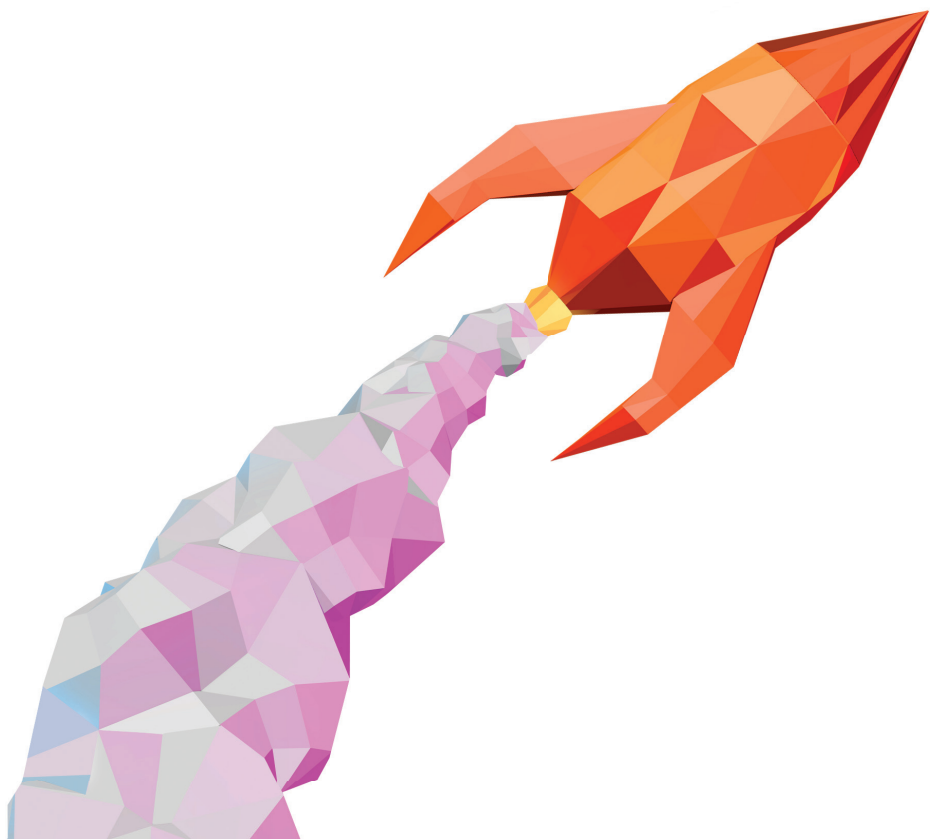


# Arrive MATH™

## BOOSTER

On-Demand, Targeted Instruction to  
Support Grade K-8 Skill Development





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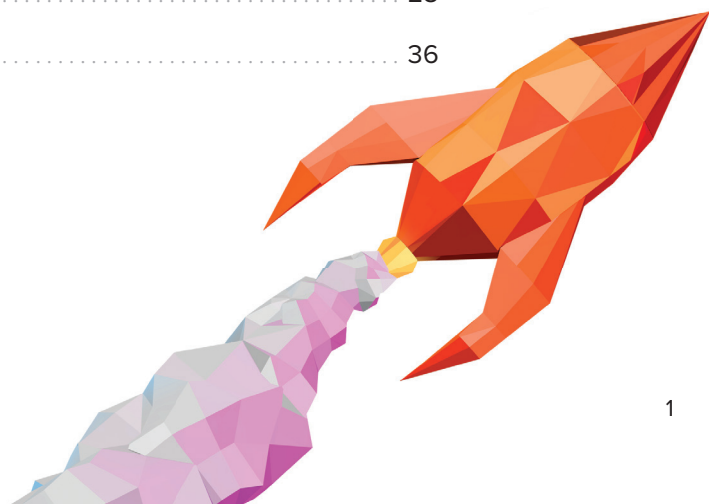
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## Targeted Instruction For All

***Arrive Math Booster* makes it easy for you to find the targeted resources you need to address every skill covered in the mathematics standards and make a plan that is just right for your classroom.**

### **Searchable Library of Skill-based Lessons**

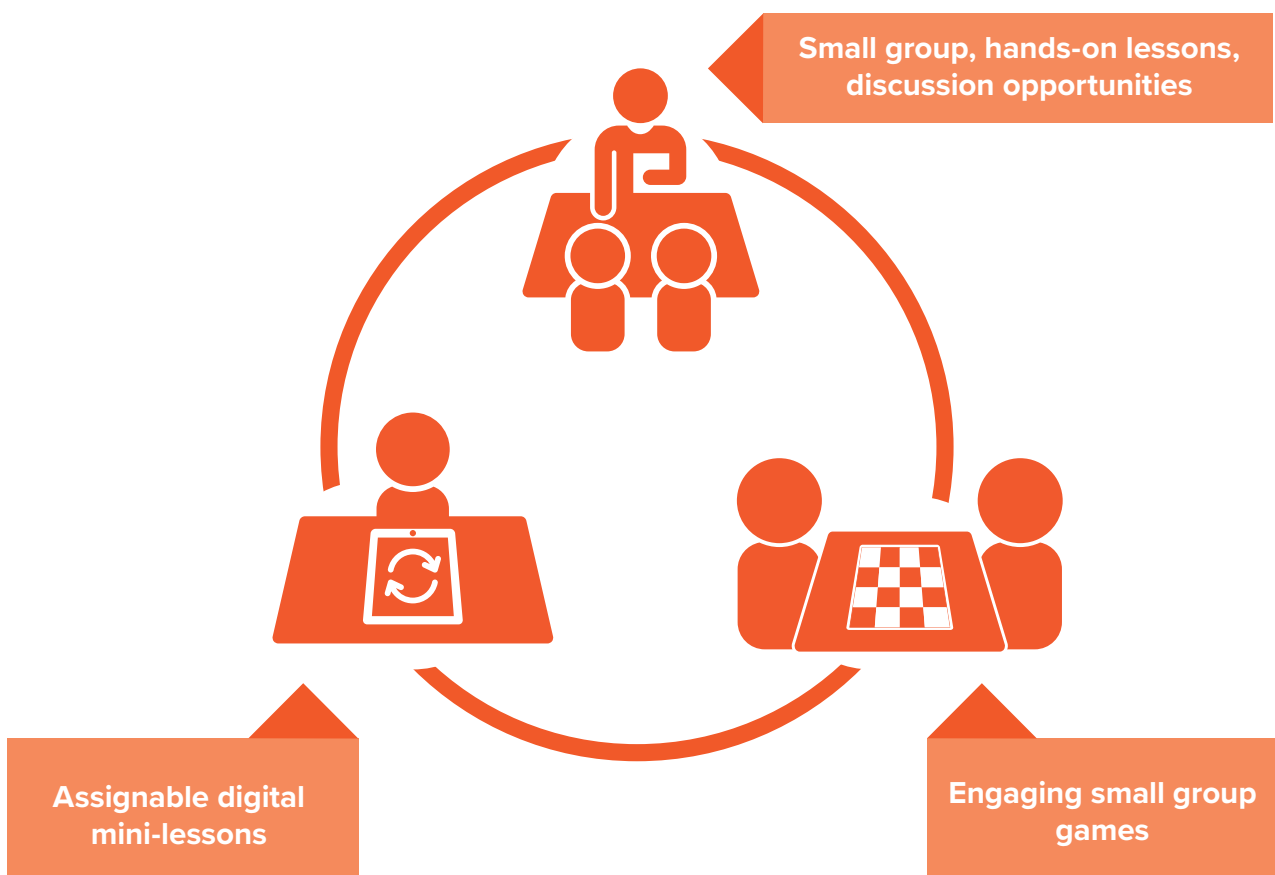
Within the *Arrive Math Booster*™, teachers can search for lessons and assessments by skill, standard, grade level, and content domain to make finding resources and planning instruction easy. Teachers can preview, assign, or add lessons to their calendar directly from their search results. Due to its modularity and searchability, teachers can quickly act upon their classroom data with aligned supplemental lessons.



## Flexible Resources to Effectively Personalize

*Arrive Math Booster* covers provides a variety of the mini-lessons to easily integrate into classroom instruction:

- Assignable Digital Mini-Lessons
- Hands-on, Small-Group Instruction
- Collaborative Small-Group Games



*Arrive Math Booster* 15-minute lessons can be easily integrated to support general classroom instruction no matter the instructional model:

Workshop  
Centers

Small Group  
Instruction

Intervention and  
Enrichment Blocks

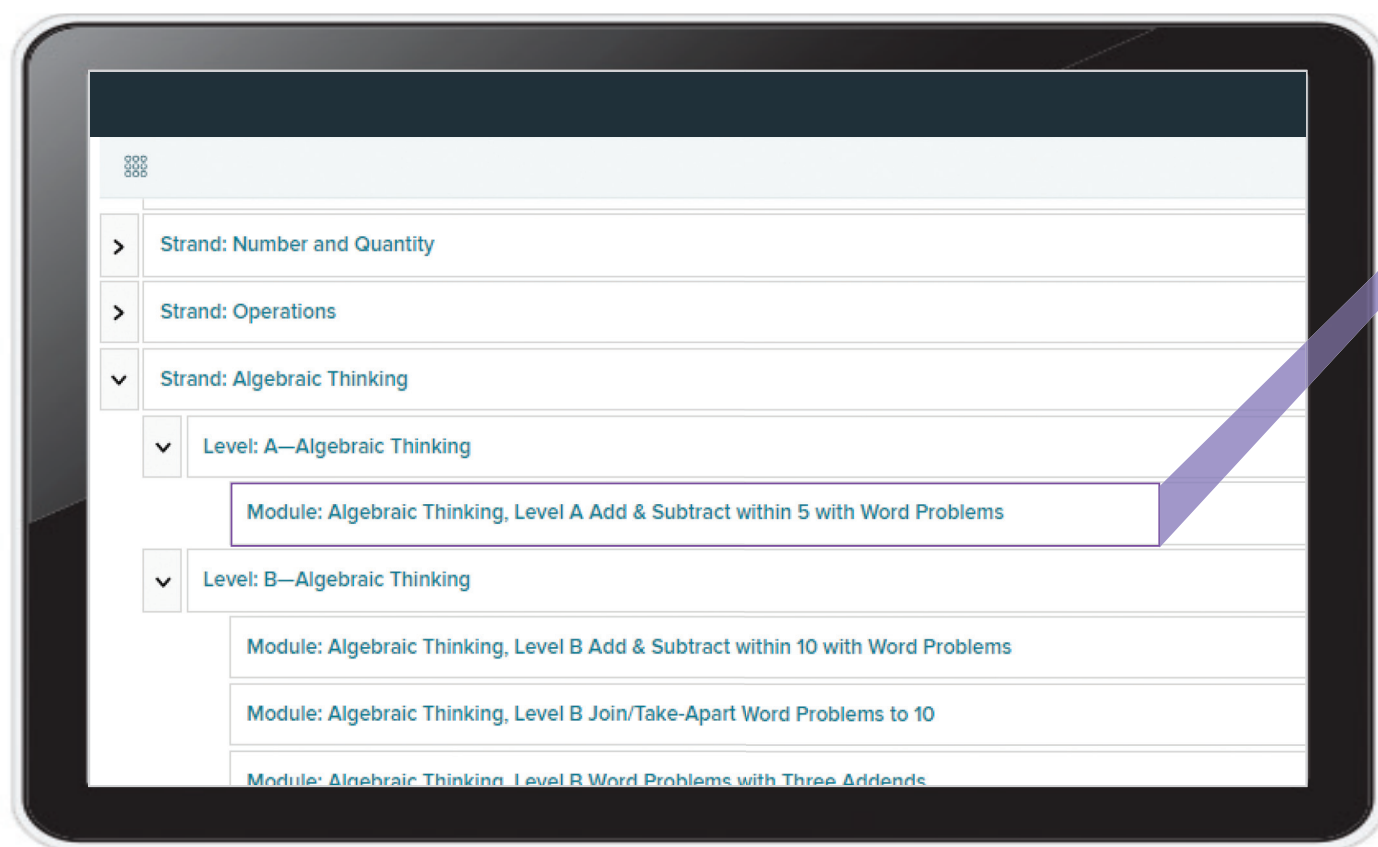
Co-Teaching

Independent  
Work Time

# Module Overview: Add & Subtract within 5 with Word Problems

**Level:** A (Grade K)

The *Arrive Math* Booster library consists of lessons covering every skill from kindergarten through eighth grade organized by standard-based modules. This allows teachers to pull lessons from various grade levels to support prerequisite and post-requisite skills to address your students' learning needs and effectively differentiate instruction.



## Module Test: Compose and Decompose Tens and Ones



Assessment

- ☒ Add to student page
- ☐ Include in presentation

## Module Assessments

Module assessments are flexible assessments that can either help indicate the skills and concepts for which students may need additional support to master a standard or help assess student understanding once they have worked through a full module worth of instruction. Teachers choose which Take Another Look and Guided Support mini-lessons would be the most beneficial to target a student's misconception early and effectively.

Algebraic Thinking, Level A

## Add & Subtract within 5 with Word Problems

Show Information

- Module Overview
- Result Unknown within 5 (Add To)
- Result Unknown within 5 (Take From)
- Change Unknown within 5 (Add To)
- Change Unknown within 5 (Take From)

Teacher-added Resources

### Result Unknown within 5 (Take From)

**Lesson Goal**  
Students will represent and solve a (subtraction) take-from word problem with result unknown, within 5.

**Prerequisite Skills**  
To be successful with solving take-from word problems with the result unknown, students need to be able to count to 5, make groups of up to 5 objects, and recognize the written numbers 1 to 5. Students should also be familiar with using objects, pictures, and drawings to represent the number of items in a group.

**English Language Learners**  
English language learners may have difficulty recognizing the many English words that can signal subtraction. Use acting out and pictures to introduce some of the words and phrases that are modeled by taking away from a starting amount, such as *go away*, *run away*, *give away*, *leave*, and *take*. In context, other verbs such as *eat*, *lose*, and *spend* can indicate the quantity to take away. Discuss these words with students, giving simple explanations, making sketches, or using motions to promote understanding.

Take Another Look: Result Unknown within 5 (Take From)

Guided Support: Result Unknown within 5 (Take From)

BLM: Take From Mat

Learning Resource

Add to student page

Include in presentation

### Skill-based Lessons

The standard is broken into individual learning targets to provide a narrowed, more attainable focus allowing students to gain resilience in learning and a growth mindset as they systematically achieve success.

### Mini-Lessons

When used together, the Guided Support and Take Another Look mini-lessons lesson provide concrete-representational-abstract support, to build both a strong conceptual and procedural foundation that helps students manage the rigorous demands of core instruction.



## Hands-On, Small Group Mini-Lesson

**Title:** Guided Support: Result Unknown within 5 (Take From)

**Goal:** Students will represent and solve a (subtraction) take-from word problem with result unknown, within 5.


Guided Support mini-lessons provide a teacher-facilitated small group mini-lesson that uses concrete modeling and discussion to build conceptual understanding. Each mini-lesson is paced to be about 15 minutes.

LESSON

### Result Unknown within 5 (Take From)

**Goal** Students will represent and solve a (subtraction) take-from word problem with result unknown, within 5.

**Guided Support** 15 MINUTES

 **Materials**

- Connecting cubes (5 per student)
- Dry-erase markers (1 per student)
- Wet wipes
- Blackline Master: *Take From Mat* (1 per student/group)

**Begin the Activity**

Tell students they are going to practice modeling story problems with connecting cubes on a mat. Show students a laminated *Take From Mat*. Explain that the large section is the whole. The two smaller sections are the parts. Emphasize that the two parts together equal the whole.

Show the following story problem and then read it aloud to students as you point to each word. *Tara has 5 toys. She gives away 2 toys. How many toys are left?* Show students the connecting cubes. *Pretend each block is 1 toy. Tara has 5 toys.* Place a train of five connecting cubes in the Whole section of the mat. *These 5 cubes show that Tara started with 5 toys.* Write 5 on the line above the cubes.

*She gives away two toys.* Take 2 of the cubes from the train and place them in the left Part section of the mat. *These 2 cubes show the 2 toys that Tara gives away.* Write the number 2 on the line under the two cubes.

*How many toys are left?* Count aloud the 3 cubes left in the Whole section. Move them to the right Part section. *These 3 cubes show that there are 3 toys left.* Write the number 3 on the line under the three cubes. Read the mat labels as a sentence as you point to each part. *5 take away 2 is 3. When you start with 5 and take away 2, there are 3 left.*

Give each student a laminated *Take From Mat* and a dry-erase marker. Read the same story problem. Guide students to model and solve it as you demonstrated. Repeat the process with other take from story problems with unknown results and starting amounts up to five.

**Conclude the Activity**

Show the following story problem and read it aloud as you point to each word: *4 dogs are in the yard. 3 dogs run away. How many dogs are left?* Place a train of four connecting cubes in the Whole section of a *Take From Mat*. Label it 4. Have students explain how the cubes on your mat show part of the problem. Then have students explain how to use the model to solve the problem.

208 Arrive Math Guided Support Teacher Guide, Level A

## Guided Teacher Questions

Guided discussion questions within the lesson foster small group discussion, allowing for verbal exploration and expression of understanding in a safe environment. These discussions help teachers reinforce mathematical vocabulary, uncover misconceptions, and discuss reasoning in problem-solving.

### Questions

Show a *Take From Mat*. In all of these story problems, we started with a number. Point to the Whole section. We took some away. Point to the left Part section. Then, there were some left. Point to the right Part section. So, each problem has 3 numbers: the starting number, the number to take away, and the number that shows how many are left.

- Which two numbers did we know in all of our problems? Sample answer: the starting number and the number taken away
- Which number did we need to find? Sample answer: the number that shows how many are left
- How did we find the number that shows how many are left? Sample answer: We used connecting cubes to show the starting number. We took away some cubes. Then we counted how many cubes were left.

### Guided Support

#### Materials

- Connecting cubes (5 per student)
- Dry-erase markers (1 per student)
- Wet wipes
- Blackline Master: *Take From Mat* (1 per student/group)

#### Begin the Activity

Tell students they are going to practice modeling story problems with connecting cubes on a mat. Show students a laminated *Take From Mat*. Explain that the large section is the whole. The two smaller sections are the parts. Emphasize that the two parts together equal the whole.

Show the following story problem and then read it aloud to students as you point to each word. **Tara has 5 toys. She gives away 2 toys. How many toys are left?** Show students the connecting cubes. **Pretend each block is 1 toy. Tara has 5 toys.** Place a train of five connecting cubes in the Whole section of the mat. **These 5 cubes show that Tara started with 5 toys.** Write 5 on the line above the cubes.

**She gives away two toys.** Take 2 of the cubes from the train and place them in the left Part section of the mat. **These 2 cubes show the 2 toys that Tara gives away.** Write the number 2 on the line under the two cubes.

**How many toys are left?** Count aloud the 3 cubes left in the Whole section. Move them to the right Part section. **These 3 cubes show that there are 3 toys left.** Write the number 3 on the line under the three cubes. Read the mat labels as a sentence as you point to each part. **5 take away 2 is 3. When you start with 5 and take away 2, there are 3 left.**

Give each student a laminated *Take From Mat* and a dry-erase marker. Read the same story problem.

### Guided Support

Teachers have access to all the Guided Support instruction in a digital and printable format. Spiral-bound Guided Support Teacher Guides are also available.





## Assignable Digital Mini-Lesson

**Title:** Take Another Look: Results Unknown within 5 (Take From)

**Goal:** Students will represent and solve a (subtraction) take-from word problem with result unknown, within 5.

Aligned to the Guided Support mini-lessons, the Take Another Look digital mini-lessons will help transition students from concrete modeling to representation and ultimately abstract understanding to build upon the foundational understanding of each mathematical concept.

Teachers can assign these mini-lessons to the whole class, specific groups, or individual students. These mini-lessons can also be used as an interactive presentation in a whole group setting. Every lesson follows a three-part progression:

**Learn**

How can you use pictures to show a story?  
Watch to find out how!

5 dolphins swim together.  
2 dolphins swim away  
How many dolphins are left?



### Model Concept

A two- to three-minute video or animation models the skill or concept using essential math vocabulary. The animation will represent the concrete modeling from the Guided Support mini-lesson in two-dimensional form.

Part  
2

## Interactive Practice

A series of engaging activities provide students immediate feedback and encourage confidence through scaffolded repetition. As students progress through the practice activities, the scaffolds will gradually release allowing the students to practice assessment-like problems.

4 of 9

### Learn and Apply

Drag Xs to show the story.  
Drag the number to tell how many are left.

Jason has 4 counters.  
He gives away 2.  
How many counters are left?

Reset

Correct!

Part  
3

## Data Check

A quick three-to-five question check will assess student understanding and provide teachers with data to inform instruction. Students receive immediate feedback on their assessment upon submission.

9 of 9

### Assess

McGraw-Hill Education Take Another Look: Result Unknown within 5 (Tak...

Question 1 of 3

#### Question 1

Use the picture.

Niko has 5 counters.  
She gives away 1.  
How many counters are left?

○ 5  
○ 1  
○ 4

Save & Continue

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## Collaborative Small-Group Game

**Title:** How Many Now?

**Focus:** Solve addition problems within 10 with objects.

**Level:** A (Grade K)

**Strand:** Algebraic Thinking

Every content domain within a grade level has a small group game opportunity that provides another activity to help students develop math fluency and apply critical skills with their peers.

### Student-Facing Instructions

# How Many Now?

**Objective** Collect counters by solving addition problems.

### Directions

1. Place the *How Many Problems* cards and counters in the middle of the group. Place your connecting cubes in front of you.
2. Select a card from the deck. Use the connecting cubes to help solve the word problem.
3. For example, if the word problem is "There are 2 birds in the yard. 5 birds join them. How many birds are there in all?", take 2 cubes and connect them. Then take 5 more cubes and connect all of the cubes together.
4. Say the problem with the answer out loud. "2 birds and 5 birds is 7 birds."
5. The group will tell you if you are correct. If you are correct, take one counter from the pile.
6. If you are incorrect, you can try the problem one more time.
7. When your turn is over, return the card to the bottom of the pile.
8. Continue taking turns drawing cards, solving word problems, and collecting counters for correct answers.
9. When time is up, finish the round you are on. Then, count your counters to see how many problems you answered correctly. The player with the most counters wins!

### Materials

- *How Many Problems* (1 set per group)
- Connecting cubes (10 per player)
- Counters (45 per group)

## Arrive Math Games

These games are board- and manipulative-based that

- Align with critical skills kindergarten through eighth grade.
- Allow students to build fluency of critical math skills.
- Promote participation in mathematical discourse.
- Accommodate a range of needs through suggested game play variations.

### Teacher Planning Support

#### FOR THE TEACHER

## How Many Now?

### Math Focus

Solve addition problems within 10 with objects.

### Set-Up

- Cut apart and shuffle the *How Many Problems*.

### Tips

- Determine who goes first. Remind players to continue playing in a clockwise direction.
- Ensure that players communicate clearly to the group when saying the problem with the answer out loud, for example, “4 birds and 2 birds is 6 birds.”
- Demonstrate that twisting the connected cubes makes it easier for players to separate them.
- To keep all players engaged, have all players (not just the player taking a turn) model and solve each problem so they can check the answer.
- Give players a 5 minute notice before time is up so they can finish the round they are on. When players have completed their last round, have each player count their counters to see how many problems they answered correctly. The player with the most counters wins! If there is a tie, have the tied players each solve one more problem. The player with the greatest sum wins.

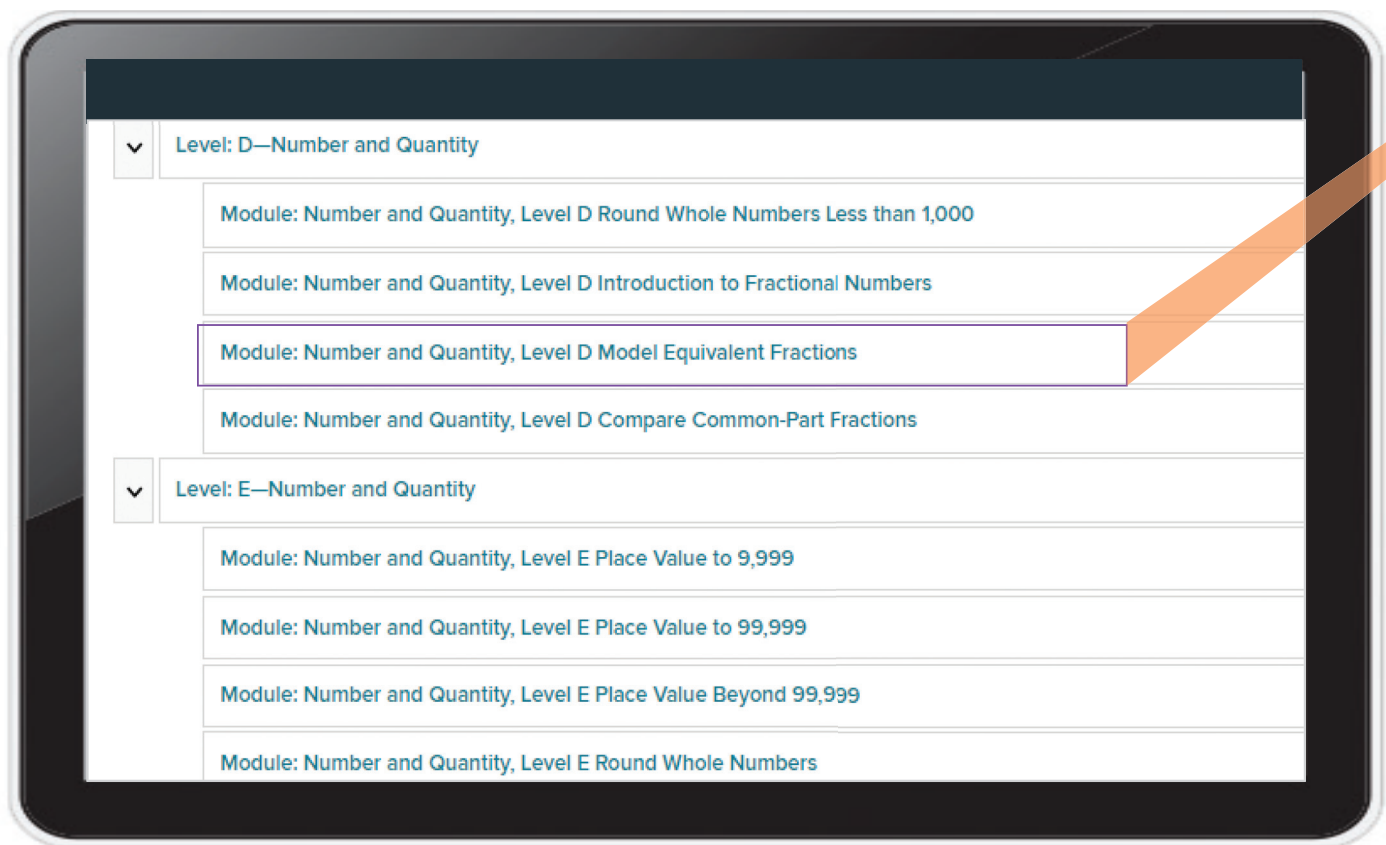
### Variations

- **Variation 1:** Have players make up their own word problems and show the solutions using the connecting cubes.
- **Variation 2:** Have players solve the word problems without relying on the connecting cubes.

# Module Overview: Model Equivalent Fractions

**Level:** D (Grade 3)

The *Arrive Math* Booster library consists of lessons covering every skill from kindergarten through eighth grade organized by standard-based modules. This allows teachers to pull lessons from various grade levels to support prerequisite and post-requisite skills to address your students' learning needs and effectively differentiate instruction.



## Module Test: Compose and Decompose Tens and Ones



Assessment

- ☒ Add to student page
- ☐ Include in presentation

000

## Module Assessments

Module assessments are flexible assessments that can either help indicate the skills and concepts for which students may need additional support to master a standard or help assess student understanding once they have worked through a full module worth of instruction. Teachers choose which Take Another Look and Guided Support mini-lessons would be the most beneficial to target a student's misconception early and effectively.



MODULE

Number and Quantity, Level D

# Model Equivalent Fractions

Show Information

- Module Overview
- Equivalent Fractions with Models
- Equivalent Fractions Using Number Lines
- Recognize Equivalent Fractions
- Equivalent Fractions with Whole Numbers

Teacher-added Resources

## Skill-based Lessons

The standard is broken into individual learning targets to provide a narrowed, more attainable focus allowing students to gain resilience in learning and a growth mindset as they systematically achieve success.

## Equivalent Fractions with Models

### Lesson Goal

Students will make equivalent fractions using models.

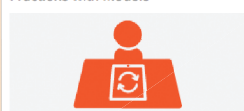
### Prerequisite Skills

To be successful with equivalent fractions, students must understand that fractions represent part of a whole and are able to compare fractions to determine if fractions are less than, greater than, or equal to their counterparts.

### English Language Learners

English language learners may need to practice the meaning of the word *equivalent*. Draw attention to the words *equal* and *equivalent*. Discuss with students that both words mean "same." *Equivalent fractions* are fractions that represent the same amount.

#### Take Another Look: Equivalent Fractions with Models



Learning Resource

- ☐ Add to student page  
☐ Include in presentation

#### Guided Support: Equivalent Fractions with Models



Learning Resource

- ☐ Add to student page  
☐ Include in presentation

## Mini-Lessons

When used together, the Guided Support and Take Another Look mini-lessons lesson provide concrete-representational-abstract support, to build both a strong conceptual and procedural foundation that helps students manage the rigorous demands of core instruction.



## Hands-On, Small Group Mini-Lesson

**Title:** Guided Support: Equivalent Fractions Using Number Lines

**Goal:** Students will use a number line to find equivalent fractions.


Guided Support mini-lessons provide a teacher-facilitated small group lesson that uses concrete modeling and discussion to build conceptual understanding. Each lesson is paced to be about 15 minutes.

LESSON

# Equivalent Fractions with Models

Goal Students will make equivalent fractions using models.

**Guided Support** 15 MINUTES

 **Materials**

- Same-sized rectangular strips of paper (3 per student, 3 per instructor)

**Begin the Activity**

Remind students that **equivalent fractions** are fractions that represent the same amount of the whole. Distribute three same-sized rectangular strips of paper to each student. As the instructor, make sure you have three strips of paper to complete the activity with students. Explain to students that they will use strips of paper to model different fractions. Then, they will compare the models they constructed to test for equivalence.

Have students complete the following:

- Take one strip of paper, and fold it in half lengthwise.
- Label each part of the strip  $\frac{1}{2}$ .
- Take the second strip of paper, and fold it in half lengthwise. (Emphasize accuracy, so that the folds on both strips of paper align.)
- Fold the second strip in half lengthwise again to create four equal sections. Label each section  $\frac{1}{4}$ .

Next, have students align the strips of paper on the left, one above the other, and ask them to identify how many fourths there are in one half. Then ask them to complete this number sentence:  $\frac{1}{2} = \frac{?}{4}$ . Have students identify these fractions as equivalent fractions. Then ask students to use their models to show and explain how they know these fractions are equivalent.

**Conclude the Activity**

Ask students to take the remaining strip of paper and fold it into halves lengthwise. Then fold each half again lengthwise into two equal parts to make fourths. Finally, fold each  $\frac{1}{4}$  into two equal parts to make eighths. Label each part  $\frac{1}{8}$ . Place the three strips of paper one above the other, making sure to align the left sides.

Number & Quantity: Model Equivalent Fractions 27

## Guided Teacher Questions

Guided discussion questions within the lesson foster small group discussion, allowing for verbal exploration and expression of understanding in a safe environment. These discussions help teachers reinforce mathematical vocabulary, uncover misconceptions, and discuss reasoning in problem-solving.

### Questions

- Using the fractional bar models you created, show how the fractions  $\frac{1}{2}$ ,  $\frac{2}{4}$ , and  $\frac{4}{8}$  are equivalent. Explain your answer. Sample answer: You can see by where the fractions line up that  $\frac{1}{2}$  is the same amount as  $\frac{2}{4}$  and  $\frac{4}{8}$ . Because these fractions take up the same amount of space, they are equivalent fractions.
- Using the models you created, what fraction is equivalent to  $\frac{3}{4}$ ? Sample answer:  $\frac{3}{4}$  lines up with  $\frac{6}{8}$  so  $\frac{3}{4}$  is equivalent to  $\frac{6}{8}$ .
- Using the models you created, can you find another fraction that is equivalent to  $\frac{1}{4}$ ? Sample answer:  $\frac{2}{8}$ .

### Guided Support

#### Materials

- Same-sized rectangular strips of paper (3 per student, 3 per instructor)

#### Begin the Activity

Remind students that **equivalent fractions** are fractions that represent the same amount of the whole. Distribute three same-sized rectangular strips of paper to each student. As the instructor, make sure you have three strips of paper to complete the activity with students. Explain to students that they will use strips of paper to model different fractions. Then, they will compare the models they constructed to test for equivalence.

Have students complete the following:

- Take one strip of paper, and fold it in half lengthwise.
- Label each part of the strip  $\frac{1}{2}$ .

### Guided Support

Teachers have access to all the Guided Support instruction in a digital and printable format. Spiral-bound Guided Support Teacher Guides are also available.



## Assignable Digital Mini-Lesson

**Title:** Take Another Look: Equivalent Fractions Using Number Lines.

**Goal:** Students will use a number line to find equivalent fractions.

Aligned to the Guided Support mini-lessons, the Take Another Look digital mini-lessons will help transition students from concrete modeling to representation and ultimately abstract understanding to build upon the foundational understanding of each mathematical concept.

Teachers can assign these mini-lessons to the whole class, specific groups, or individual students. These mini-lessons can also be used as an interactive presentation in a whole group setting. Every lesson follows a three-part progression:

**Learn**

Just as a whole can be broken into equal parts to make fractions,  
Equivalent fractions have the same amount.  
As you watch this, notice how two fractions name the same amount of different breakfast foods.

Jaime

Kerri

$\frac{2}{3} = \frac{4}{6}$



### Model Concept

A two- to three-minute video or animation models the skill or concept using essential math vocabulary. The animation will represent the concrete modeling from the Guided Support mini-lessons in two-dimensional form.

Part  
2

## Interactive Practice

A series of engaging activities provide students immediate feedback and encourage confidence through scaffolded repetition. As students progress through the practice activities, the scaffolds will gradually release allowing the students to practice assessment-like problems.

The interface shows a navigation bar at the top with a menu icon, left and right arrows, and the text "2 of 8". Below the navigation bar, instructions read: "Watch how to make [equivalent fractions](#). Then build your own. Click the arrows and follow the instructions." A progress indicator shows five circles, with the first one filled red. The main content area displays the text "Read the equivalent fraction sentence." followed by a progress bar. Below this, the text "equivalent fractions:  $\frac{1}{3} = \frac{?}{6}$ " is shown. Two fraction bars are displayed: the first is a bar divided into three equal parts, with the first part shaded gray and labeled  $\frac{1}{3}$ ; the second is a bar divided into six equal parts, with the first part shaded orange and labeled  $\frac{1}{6}$ . Below the bars are two sets of controls, each with a "show me" button and a "reset" button. A third fraction bar, divided into six parts with the first part shaded orange and labeled  $\frac{1}{6}$ , is shown below the controls.

Part  
3

## Data Check

A quick three-to-five question check will assess student understanding and provide teachers with data to inform instruction. Students receive immediate feedback on their assessment upon submission.

The interface shows a navigation bar at the top with a menu icon, left and right arrows, and the text "8 of 8". Below the navigation bar, the text "Assess" is displayed. The main content area shows a question titled "Question 2" with the text "Choose the equivalent fraction." and the equation  $\frac{2}{4} = \frac{?}{2}$ . Below the equation, the text "Use the models to help." is displayed. Two fraction bars are shown: the first is a bar divided into four equal parts, with the first two parts shaded yellow and labeled  $\frac{1}{4}$ ; the second is a bar divided into two equal parts, with the first part shaded yellow and labeled  $\frac{1}{2}$ . Below the bars are three radio button options: A.  $\frac{1}{2}$ , B.  $\frac{2}{2}$ , and C.  $\frac{3}{4}$ . A "Save & Continue" button is located at the bottom of the question area. The footer contains copyright information: "©2018 McGraw-Hill Education. All Rights Reserved. Privacy and Cookies | Terms of Use | Minimum Requirements | Platform Status".





## Collaborative Small-Group Game

**Title:** Trek to 1

**Focus:** Build fractions equivalent to one.

**Level:** D (Grade 3)

**Strand:** Number and Quantity

Every content domain within a grade level has a small group game opportunity that provides another activity to help students develop math fluency and apply critical skills with their peers.

### Student-Facing Instructions

## Trek to 1

**Objective** Collect the most sets of one by building fractions equivalent to one.

### Directions

1. Put the game board and game cards in the middle of the group.
2. Put the bag of fraction tiles near the game board. Put a '1' fraction tile in front of you.
3. Place your pawn in the circle in the center of the game board. Players can move backward or forward during the game.
4. Draw a game card.  
**If you draw a green or red card:** Jump backward or forward to that color square. If you land on a green square, take a fraction tile from the bag without looking.  
**If you draw an object card:** Move to that object. Pick a fraction tile from the bag without looking. Trade this for another player's fraction tile if you want.
5. If you move across the center circle, take an extra fraction tile.
6. Place your game card at the bottom of the pile.
7. Continue taking turns drawing cards, moving around the board, and drawing fraction tiles. When you think you have a set of fraction tiles equivalent to one, make sure the other players agree you are correct. Be sure to keep each set of your fraction tiles equivalent to one until the game is over.
8. When time is up, the player with the most sets of fraction tiles equivalent to one wins!



### Materials

- Urban Trek Game Board (1 per group)
- Urban Trek Game Cards (1 set per group)
- Fraction tiles (4 sets per group)
- Pawns (1 per player)
- Paper bag (1 per group)

## Arrive Math Games

These games are board- and manipulative-based that

- Align with critical skills kindergarten through eighth grade.
- Allow students to build fluency of critical math skills.
- Promote participation in mathematical discourse.
- Accommodate a range of needs through suggested game play variations.

### Teacher Planning Support

#### FOR THE TEACHER

## Trek to 1

### Math Focus

Build fractions equivalent to one.

### Set-Up

- Make a bag of fraction tiles for each group. Each bag should include four full sets without the '1' tiles. Set aside the '1' tiles for players to take and keep at the beginning of the game.

### Tips

- Determine who goes first. Remind players to continue playing in a clockwise direction.
- When given the option to trade, a good strategy for players is to try to trade tiles they only have one of so they can build onto fractions they are closer to completing.
- In case of a tie, have the tied players quickly draw fraction pieces out of the bag without looking. The player with the smallest fraction piece is the winner.

### Variations

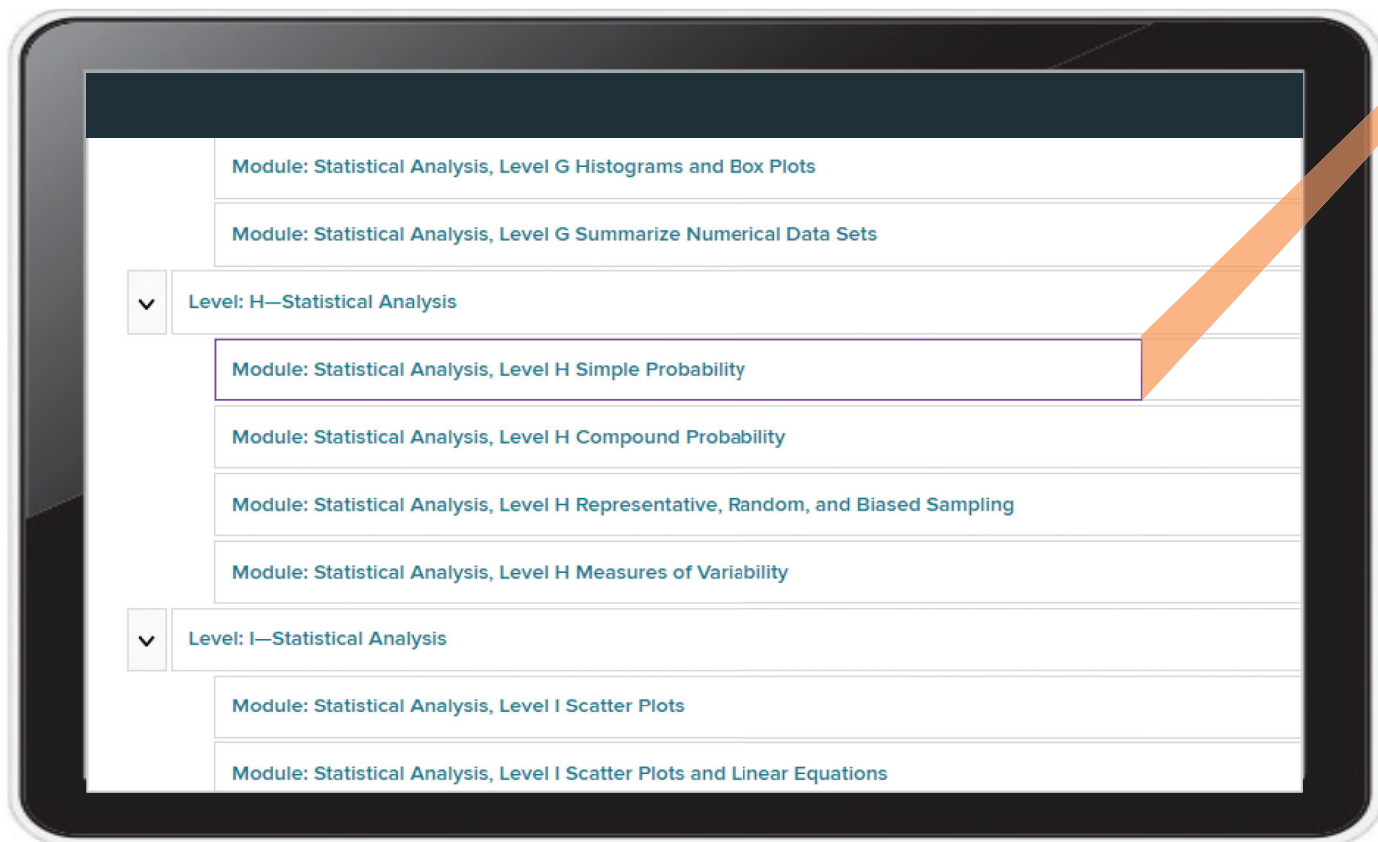
- **Variation 1:** You might choose to use only a subset of the fraction tiles for the game. For example, only use the denominators 2, 3, 4, 6, and 8.
- **Variation 2:** Give players goal fractions for each denominator, such as  $\frac{1}{2}$ ,  $\frac{2}{3}$ , and  $\frac{2}{4}$ . Players aim to build fractions greater than or equal to the goal fractions. The winner is the first player to build one fraction greater than or equal to each of the goal fractions.
- **Variation 3:** Give players a goal fraction, such as  $\frac{2}{10}$ . Challenge players to make fractions with the same numerator as the goal fraction, but with greater values, such as  $\frac{2}{3}$  and  $\frac{2}{5}$ .

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# Module Overview: Simple Probability

**Level:** H (Grade 7)

The *Arrive Math* Booster library consists of lessons covering every skill from kindergarten through eighth grade organized by standard-based modules. This allows teachers to pull lessons from various grade levels to support prerequisite and post-requisite skills to address your students' learning needs and effectively differentiate instruction.



## Module Test: Compose and Decompose Tens and Ones



Assessment

- ☒ Add to student page
- ☐ Include in presentation

ooo

## Module Assessments

Module assessments are flexible assessments that can either help indicate the skills and concepts for which students may need additional support to master a standard or help assess student understanding once they have worked through a full module worth of instruction. Teachers choose which Take Another Look and Guided Support mini-lessons would be the most beneficial to target a student's misconception early and effectively.

MODULE

Statistical Analysis, Level H

# Simple Probability

Show Information

- Module Overview
- Introduce Probability
- Simple Experimental Probability
- Simple Theoretical Probability
- Uniform and Non-Uniform Probabilities
- Teacher-added Resources

## Skill-based Lessons

The standard is broken into individual learning targets to provide a narrowed, more attainable focus allowing students to gain resilience in learning and a growth mindset as they systematically achieve success.

### Uniform and Non-Uniform Probabilities

#### Lesson Goal

Students will identify uniform or non-uniform probability models.

#### Prerequisite Skills

To be successful with identifying uniform and non-uniform probability models, students need to be able to identify outcomes of an event.

#### English Language Learners

For English Language Learners, connect the term *uniform probability* to school or work uniforms. Point out that in the clothing context of the word "uniform", everyone wears the same outfit. Point out that in the probability context of the word "uniform", every outcome has the same probability.

#### Take Another Look: Uniform and Non-Uniform Probabilities



Learning Resource

- ☐ Add to student page  
☐ Include in presentation

#### Guided Support: Uniform and Non-Uniform Probabilities



Learning Resource

- ☐ Add to student page  
☐ Include in presentation

## Mini-Lessons

When used together, the Guided Support and Take Another Look mini-lessons lesson provide concrete-representational-abstract support, to build both a strong conceptual and procedural foundation that helps students manage the rigorous demands of core instruction.



## Hands-On, Small Group Mini-Lesson

**Title:** Take Another Look: Uniform and Non-Uniform Probabilities


**Goal:** Students will identify uniform or non-uniform probability models.

Guided Support mini-lessons provide a teacher-facilitated small group lesson that uses concrete modeling and discussion to build conceptual understanding. Each mini-lesson is paced to be about 15 minutes.

LESSON

# Uniform and Non-Uniform Probabilities

Goal Students will identify uniform or non-uniform probability models.



HANDS-ON

### Materials

- Color counters (10 green, 3 red, 5 yellow per student)
- Number cube 1–6 (1 per student)
- Coin (1 per student)

### Begin the Activity

Line up the different colored counters in front of the student. Ask: If you were to play a game in which you were assigned a certain color, and every time you picked that color, you got points or a prize, which color would be the best one to have? green If you were playing the game with a friend, and your friend's assigned color were yellow, would that be a fair game? Why or why not? no; Sample answer: My chances of winning a prize would be  $\frac{10}{18}$  or  $\frac{5}{9}$ , and my friend's chances of winning a prize would be  $\frac{5}{18}$ . Explain that this is called a non-uniform probability because each outcome does not have an equal probability.

Show the student a number cube. Ask: Which would have a greater probability: tossing the cube and getting an even number, or tossing the cube and getting an odd number? Sample answer: Both outcomes have the same probability. Tell the student that this is a uniform probability, because even and odd outcomes have equal probabilities.

Let the student examine the coin. Ask: What are the possible outcomes of flipping a coin? heads and tails Which outcome is more likely? Sample answer: Both outcomes have the same probability. Is this probability model uniform or non-uniform? uniform

### Conclude the Activity

Conclude by presenting the student with the following scenarios. Have the student determine whether the probabilities are uniform or non-uniform.

1. Choosing a specified color counter from a bag with 5 green, 5 yellow, and 3 red counters. Ask: What are the possible outcomes? green, yellow, and red What is the probability of choosing each color? green:  $\frac{5}{13}$ ; yellow:  $\frac{5}{13}$ ; red:  $\frac{3}{13}$  Is this probability uniform or non-uniform? non-uniform
2. Playing a number-cube game in which one player needs to roll a 1 or a 6 and the other player needs to roll a 2, 3, 4, or 5.  
Ask: What are the possible outcomes? rolling a 1 or a 6 and rolling a 2, 3, 4, or 5 What is the probability of rolling each set of numbers? rolling a 1 or 6:  $\frac{1}{3}$ ; rolling a 2, 3, 4, or 5:  $\frac{2}{3}$  Is this probability uniform or non-uniform? non-uniform

Statistical Analysis: Simple Probability 287



## Guided Teacher Questions

Guided discussion questions within the lesson foster small group discussion, allowing for verbal exploration and expression of understanding in a safe environment. These discussions help teachers reinforce mathematical vocabulary, uncover misconceptions, and discuss reasoning in problem-solving.

3. Choosing a specified color counter from a bag with 5 green, 5 yellow, and 5 red.

Ask: What are the possible outcomes? green, yellow, or red What is the probability of choosing each color? green:  $\frac{1}{3}$ ; yellow:  $\frac{1}{3}$ ; red:  $\frac{1}{3}$  Is this probability uniform or non-uniform? uniform

4. Spinning a spinner with 5 equal-size spaces. Two of the spaces are blue. Three of the spaces are purple.

Ask: What are the possible outcomes? blue or purple What is the probability of choosing each color? blue:  $\frac{2}{5}$ ; purple:  $\frac{3}{5}$  Is this probability uniform or non-uniform? non-uniform

5. Spinning a spinner with 6 equal-size spaces. Three of the spaces are red. Three of the spaces are yellow.

Ask: What are the possible outcomes? red and yellow What is the probability of choosing each color? red:  $\frac{1}{2}$ ; yellow:  $\frac{1}{2}$  Is this probability uniform or non-uniform? uniform

### Questions

- How do you determine whether a probability is uniform or non-uniform?  
Sample answer: Find the theoretical probability of all the outcomes. If the probabilities are all equal, then the model is uniform.
- Think about the colored counters you saw at the beginning of this activity. How could you change the numbers of the colored counters to make the model uniform? Sample answer: The model would be uniform if there were the same number of counters of each color.

1 of 1

### Guided Support

**Materials**

- Color counters (10 green, 3 red, 5 yellow per student)
- Number cube 1–6 (1 per student)
- Coin (1 per student)

**Begin the Activity**

Line up the different colored counters in front of the student. Ask: *If you were to play a game in which you were assigned a certain color, and every time you picked that color, you got points or a prize, which color would be the best one to have?* [green] *If you were playing the game with a friend, and your friend's assigned color were yellow, would that be a fair game? Why or why not?* [no; Sample answer: My chances of winning a prize would be  $\frac{10}{18}$  or  $\frac{5}{9}$ , and my friend's chances of winning a prize would be  $\frac{5}{18}$ .] Explain that this is called a non-uniform probability because each outcome does not have an equal probability.

### Guided Support

Teachers have access to all the Guided Support instruction in a digital and printable format. Spiral-bound Guided Support Teacher Guides are also available.



## Assignable Digital Mini-Lesson

**Title:** Take Another Look: Uniform and Non-Uniform Probabilities.

**Goal:** Students will identify uniform or non-uniform probability models.


Aligned to the Guided Support mini-lessons, the Take Another Look digital mini-lessons will help transition students from concrete modeling to representation and ultimately abstract understanding to build upon the foundational understanding of each mathematical concept.

Teachers can assign these mini-lessons to the whole class, specific groups, or individual students. These mini-lessons can also be used as an interactive presentation in a whole group setting. Every mini-lesson follows a three-part progression:

1 of 8

### Learn

How can you use probabilities to determine if a game is fair or not? In a fair game, all players have an equal chance of winning. We call this a uniform probability mode. Let's watch to find out how to identify a uniform probability model.



Widget Credit

Part  
1

### Model Concept

A two- to three-minute video or animation models the skill or concept using essential math vocabulary. The animation will represent the concrete modeling from the Guided Support mini-lessons in two-dimensional form.

Part  
2

## Learn and Apply

Let's sort experiments by their probability models.

Label each situation as uniform or non-uniform

uniform	A game is played in which each player chooses a number from 1–10. Then, a number is chosen at random from a hat that contains pieces of paper with numbers 1–10 written on them. There is one piece of paper for each number in the hat. Players earn a point if their number is chosen.
non-uniform	A game is played in which each player chooses a number from 0–7. Then, a number cube that has one number from 1–6 on each side is rolled. Players earn a point if their number is rolled.
	A game is played in which each player is assigned the letter of their first name. Then, a random letter generator chooses a letter from all of the letters in the alphabet. Players earn a point if their letter is chosen.

uniform
non-uniform

Reset

Check Answer

## Interactive Practice

A series of engaging activities provide students immediate feedback and encourage confidence through scaffolded repetition. As students progress through the practice activities, the scaffolds will gradually release allowing the students to practice assessment-like problems.

Part  
3

## Assess

Sample Student | Take Another Look: Uniform and Non-Uniform Pro...

Question 1

A coin has one side with a head on it and one side with a building on it. Does flipping this coin have a uniform or non-uniform probability model?

The probabilities of each outcome are equal so the model is

Save & Continue

## Data Check

A quick three-to-five question check will assess student understanding and provide teachers with data to inform instruction. Students receive immediate feedback on their assessment upon submission.



## Collaborative Small-Group Game

**Title:** Star Populations

**Focus:** Find the median or range to compare two populations.

**Level:** H (Grade 7)

**Strand:** Statistical Analysis

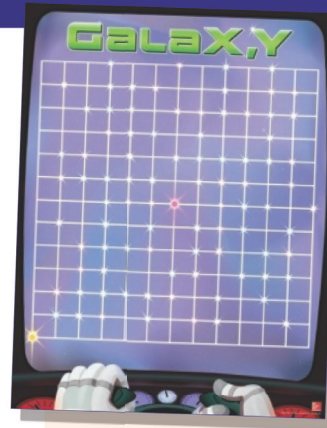
### Student-Facing Instructions

# Star Populations

**Objective** Be the first to place 4 tiles in a row by comparing populations given in a dot plot or box plot.

### Directions

1. Place the game board in the center of the group. Put the spinner and *Population Cards* near the game board. Put your tiles next to you.
2. Draw a card. The card gives you two populations to compare. Spin the spinner to see how to compare your populations.
3. Compare your populations and explain your answer to the group. For example, if the spinner lands on greater range, you need to tell the group which population shows the greater range and why. The group will make sure you are correct.  
**If you are correct:** Place a color tile on a square on the game board. The goal is to get 4 tiles in a row, column, or on a diagonal  
**If you are incorrect:** Do not place a color tile.
4. Discard the card to the bottom of the pile.
5. Continue taking turns drawing cards, spinning the spinner, comparing populations, and placing a color tile on a square on the game board. Remember, you are trying to get 4 tiles in a row, column, or on a diagonal.
6. The first player to place 4 tiles in a row, column, or on a diagonal is the winner. If time runs out, the player with the most tiles on the game board is the winner. If there is a tie, players each draw one more card. The player with the population with the greater range is the winner.



### Materials

- GalaX,Y Game Board (1 per group)
- *Population Cards* (1 set per group)
- Color tiles (15 of one color per player)
- Transparent spinner (1 per group)
- Calculator (optional)
- Paper (1 sheet per player)
- Pencils (1 per player)

## Arrive Math Games

Every content domain within a grade level has a small group game opportunity that provides another activity to help students develop math fluency and apply the critical skills within that domain with their peers. These games are board- and manipulative-based and

- Align with critical skills kindergarten through eighth grade.
- Allow students to build fluency of critical math skills.
- Promote participation in mathematical discourse.
- Accommodate a range of needs through suggested game play variations.

### Teacher Planning Support

FOR THE TEACHER

## Star Populations

### Math Focus

Find the median or range to compare two populations

### Set-Up

- Cut apart and shuffle the *Population Cards*.
- Divide the transparent spinner into four sections and label with the following: Greater Range, Lesser Range, Greater Median, and Lesser Median.

### Tips

- Determine who goes first. Remind players to continue playing in a clockwise direction.
- Players may benefit from a review of the two types of graphs used in the game before playing: dot plots and box plots.
- Some graphs may be more challenging than others to evaluate based on one of the characteristics. Encourage players to evaluate all the visible information and make a clear argument to the group as to why one population wins over the other.

### Variations

- **Variation 1:** Play focusing on one type of graph by using a subset of the *Population Cards*. There are equal numbers of dot plots and box plots.
- **Variation 2:** Play without the spinner. Have players tell the group at least one thing they notice about their populations (related to median value and range). If they are correct, they can play a color tile on the game board.

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# Scope of Arrive Math Booster Content



## Number & Quantity

### Level A • Game: Tunnel on to 100

#### Modules:

- Compare and Order Numbers 1 to 10
- Compose and Decompose Numbers 1 to 10
- Compose and Decompose Tens and Ones
- Count Down from 20
- Count to 10
- Count to 100
- Count to 11 and 12
- Count to 13 and 14
- Count to 15
- Count to 16 and 17
- Count to 18 and 19
- Count to 20
- Count to 5
- Count to 6 and 7
- Count to 8 and 9
- Count to Compare

### Level B • Game: Pony Express

#### Modules:

- Compare and Order Numbers Less than 100
- Numbers to 120
- Ordinal Numbers
- Place Value to 100
- Place Value to 20
- Place Value to 50

### Level C • Game: 500 Here I Come

#### Modules:

- Compare and Order Numbers Less than 1,000
- Place Value to 999
- Skip Count Beyond 100
- Skip Count to 100
- Write Number Names to 100

### Level D • Game: Trek to 1

#### Modules:

- Compare Common-Part Fractions
- Introduction to Fractional Numbers
- Model Equivalent Fractions
- Round Whole Numbers Less than 1,000



## Comprehensive K-8 Resource Library

Teachers have access to every kindergarten through eighth module within one easy-to-use resource library. Represented by a hexagon on this graphic, *Arrive Math Booster* has a module worth of the digital and hands-on lessons for every mathematical standard that can be used to target instruction. The content is organized by strand and grade level. The six content strands are derived from the math domains.



Within every strand, there is a hands-on game per level that helps to practice and apply the critical skills within that grade level and strand.

### Level E • Game: Tunnel on to 100

#### Modules: A-Mazing Place Value

- Compare Fractional and Decimal Numbers
- Compare Fractions with Uncommon Denominators
- Divisibility
- Equivalent Fractional Numbers
- Factors and Multiples
- Fractions and Decimals
- Improper Fractions and Mixed Numbers
- Place Value Beyond 99,999
- Place Value to 9,999
- Place Value to 99,999
- Round Whole Numbers

### Level F • Game: Expanding Trek

#### Modules:

- Compare and Order Decimal Numbers
- Decimal Place Value
- Fractions as Quotients
- Place Value with Powers of Ten
- Round Decimal Numbers

### Level G • Game: Greatest Common Foe

#### Modules:

- Compare and Order Integers
- Exponents
- Integers, Absolute Value, and Opposites
- Percentages
- Prime Factorization
- Use Integers

### Level H • Game: Absolutely Rational

#### Module:

- Rational Numbers

### Level I • Game: Number Line Fill Up

#### Modules:

- Irrational Numbers
- Roots
- Scientific Notation





## Operations

### Level A • Game: 20 Buckets

#### Modules:

- Sums to 10
- Subtract from Numbers to 10

### Level B • Game: Race to the Rescue

#### Modules:

- Add Three Numbers
- Addition Concepts
- Addition Strategies
- Subtraction Concepts
- Subtraction Strategies
- Two-Digit Addition
- Two-Digit Subtraction

### Level C • Game: 100 Buckets to Victory

#### Modules:

- Add and Subtract using Mental Strategies
- Addition Strategies with Place Value
- Mentally Add and Subtract 10 and 100
- Related Facts
- Repeated Addition
- Subtraction Strategies with Place Value
- Three-Digit Addition
- Three-Digit Addition
- Three-Digit Subtraction



### Level D • Game: Space Pioneer

#### Modules:

- Adding and Subtracting Multi-Digit Numbers
- Introduction to Division
- Multiplication and Properties
- Multiplication Facts
- Multiplication Models

### Level E • Game: Fraction Frenzy

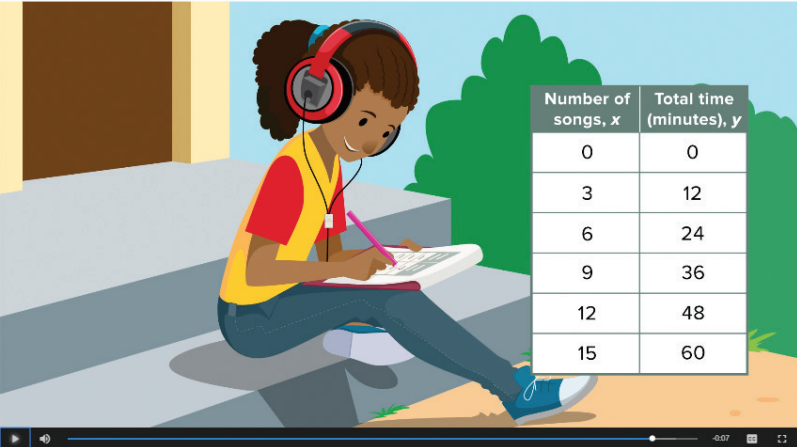
#### Modules:

- Add & Subtract Like-Denominator Fractions
- Add & Subtract Mixed Numbers
- Division Based on Place-Value Strategies
- Division by One-Digit Numbers
- Multiplication as Comparison
- Multiplication of Fractions by Whole Numbers
- Multiply with One-Digit Numbers
- Multiply with Two-Digit Numbers
- Understanding Division
- Use the Standard Algorithm to Add & Subtract

1 of 6

### Learn

Watch to learn how to model a linear relationship.



Number of songs, $x$	Total time (minutes), $y$
0	0
3	12
6	24
9	36
12	48
15	60

In this lesson you will be modeling linear relationships by writing equations that represent functions.

## Level F • Game: Win Sum Lose Sum

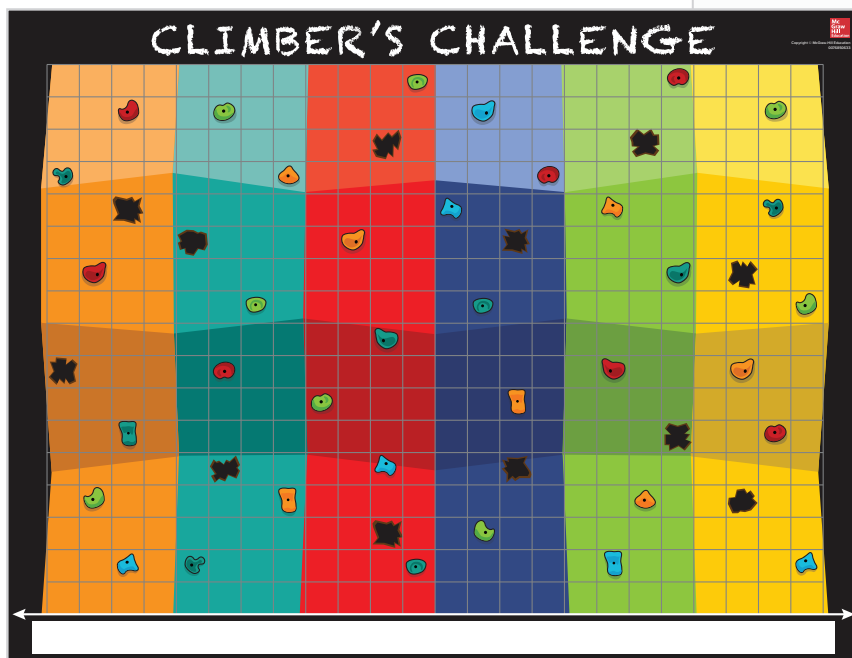
### Modules:

- Add & Subtract Unlike-Denominator Fractions
- Addition of Decimal Numbers
- Division by 2-Digit Divisors
- Division of Decimal Numbers
- Division of Unit Fractions
- Mixed-Number Addition and Subtraction
- Multi-Digit Division Using Extended Facts
- Multiplication of Decimal Numbers
- Multiplication of Fractions
- Multiplication of Fractions and Mixed Numbers
- Multiplication with Multi-Digit Numbers
- Patterns with Powers of 10
- Subtraction of Decimal Numbers
- The Order of Operations

## Level G • Game: Climbing Capture

### Modules:

- Division of Positive Fractions
- Operations with Multi-Digit Decimal Numbers
- Properties of Operations



## Level H • Game: Expression Expert

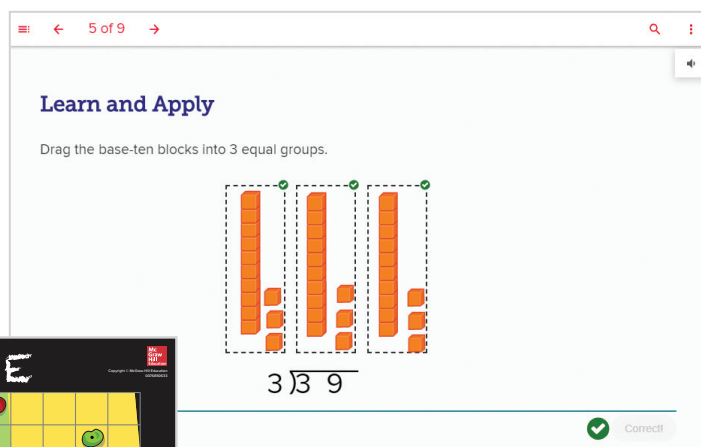
### Modules:

- Addition and Multiplication Properties
- Addition and Subtraction of Integers
- Addition and Subtraction of Signed Fractions
- Multiplication and Division of Integers
- Multiplication and Division of Mixed Numbers
- Operations with Rational Numbers
- Operations with Signed Decimal Numbers

## Level I • Game: Counter Capture

### Modules:

- Exponent Rules
- Operations With Scientific Notation





# Algebraic Thinking

## Level A • Game: How Many Now?

### Module:

- Add & Subtract Within 5 with Word Problems

## Level B • Game: Going Shopping

### Modules:

- Add & Subtract Within 10 with Word Problems
- Join/Take-Apart Word Problems to 10
- Word Problems with Three Addends

## Level C • Game: Gopher It!

### Modules:

- Add & Subtract Compare Word Problems to 20
- Add & Subtract Within 50 with Word Problems
- Join/Take-Apart Word Problems to 50
- Odd and Even Numbers
- Two-Step Addition and Subtraction Word Problems
- Whole Numbers on a Number Line

## Level D • Game: Riddles in the Labyrinth

### Modules:

- Evaluate the Reasonableness of Answers
- Model to Multiply & Divide in Word Problems
- Multiply & Divide to Solve Word Problems
- Patterns in Arithmetic
- Solve Two-Step Word Problems

## Level E • Game: Multiplication Jumble

### Modules:

- Growing Patterns
- Introduction to Word Problems with Fractions (Module 21)
- Multi-Step Word Problems within 10,000
- Repeating Patterns

## Level F • Game: The Great Expression Trek

### Modules:

- Pairs of Patterns
- Word Problems with Fractions

## Level G • Game: Ratio Bingo

### Modules:

- Equivalent Whole-Number Expressions
- Evaluate Whole-Number Expressions
- Introduction to Inequalities
- Rational Numbers on a Number Line
- Ratios and Percentages
- Ratios and Rates
- Solve One-Step Equations

## Level H • Game: Ratio Fishing

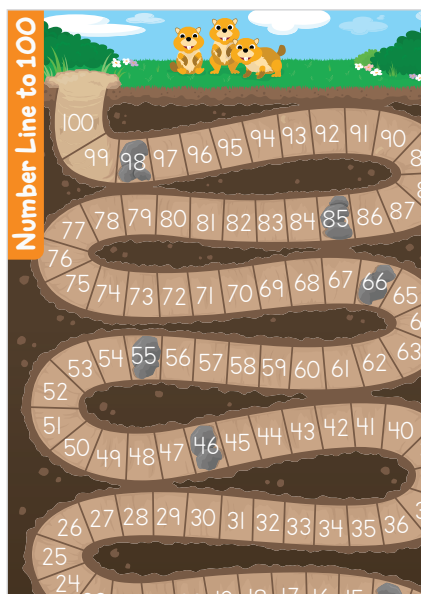
### Modules:

- Create Equivalent Rational Expressions
- Identify Equivalent Rational Expressions
- Proportional Relationships
- Solve Inequalities Algebraically
- Solve Multi-Step Equations Algebraically
- Use Proportional Relationships
- Word Problems with Rational Numbers

## Level I • Game: Functional Star Chase

### Modules:

- Analyze Functions
- Equation of a Line
- Introduction to Functions
- Linear Functions
- Proportional Relationships on a Graph
- Simultaneous Linear Equations
- Solve Linear Equations in One Variable





# Measurement

## Level A • Game: Tallest Tower

### Module:

- Measurable Attributes

## Level B • Game: Mystery Measuring

### Modules:

- Measure Length
- Compare and Organize
- Linear Measurements
- Telling Time

## Level C • Game: Measurement Hunt

### Modules:

- Linear Measurement with Metric Units
- Compare Measurements of Length
- Determine the Amount of Money
- Equal Amounts of Money
- Linear Measurement with Customary Units
- Linear Measurement with Metric Units
- Measuring Length with Customary Units
- Recognize and Count U.S. Coins and Bills
- Telling Time in Smaller Increments
- Use Number Lines to Determine Length
- Word Problems Using Length

James has 3 dimes, 1 quarter, and 2 nickels. How much money does he have?  
 Drag the coins, greatest to least, to the boxes to model.  
 Drag the correct number to complete the sentence.

James has 65¢.

## Level D • Game: Master Builder

### Modules:

- Introduction to Area
- Metric Units of Liquid Volume
- Metric Units of Mass (Module 21)
- Perimeter
- Rectilinear Area
- Tell Time to the Minute

## Level E • Game: Goo-d Alien Research

### Modules:

- Conversions
- Distance Word Problems
- Liquid Volume Word Problems
- Mass and Weight Word Problems
- Measure Angles
- Money Word Problems
- Perimeter and Area Formulas
- Time Word Problems

## Level F • Game: Volume Builder

### Modules:

- Converting Customary and Metric Units
- Volume

## Level G • Game: Area Trek

### Modules:

- Area of Special Quadrilaterals and Polygons
- Area of Triangles
- Surface Area Using Nets
- Volume and Fractional Edge Lengths

## Level H • Game: Scaling the Job Site

### Modules:

- Circumference and Area
- Scale Drawings
- Surface Area
- Volume of Pyramids and Triangular Prisms

## Level I • Game: Turn Up the Volume

### Module:

- Cylinders, Cones and Spheres



# Geometry

## Level A • Game: Shape Builder

### Modules:

- Compare 2-D and 3-D Shapes
- Create Shapes
- Describe Shapes
- Shapes in the Environment

## Level B • Game: Fill It Up

### Modules:

- Characteristics of 3-D Shapes
- Characteristics of Shapes
- Halves and Fourths

## Level C • Game: Shape Bingo

### Modules:

- Attributes
- Equal Parts

## Level D • Game: Four Sides of Victory

### Module:

- Quadrilaterals and Partitioned Shapes

## Level E • Game: Attribute Bingo

### Modules:

- Angles
- Categorize Shapes
- Geometric Objects
- Symmetry



## Level F • Game: Starship Quest

### Modules:

- Introduction to the Coordinate Plane
- Quadrilaterals

## Level G • Game: Creatures Under the Surface

### Modules:

- 3-D Figures
- Coordinate Plane (all quadrants)

## Level H • Game: Circle Circuits

### Modules:

- Design Shapes
- Unknown Angles

## Level I • Game: I've Been Transformed!

### Modules:

- Angles and Parallel Lines
- Congruent and Similar Figures
- Right Triangles
- Spheres, Cones, and Cylinders
- Transformations and Coordinates

← 2 of 7 →

### Learn and Apply

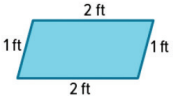
Shapes are all around us! Your classroom is full of many shapes. **Quadrilaterals** are shapes that have 4 sides and 4 angles. Today we a


- [parallelogram](#)
- [rectangle](#)
- [rhombus](#)
- [square](#)
- [trapezoid](#)

Click below each


parallelogram

A quadrilateral with four sides in which each pair of opposite sides is parallel and equal in length.






square



rectangle



trapezoid



# Statistical Analysis

## Level A • Game: Shape Collector

### Module:

- Classifying and Counting Objects

## Level B • Game: Drop the Counter

### Module:

- Basic Tally Charts and Tables

## Level C • Game: Fruit Collector

### Modules:

- Single-unit Scale Picture and Bar Graphs
- Whole Number Line Plots

## Level D • Game: A Scaly Situation

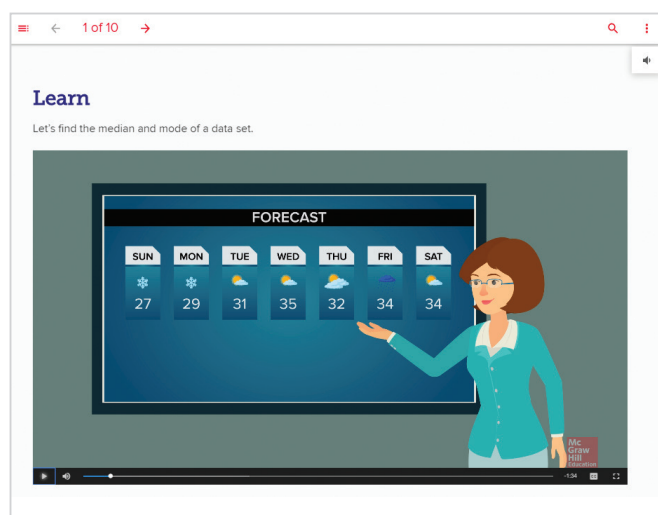
### Modules:

- Line Plots with Half and Quarter Inches
- Scaled Picture and Bar Graphs

## Level E • Game: Collector Challenge

### Module:

- Line Plots to Eighths



## Level F • Game: Got the Plot?

### Module:

- Line Plots

## Level G • Game: Don't Be Mean, Data!

### Modules:

- Central Tendency, Range, and Data Displays
- Histograms and Box Plots
- Mean, Median, Mode, Range
- Summarize Numerical Data Sets
- Use Statistics

## Level H • Game: Star Populations

### Modules:

- Compound Probability
- Measures of Variability
- Representative, Random, and Biased Sampling
- Simple Probability

## Level I • Game: Scattering Plots

### Modules:

- Frequency Tables
- Scatter Plots and Linear Equations
- Scatter Plots



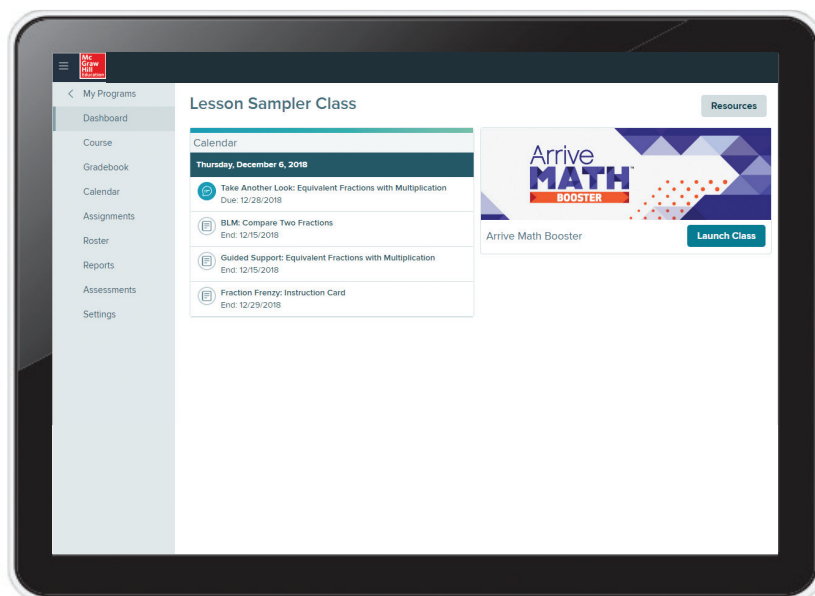
# Arrive Math Booster Components

## Digital Experience

### Teacher:

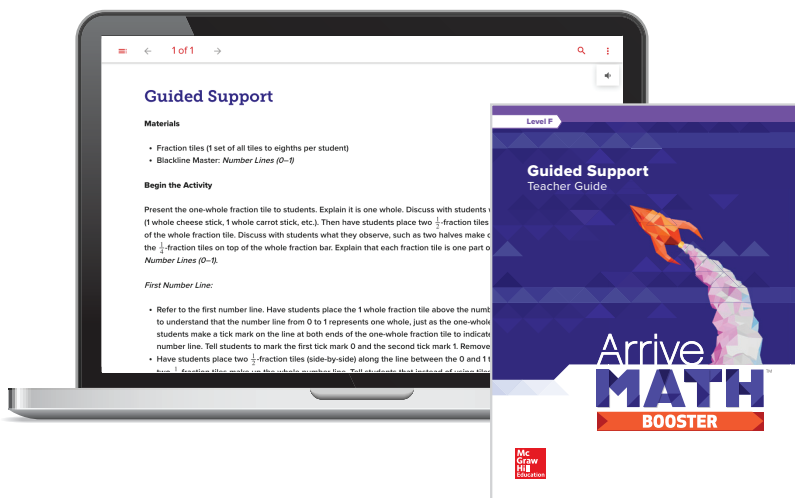
*Arrive Math Booster* provides an intuitive and easy to use platform from which to plan and implement student instruction. The teacher subscription provides the teacher access to:

- 242 instructional modules across grades K-8 to include:
  - 1160 Take Another Look Lessons
  - 1160 Guided Support Lessons
  - 242 Module Test
  - English Language Learner Support
- Printable game resources
- Standard trajectory guidance
- Class management and planning tools
- Gradebook and assignment management tools
- Customizable digital and print assessments
- Activity and standard reports
- Administrator reports



### Student

*Arrive Math Booster* offers a simple student experience that will allow students to access their assigned digital lessons and assessments as well as monitor their progress over time.



## Guided Support Teacher Guides

While all the Guided Support hands-on lesson instruction is available for the teacher within the *Arrive Math Booster* Digital Experience in both a digital and printable format, spiral-bound, Guided Support Teacher Guides are available by grade level for those who prefer to teach with a printed book.



## Classroom Games Kit

The Arrive Math Games Kit contains two sets of all the physical materials and instructions needed to play 54 games from kindergarten to eighth grade, Including:

- Instruction Cards
- Playing Cards
- Resource Guide
- Game Boards
- Manipulatives



### Resource Guide

The Resource Guide provides an overview to get you started with the *Arrive Math Games Kit*. It includes:

- List of Games
- Math Focus
- Implementation suggestions
- All supporting Blackline Masters for game play

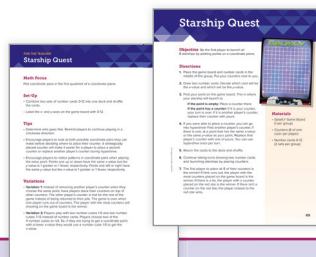


### Instruction Cards

(2 sets of 54)

Each Instruction Card provides:

- Directions for game play
- Materials list
- Teacher tips
- Game variations



### Game Cards

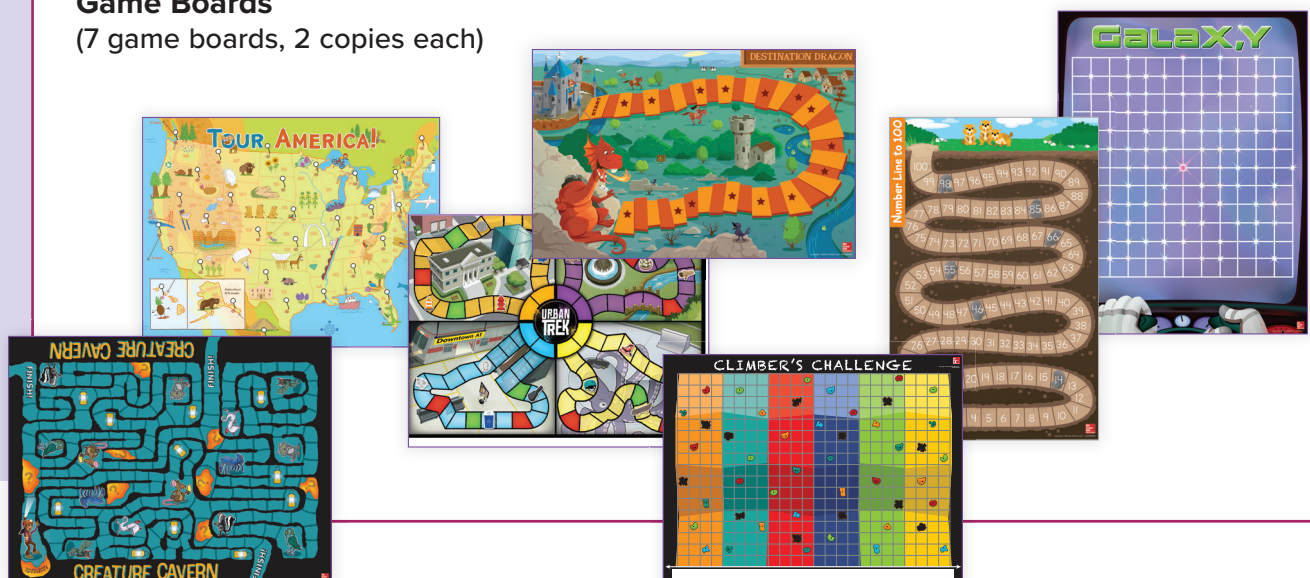
(2 sets of 2)

The game cards correspond to the Creature Cavern and Urban Trek game boards to support game play.



### Game Boards

(7 game boards, 2 copies each)



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