	Counting (Strategies)	Ages 7–9 Grades 1–3

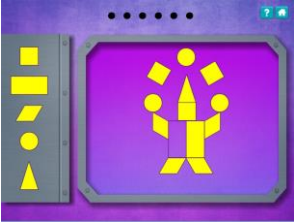
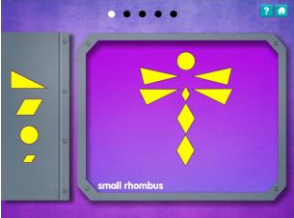
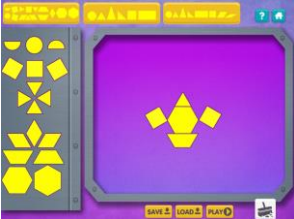

Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Memory Geometry 1: Exact Matches</b></p> <p>Students match familiar geometric shapes within the framework of a "Concentration" card game. Shapes are in the same orientation.</p> 	Geometry	Recognizing Geometric Shapes	Ages 3–5 Grades PreK–K
<p><b>Memory Geometry 2: Turned Shapes</b></p> <p>Students match familiar geometric shapes within the framework of a "Concentration" card game. Shapes are in different orientations.</p> 	Geometry	Recognizing Geometric Shapes	Ages 3–5 Grades PreK–K
<p><b>Memory Geometry 3: Shapes-A-Round</b></p> <p>Students match geometric shapes within the framework of a "Concentration" card game. Shapes are in different orientations.</p> 	Geometry	Recognizing Geometric Shapes	Ages 3–5 Grades PreK–K





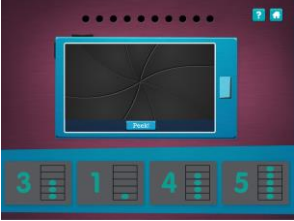
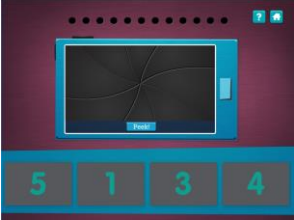
Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Memory Geometry 4: Shapes of Things</b> Students match familiar geometric shapes to items seen in the real world that share that geometric shape within the framework of a "Concentration" card game.</p> 	Geometry	Recognizing Geometric Shapes	Ages 3–5 Grades PreK–K
<p><b>Memory Geometry 5: Shapes in the World</b> Students match familiar geometric shapes to items seen in the real world that share that geometric shape within the framework of a "Concentration" card game.</p> 	Geometry	Recognizing Geometric Shapes	Ages 3–5 Grades PreK–K
<p><b>Memory Number 1: Counting Cards</b> Students match number cards (each with a numeral and corresponding dot cluster) within the framework of a "Concentration" card game.</p> 	Number Sense	Counting (Object)	Ages 4–6 Grades PreK–K

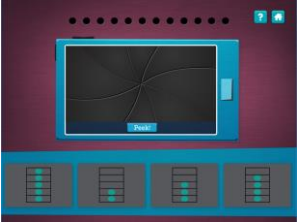
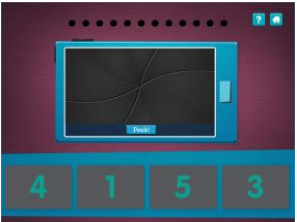
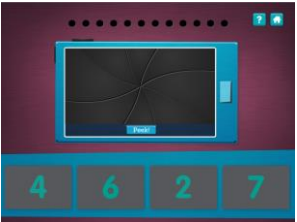
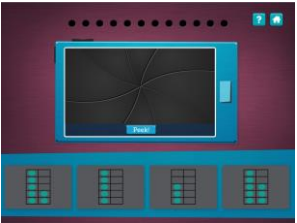
Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Memory Number 2: Counting Cards to Numerals</b></p> <p>Students match cards with dot arrays to cards with the corresponding numerals within the framework of a "Concentration" card game.</p> 	Number Sense	Counting (Object)	Ages 4–6 Grades PreK–K
<p><b>Memory Number 3: Dots to Dots</b></p> <p>Students match cards with dots in frames to cards with the same number of dots, unframed, within the framework of a "Concentration" card game.</p> 	Number Sense	Counting (Object)	Ages 4–6 Grades K–1
<p><b>Missing Number Mania</b></p> <p>Students identify missing numbers in multiplication and division equations.</p> 	Algebra and Patterns	Patterns and Algebraic Thinking	Ages 8–10 Grades 2–4

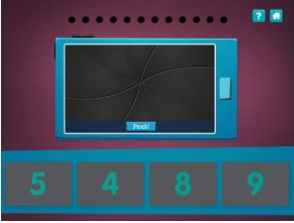



Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Mowing Lawns</b></p> <p>Students solve problems involving rate by using a double number line.</p> 	<p>Ratio, Proportion, and Percent</p>	<p>Rational Numbers</p>	<p>Ages 11–14 Grades 6–8</p>
<p><b>Multidigit Multiplication Builder</b></p> <p>Students use number blocks to help find the product of multidigit multiplication.</p> 	<p>Multiplication</p>	<p>Multiplication and Division</p>	<p>Ages 9–11 Grades 4–6</p>
<p><b>Mystery Pictures 1</b></p> <p>Students construct predefined pictures by selecting shapes that match a series of target shapes.</p> 	<p>Geometry</p>	<p>Recognizing Geometric Shapes</p>	<p>Ages 3–5 Grades PreK–K</p>
<p><b>Mystery Pictures 2</b></p> <p>Students construct predefined pictures by identifying shapes named in VO and text prompts.</p> 	<p>Geometry</p>	<p>Recognizing Geometric Shapes</p>	<p>Ages 3–5 Grades PreK–K</p>

Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Mystery Pictures 3</b></p> <p>Students construct predefined pictures by selecting shapes that match a series of target shapes.</p> 	Geometry	Recognizing Geometric Shapes	Ages 3–6 Grades PreK–K
<p><b>Mystery Pictures 4</b></p> <p>Students construct predefined pictures by identifying component shapes.</p> 	Geometry	Recognizing Geometric Shapes	Ages 5–7 Grades K–1
<p><b>Mystery Pictures Free Explore</b></p> <p>Students freely construct pictures by assembling a variety of shapes.</p> 	Geometry	Recognizing Geometric Shapes	Ages 3–7 Grades K–1
<p><b>Number Compare 1: Dots and Numerals</b></p> <p>Students compare two cards and choose the one with the greater value.</p> 	Number Sense	Comparing and Ordering Numbers	Ages 4–6 Grades PreK–1


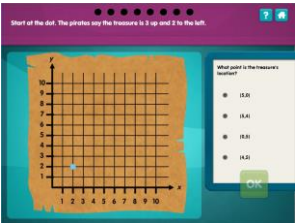

Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Number Compare 2: Dots to 7</b> Students compare two cards and choose the one with the greater number of dots.</p> 	Number Sense	Comparing and Ordering Numbers	Ages 5–7 Grades PreK–1
<p><b>Number Compare 3: Dots to 10</b> Students compare two cards and choose the one with the greater number of dots.</p> 	Number Sense	Comparing and Ordering Numbers	Ages 6–8 Grades K–1
<p><b>Number Compare 4: Numerals to 100</b> Students compare two cards and choose the one with the larger numeral.</p> 	Number Sense	Comparing and Ordering Numbers	Ages 7–9 Grades 1–3
<p><b>Number Compare 5: Dot Arrays to 100</b> Students compare two cards and choose the one with the larger number of dots.</p> 	Number Sense	Multiplication and Division	Ages 8–11 Grades 2–4

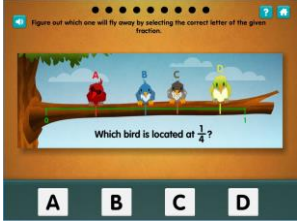



Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Number Patterns</b></p> <p>Students recognize a numeric pattern and then supply the next three numbers.</p> 	Algebra and Patterns	Patterns and Algebraic Thinking	Ages 7–9 Grades 1–3
<p><b>Number Snapshots 1</b></p> <p>Students identify an image that correctly matches a target image from four multiple-choice selections.</p> 	Number Sense	Recognizing Numbers	Ages 3–5 Grades PreK–K
<p><b>Number Snapshots 2</b> Students identify an image that correctly matches a target image from four multiple-choice selections.</p> 	Number Sense	Recognizing Numbers	Ages 4–6 Grades PreK–K
<p><b>Number Snapshots 3</b></p> <p>Students identify an image that correctly matches a target image from four multiple-choice selections.</p> 	Number Sense	Recognizing Numbers	Ages 5–7 Grades PreK–1





Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Number Snapshots 4</b> Students identify an image that correctly matches a target image from four multiple-choice selections.</p> 	Number Sense	Recognizing Numbers	Ages 5–7 Grades PreK–1
<p><b>Number Snapshots 5</b> Students identify an image that correctly matches a target image from four multiple-choice selections.</p> 	Number Sense	Recognizing Numbers	Ages 5–7 Grades PreK–1
<p><b>Number Snapshots 6</b> Students identify an image that correctly matches a target image from four multiple-choice selections.</p> 	Addition	Recognizing Numbers	Ages 6–8 Grades K–1
<p><b>Number Snapshots 7</b> Students identify an image that correctly matches a target image from four multiple-choice selections.</p> 	Addition	Recognizing Numbers	Ages 5–7 Grades K–1




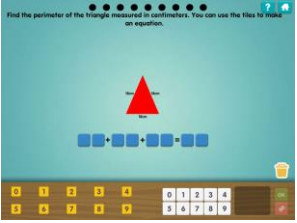
Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Number Snapshots 8</b></p> <p>Students identify an image that correctly matches a target image from four multiple-choice selections.</p> 	Addition	Recognizing Numbers	Ages 6–8 Grades K–2
<p><b>Number Snapshots 9</b></p> <p>Students identify an image that correctly matches a target image from four multiple-choice selections.</p> 	Number Sense	Recognizing Numbers	Ages 6–8 Grades 1–3
<p><b>Number Snapshots 10</b></p> <p>Students identify an image that correctly matches a target image from four multiple-choice selections.</p> 	Number Sense	Recognizing Numbers	Ages 7–9 Grades 2–4
<p><b>Numeral Train Game</b></p> <p>Students identify numerals (1-5) and move forward a corresponding number of spaces on a game board.</p> 	Number Sense	Counting (Object)	Ages 4–6 Grades PreK–K


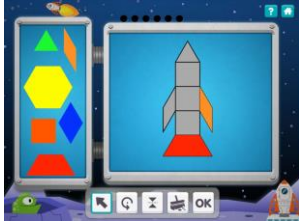
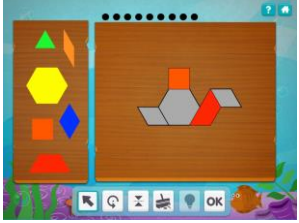




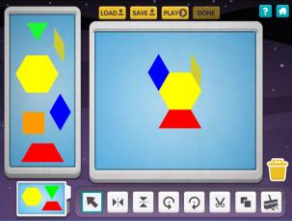
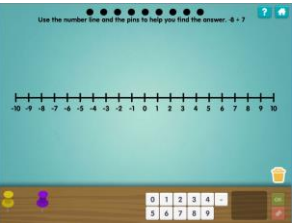
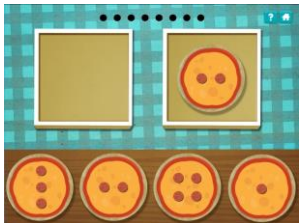
Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Off the Tree</b> Students add two amounts of dots to identify their total number value (from two through ten) and move forward a corresponding number of spaces on a game board.</p> 	Addition	Addition and Subtraction	Ages 5–7 Grades K–1
<p><b>One Quadrant Treasure Trove</b> Students choose the correct spot for buried treasure by following directions from their correct location on a one quadrant grid.</p> 	Algebra and Patterns	Patterns and Algebraic Thinking	Ages 9–11 Grades 4–7
<p><b>Ordinal Construction Company</b> Students learn ordinal positions (1st through 10th) by moving objects between the floors of a building.</p> 	Number Sense	Comparing and Ordering Numbers	Ages 5–7 Grades PreK–K


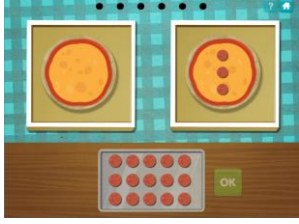


Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Out on a Limb</b></p> <p>Students determine which of four birds will fly away by choosing the bird sitting at the placement of a certain fraction on a number line.</p> 	Fractions	Rational Numbers	Ages 8–11 Grades 3–5
<p><b>Painter's Ratios</b></p> <p>Students use diagrams to answer ratio word problems.</p> 	Ratio, Proportion, and Percent	Rational Numbers	Ages 11–13 Grades 6–8
<p><b>Party Time 1</b></p> <p>Students practice one-to-one correspondence by matching party utensils to placemats.</p> 	Number Sense	Comparing and Ordering Numbers	Ages 4–6 Grades PreK–K
<p><b>Party Time 2</b></p> <p>Students identify the numeral that represents a target amount of party items to be placed on a table.</p> 	Number Sense	Counting (Object)	Ages 4–6 Grades PreK–K




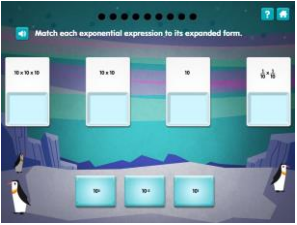
Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Party Time 3</b> Students place items on a tray (up to 10), to match target numerals.</p> 	Number Sense	Counting (Object)	Ages 4–6 Grades PreK–K
<p><b>Party Time Free Explore</b> Students explore counting and related number topics by putting party items on a table.</p> 	Number Sense	Comparing and Ordering Numbers	Ages 4–6 Grades PreK–K
<p><b>Pattern Planes 1</b> Students duplicate a linear pattern from a guide.</p> 	Algebra and Patterns	Patterns and Algebraic Thinking	Ages 3–6 Grades PreK–K
<p><b>Pattern Planes 2</b> Students duplicate a linear pattern from a guide.</p> 	Algebra and Patterns	Patterns and Algebraic Thinking	Ages 3–6 Grades PreK–K

Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Pattern Planes 3</b> Students duplicate a linear pattern from a guide.</p> 	Algebra and Patterns	Patterns and Algebraic Thinking	Ages 3–5 Grades PreK–K
<p><b>Patterns Free Explore</b> Students explore patterning by creating rhythmic patterns of their own.</p> 	Algebra and Patterns	Patterns and Algebraic Thinking	Ages 3–5 Grades PreK–K
<p><b>Paula's Symmetrical Patterns</b> Students determine which line is a line of symmetry on different figures.</p> 	Geometry	Symmetrical Shapes	Ages 10–12 Grades 6–8
<p><b>Perimeter</b> Students use repeated addition to find the perimeters of various figures.</p> 	Geometry	Area, Perimeter, and Volume	Ages 8–10 Grades 3–5

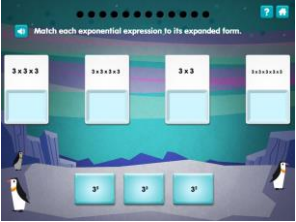
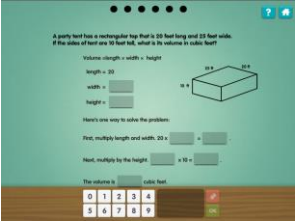
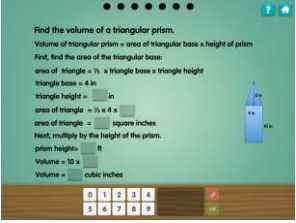
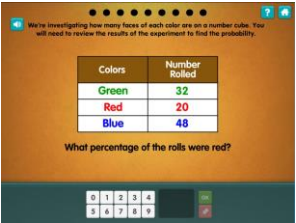
Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Piece Puzzler 1</b> Students complete puzzles using pattern shapes.</p> 	Geometry	Composing Geometric Shapes	Ages 4–6 Grades PreK–K
<p><b>Piece Puzzler 2</b> Students complete puzzles using pattern shapes.</p> 	Geometry	Composing Geometric Shapes	Ages 4–6 Grades PreK–K
<p><b>Piece Puzzler 3</b> Students complete puzzles using pattern shapes.</p> 	Geometry	Composing Geometric Shapes	Ages 5–7 Grades K–1
<p><b>Piece Puzzler 4</b> Students complete puzzles using pattern or Tangram shapes.</p> 	Geometry	Composing Geometric Shapes	Ages 5–7 Grades K–1

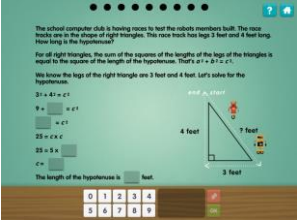



Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Piece Puzzler 5</b></p> <p>Students find several solutions to each puzzle by substituting shapes for each other.</p> 	Geometry	Composing Geometric Shapes	Ages 6–8 Grades 1–3
<p><b>Piece Puzzler Free Explore</b></p> <p>Students explore shapes by moving and manipulating them to make pictures.</p> 	Geometry	Composing Geometric Shapes	Ages 4–6 Grades PreK–K
<p><b>Pin the Number Line</b></p> <p>Students use a number line to add and subtract integers. The number line and the integers will be from -10 to 10.</p> 	Number Sense	Rational Numbers	Ages 11–13 Grads 6–8
<p><b>Pizza Pizzazz 1</b></p> <p>Students count items up to 10, matching target amounts.</p> 	Number Sense	Comparing and Ordering Numbers	Ages 3–5 Grades PreK–K

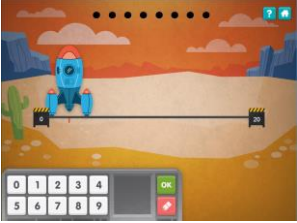
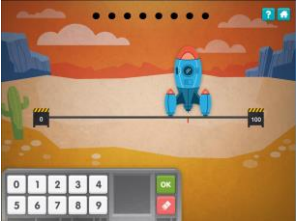
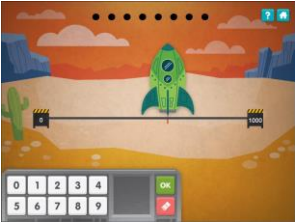

Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Pizza Pizzazz 2 (1–5)</b> Students count items up to 5, putting toppings on a pizza to match a target amount.</p> 	Number Sense	Counting (Object)	Ages 4-6 Grades PreK–K
<p><b>Pizza Pizzazz 2 (1–10)</b> Students count items up to 10, matching target amounts.</p> 	Number Sense	Counting (Object)	Ages 5–7 Grades PreK–3
<p><b>Pizza Pizzazz 3: Make Number Pizzas (1–5)</b> Students add toppings to a pizza (up to 5) to match target numerals.</p> 	Number Sense	Counting (Object)	Ages 4–6 Grades PreK–K
<p><b>Pizza Pizzazz 3: Make Number Pizzas (1–10)</b> Students add toppings to a pizza (up to 10), to match target numerals.</p> 	Number Sense	Counting (Object)	Ages 4–6 Grades PreK–K



Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Pizza Pizzazz 4</b></p> <p>Students add and subtract numbers up to 5, (with objects shown, but then hidden) matching target amounts.</p> 	Number Sense	Addition and Subtraction	Ages 3–6 Grades PreK–K
<p><b>Pizza Pizzazz 5</b></p> <p>Students add toppings to a pizza (up to 10), finding missing addends.</p> 	Number Sense	Addition and Subtraction	Ages 6–8 Grades K–1
<p><b>Pizza Pizzazz Free Explore</b></p> <p>Students explore counting and related number topics by adding toppings to pizzas.</p> 	Number Sense	Comparing and Ordering Numbers	Ages 3–5 Grades PreK–1
<p><b>Power Play Negative</b></p> <p>Match exponential expressions, including negative exponents, to expanded forms.</p> 	Number Sense	Exponents and Roots	Ages 12–14 Grades 6–8


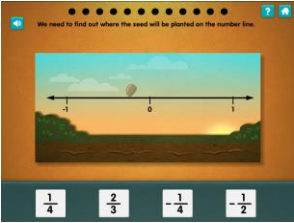

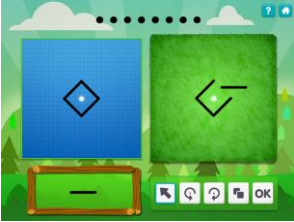


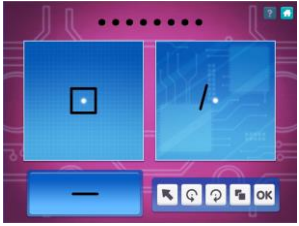


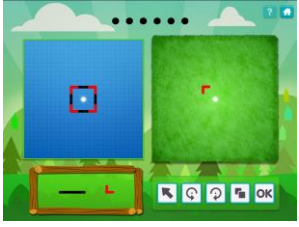
Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Power Play</b></p> <p>Match exponential expressions to expanded forms.</p> 	Number Sense	Exponents and Roots	Ages 12–14 Grades 6–8
<p><b>Prism Fill 1</b></p> <p>Students work through finding the volume of right rectangular prisms.</p> 	Geometry	Area, Perimeter, and Volume	Ages 8–12 Grades 4–6
<p><b>Prism Fill 2</b></p> <p>Students work through finding the volume of right triangular prisms.</p> 	Geometry	Area, Perimeter, and Volume	Ages 9–12 Grades 5–7
<p><b>Probability Pro</b></p> <p>Students find the relative populations of colored faces on a number cube as well as the percentage of rolls of the cube for a certain color.</p> 	Probability	Probability and Statistics	Ages 11–13 Grades 6–8




Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Racing Robots</b></p> <p>Students use a race scenario to find the distances involved in a right triangle.</p> 	Geometry	Exponents and Roots	Ages 12–14 Grades 6–8
<p><b>Reptile Ruler</b></p> <p>Students learn about non-standard linear measurement by using a ruler to determine the length of various reptiles.</p> 	Measurement	Length Measurement	Ages 7–10 Grades PreK–2
<p><b>Road Race</b></p> <p>Students identify numbers of sides (three, four, or five) on polygons and move forward a corresponding number of spaces on a game board.</p> 	Number Sense	Counting (Object)	Ages 4–6 Grades PreK–K
<p><b>Road Race Counting Game</b></p> <p>Students identify number amounts (from one through five) and move forward a corresponding number of spaces on a game board.</p> 	Number Sense	Counting (Object)	Ages 3–6 Grades PreK–K

Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Rocket Blast 1</b></p> <p>Students estimate the placement of a tick mark to the nearest whole number on a 1–20 number line.</p> 	Number Sense	Comparing and Ordering Numbers	Ages 6–8 Grades 1–3
<p><b>Rocket Blast 2</b></p> <p>Students estimate the placement of a tick mark to the nearest whole number on a 1–100 number line.</p> 	Number Sense	Comparing and Ordering Numbers	Ages 7–10 Grades 1–3
<p><b>Rocket Blast 3</b></p> <p>Students estimate the placement of a tick mark to the nearest whole number on a 1–1000 number line.</p> 	Number Sense	Comparing and Ordering Numbers	Ages 8–11 Grades 2–4
<p><b>Sandwich Shop 1</b></p> <p>Students identify figures that show two equal parts.</p> 	Fractions	Rational Numbers	Ages 5–7 Grades 1–3

Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Sandwich Shop 2</b></p> <p>Students identify the figure that's been fractioned into equal parts.</p> 	Fractions	Rational Numbers	Ages 6–8 Grades 2–4
<p><b>Scatter It</b></p> <p>Students analyze scatter plots to answer questions about line of best fit, the relationship, and outliers.</p> 	Statistics and Graphing	Probability and Statistics	Ages 11–13 Grades 6–8
<p><b>School Supply Shop</b></p> <p>Students count objects by tens to reach a target number up to 100.</p> 	Number Sense	Counting (Objects)	Ages 6–8 Grades K–2
<p><b>Sea to Shore: Plus One</b></p> <p>Students identify number amounts by counting on. They move forward a number of spaces on a game board that is one more than a given numeral.</p> 	Addition	Counting (Verbal)	Ages 6–8 Grades K–2

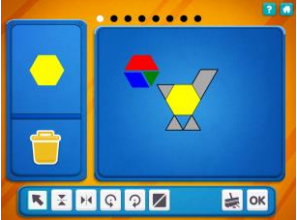
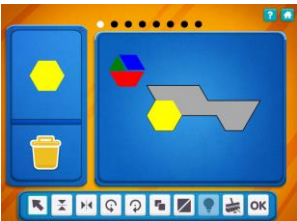
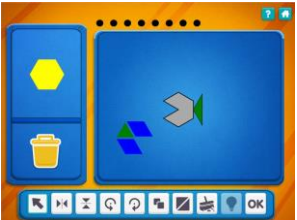
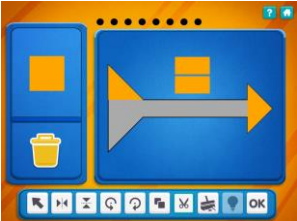
Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Seed Sprout 1: Integers</b></p> <p>Students determine where a seed will be planted using a number line that includes both negative and positive numbers.</p> 	Number Sense	Rational Numbers	Ages 11–13 Grades 6–8
<p><b>Seed Sprout 2: Rational Numbers</b></p> <p>Students determine where a seed will be planted using a number line that includes both negative and positive decimals and fractions.</p> 	Fractions	Rational Numbers	Ages 11–13 Grades 6–8
<p><b>Shape Parts 1</b></p> <p>Students use shape parts to construct a shape that matches a target.</p> 	Geometry	Recognizing Geometric Shapes	Ages 5–8 Grades PreK–1
<p><b>Shape Parts 2</b></p> <p>Students use shape parts to construct a shape that matches a target.</p> 	Geometry	Recognizing Geometric Shapes	Ages 5–8 Grades PreK–1


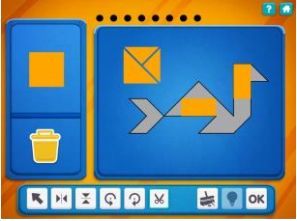
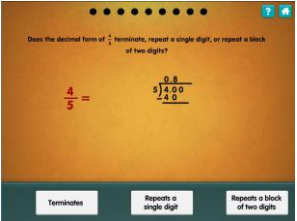
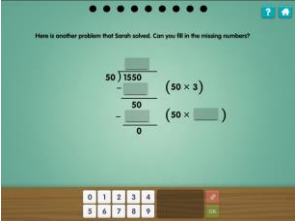
Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Shape Parts 3</b></p> <p>Students build a “real-world” object. Objects are in standard orientation, but students must copy them in an orientation different from the original.</p> 	Geometry	Recognizing Geometric Shapes	Ages 7–9 Grades 1–3
<p><b>Shape Parts 4</b></p> <p>Students build a “real-world” object. Objects are in standard orientation. Concentric shapes are included.</p> 	Geometry	Recognizing Geometric Shapes	Ages 7–9 Grades 1–4
<p><b>Shape Parts 5</b></p> <p>Students build a “real-world” object based on a verbal description of its component shapes.</p> 	Geometry	Recognizing Geometric Shapes	Ages 7–9 Grades 2–4
<p><b>Shape Parts 6</b></p> <p>Students build a “real-world” object, using angles at the vertices to make it "stronger."</p> 	Geometry	Recognizing Geometric Shapes	Ages 7–9 Grades 3–5

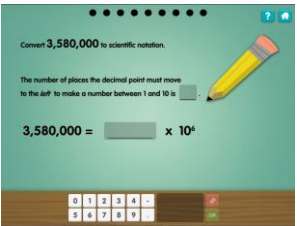


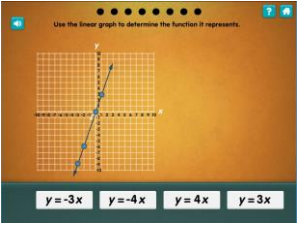
Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Shape Parts 7</b></p> <p>Students build a “real-world” object using verbal descriptions of shapes; shapes are defined verbally in terms of sides and angles (e.g., equilateral triangle).</p> 	Geometry	Recognizing Geometric Shapes	Ages 8–11 Grades 3–5
<p><b>Shape Shop 1</b></p> <p>Students identify shapes by their attributes or properties (number of sides and angles).</p> 	Geometry	Recognizing Geometric Shapes	Ages 5–8 Grades K–1
<p><b>Shape Shop 2</b></p> <p>Students identify shapes by their attributes or properties.</p> 	Geometry	Recognizing Geometric Shapes	Ages 6–8 Grades K–1
<p><b>Shape Shop 3</b></p> <p>Students identify shapes by their attributes or properties.</p> 	Geometry	Recognizing Geometric Shapes	Ages 8–11 Grades 2–5

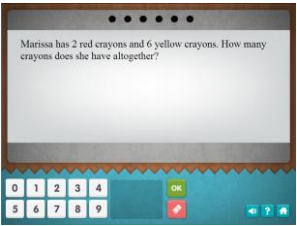
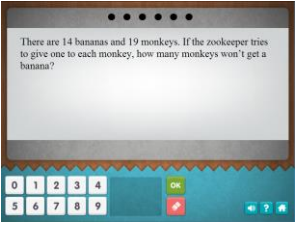
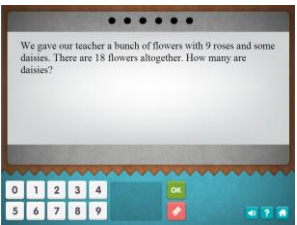
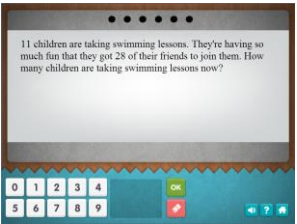
Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Snack Time</b> Students divide a target number into equal groups to find a quotient.</p> 	Division	Multiplication and Division	Ages 6–8 Grades 2–4
<p><b>Space Race: Number Choice</b> Students choose numbers that enable them to reach the final space on a game board in a designated number of moves.</p> 	Number Sense	Comparing and Ordering Numbers	Ages 4–6 Grades PreK–K
<p><b>Stacking Cubes</b> Students use a shipping scenario to determine volume of stacked cubes.</p> 	Geometry	Area, Perimeter, and Volume	Ages 8–11 Grades 4–6
<p><b>Super Shape 1</b> Students complete puzzles using pattern shapes.</p> 	Geometry	Composing Geometric Shapes	Ages 5–7 Grades K–1

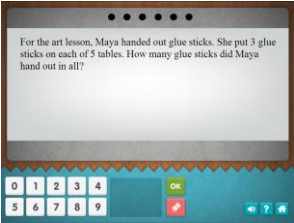

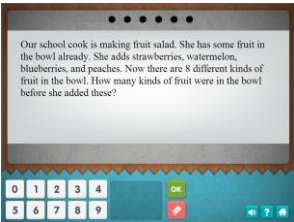
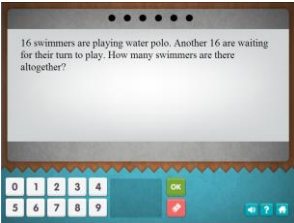



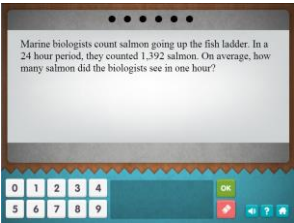
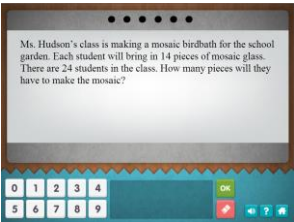
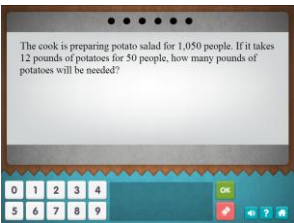
Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Super Shape 2</b> Students decompose a shape and combine the resultant pieces to fill in puzzle outlines.</p> 	Geometry	Composing Geometric Shapes	Ages 5–7 Grades K–1
<p><b>Super Shape 3</b> Students decompose shapes and combine the resultant smaller pieces to fill in puzzle outlines.</p> 	Geometry	Composing Geometric Shapes	Ages 5–7 Grades 1–3
<p><b>Super Shape 4</b> Students complete puzzles using shapes that are derived from decomposition of a single larger shape.</p> 	Geometry	Composing Geometric Shapes	Ages 5–7 Grades 1–3
<p><b>Super Shape 5</b> Students decompose shapes and combine the resultant pieces to fill in puzzle outlines.</p> 	Geometry	Composing Geometric Shapes	Ages 6–8 Grades 2–4


Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Super Shape 6</b></p> <p>Students decompose shapes and combine the resultant pieces to fill in puzzle outlines.</p> 	Geometry	Composing Geometric Shapes	Ages 7–9 Grades 4–6
<p><b>Super Shape 7</b></p> <p>Students decompose shapes and combine the resultant pieces to fill in puzzle outlines.</p> 	Geometry	Composing Geometric Shapes	Ages 8–11 Grades 4–6
<p><b>Termination Station</b></p> <p>Students observe a fraction as a long division problem and determine if it repeats a single digit, repeats a block of two digits, or terminates.</p> 	Decimals	Rational Numbers	Ages 10–12 Grades 6–8
<p><b>The Great Divide</b></p> <p>Students explore the standard long division algorithm.</p> 	Division	Multiplication and Division	Ages 9–11 Grades 4–6

Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>The Powers of Ten</b> Students explore scientific notation.</p> 	Number Sense	Exponents and Roots	Ages 12–14 Grades 6–8
<p><b>Tidal Tally</b> Students identify missing addends (hidden objects) by counting forward from given addends (visible objects) to reach a numerical total.</p> 	Algebra and Patterns	Counting (Strategies)	Ages 6–8 Grades 1–3
<p><b>Tire Recycling</b> Students count objects by 5s up to 100, or by 2s up to 40</p> 	Number Sense	Counting (Objects)	Ages 6–8 Grades 1–3
<p><b>What is the Function?</b> Students determine function rules from linear graph representations.</p> 	Algebra and Patterns	Patterns and Algebraic Thinking	Ages 11–13 Grades 6–8

Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Word Problems 1</b> Students solve word problems (totals to 10).</p> 	Problem Solving	Addition and Subtraction	Ages 5–7 Grades K–1
<p><b>Word Problems 2</b> Students solve word problems (single digit addition and subtraction).</p> 	Problem Solving	Addition and Subtraction	Ages 6–8 Grades 1–3
<p><b>Word Problems 3</b> Students solve word problems (1- and 2-digit addition and subtraction).</p> 	Problem Solving	Addition and Subtraction	Ages 6–8 Grades 1–3
<p><b>Word Problems 4</b> Students solve word problems (1- and 2-digit addition and subtraction).</p> 	Problem Solving	Addition and Subtraction	Ages 7–9 Grades 2–4

Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Word Problems 5</b></p> <p>Students solve word problems using multiplication or division.</p> 	Problem Solving	Multiplication and Division	Ages 7–9 Grades 3–5
<p><b>Word Problems 6</b></p> <p>Students solve word problems using multiplication or division.</p> 	Problem Solving	Multiplication and Division	Ages 7–9 Grades 3–5
<p><b>Word Problems 7</b></p> <p>Students solve word problems involving multi-digit addition and subtraction.</p> 	Problem Solving	Addition and Subtraction	Ages 8–11 Grades 3–5
<p><b>Word Problems 8</b></p> <p>Students solve word problems involving multi-digit addition and subtraction.</p> 	Problem Solving	Addition and Subtraction	Ages 8–11 Grades 3–5

Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Word Problems 9</b></p> <p>Students solve word problems involving multi-digit addition and subtraction.</p> 	Problem Solving	Addition and Subtraction	Ages 8–11 Grades 4–6
<p><b>Word Problems 10</b></p> <p>Students solve word problems involving multi-digit multiplication and division.</p> 	Problem Solving	Multiplication and Division	Ages 8–11 Grades 4–6
<p><b>Word Problems 11</b></p> <p>Students solve word problems involving multi-digit multiplication and division.</p> 	Problem Solving	Multiplication and Division	Ages 8–12 Grades 4–6
<p><b>Word Problems 12</b></p> <p>Students solve word problems involving multi-digit multiplication and division.</p> 	Problem Solving	Multiplication and Division	Ages 8–12 Grades 4–6

Activity	Topic	Learning Trajectory / Subject	Age/Grade Range
<p><b>Workin' on the Railroad</b>            Students identify the length (in non-standard units) of railroad trestles they built to span a gully.</p> 	Measurement	Length Measurement	Ages 6–9 Grades PreK–1