





# Read Me First for Homeschool

**Starfall Education Foundation** P.O. Box 359, Boulder, CO 80306

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# Mathematics... The Starfall Way!

Starfall Kindergarten Mathematics is a spiraled curriculum that aligns with the Common Core State Standards. The benefits of a spiraled curriculum include:

- ★ Learning is spread out over time and concepts are revisited repeatedly over months rather than concentrated in continuous blocks. For example, measurement is not taught as a unit. Rather, measurement is integrated throughout the curriculum across many units.
- ★ Spiraling is effective with all learners, including those who are struggling, since important concepts are often revisited.
- research documents that the "spacing" or "spiral" approach increases long-term learning.
- ★ Spiraling enables learners to develop connections over time, creating pathways for recalling information.
- ★ Multiple strategically-spaced and strategically-progressive experiences produce deeper, more conceptual learning.

The Starfall Math curriculum was designed with the classroom in mind. However, each lesson can be modified or adapted to your unique homeschool setting. For group activities, consider recruiting family members to help, inviting other homeschool parents and children to participate, or modifying the lesson to address target concepts. You may also participate directly with your child during "Partner Share" activities.

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## Starfall.com

The *Starfall.com* website is at the heart of Starfall Mathematics. The online activities and games help introduce, practice, and review essential skills that will be taught throughout the year. Many of the activities will be used during instruction. Some teachers prefer to use a projector at these times so the whole class can participate.

# Preparation and Setup

#### **Prepare Math Bag for Your Child**

Place similar objects in resealable plastic bags. Initially, include the following:



- ne attribute block (or laminated construction paper) in each of the following shapes: *circle, ellipse* (oval), triangle, rectangle, and square
- ★ Set of 20 connect cubes (10 of one color, 10 of another color)

#### **Display the Number Wall Cards**

Display the Number Wall Cards. These are used to reinforce place value (tens and ones).



#### Set up Starfall.com on your computer

If you are beginning a new membership, you will need to choose an email address and password for your account. This information will be used to authorize the computers at your location.

To get started, go to http://starfall.com. Next, if you:

#### Have an Access Code:

• Click the "Login" link at the top of the screen.

Have a membership:

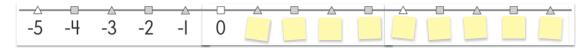
- Under "Authorize Computer," enter your administrator email address and password in the appropriate fields and click the "Authorize" button.
- Click the "Login" link at the top of the screen.
- Enter your code in the field under "Have an Access Code?"
- Follow the prompts to complete registration.

#### Wish to Purchase a Membership:

- Click the "How to Join" link at the top of the screen.
- Choose which method you would like to use to purchase your membership.
- Follow the on-screen prompts to complete your purchase.

#### Set Up the Number Line

Display the Starfall Number Line. Cover all of the numbers greater than zero with sticky notes. Each day you will reveal a new number to indicate how many days your child has been in school. For humid states, we recommend using sticky notes with a strong adhesive to keep them in place. You will use this daily as part of the Number Line routine. (See page 6.)





#### **Establish A Weather Chart**

Create a chart using the Starfall Weather Cards. Allow space to place tally marks under each card. Your child will use and interpret this graph based on the daily weather. You will use this chart during the daily Weather Routine. (See page 5.)



#### **Prepare a Hundredth Day Chart**

Create a chart with numbers 1-100 placed with the numbers hidden in a pocket chart. Each day you will reveal a new number to show how many days your child has been in school. You will use this chart during the daily Hundredth Day Chart Routine. (See page 6.)



#### **Obtain manipulatives and other required materials**

The following items are not included with Starfall Math, but are required for use throughout the year.

- Connect Cubes (20) plus additional cubes for activities, games, and learning centers
- Regular size dice (for some activities and games)
- Labeled containers for ones, tens, hundreds
- Pocket chart for Hundredth Day Routine
- Whiteboard and marker
- Money Graph and Toy Cash Register
- Plastic or wooden 2D and 3D Shapes
- Large color magnets to use with the Ten-Frame
- Month, day, and number cards
- Calendar chart
- Craft sticks and rubber bands
- Two-Color Counters
- Growth Chart
- Pan balance
- Dominoes
- Plastic 3D Math Nets (optional)
- Large Foam Dice (optional)
- Math Tiles (optional)



| Beginning of the Year Checklist (Prior to the first day of school)    |
|---|
| ☐ Prepare Math Bag  |
| ☐ Display Number Wall Cards   |
| Set up Starfall.com   |
| Set up the Number Line  |
| Establish a Weather Chart   |
| Prepare a Hundredth Day Chart   |
| <ul> <li>Obtain manipulatives and other required materials</li> </ul> |

## **Daily Routines**





#### Calendar

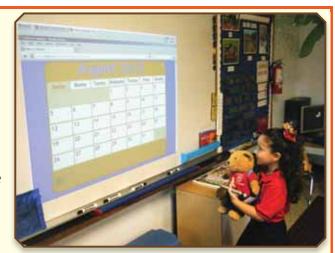
#### Setup

Begin with a blank calendar. Open the calendar activity on *Starfall.com*. Your child will use the calendar on *Starfall* to set up your calendar.

#### **Extension**

At the end of each month your child will help disassemble the calendar to prepare for the new month.

Starting with Unit 6, you will begin using coins to demonstrate one-to-one correspondence to the number of days in the month.





#### Weather

#### Setup

Create a chart using the Starfall Weather Cards. Allow space to place tally marks under each card. Your child will use and interpret this graph based on the daily weather.

#### **Comparing Data and Finding Patterns**

Prepare a monthly graph to indicate which weather card has the most/least/equal number of tally marks. Use the chart to show when seasons have changed.

#### **Probability and Chance**

Explore basic concepts and language related to probability and chance by asking questions such as:

- Is it **likely** that it will rain tomorrow? Why or why not?
- What type of weather are we **least likely** to have this afternoon? Why?
- Can we be **certain** that it will storm tomorrow? Why or why not?
- Is it **possible** that it will snow tomorrow? Why or why not?

#### **Collecting Data and Recording Temperature**

- Collect daily temperature data.
- Describe temperature using appropriate vocabulary.
- Discuss temperature trends.
- Use temperature data to discuss probability and chance.

#### Number Line

#### **Daily Routine**

- Begin with negative five.
- Count in sequence (days in school).
- Count by ones, fives, tens.
- Add "one more."
- Skip count even/odd.
- Count backward from any given number.
- Count in sequence from any given number.
- Identify numbers that come before, after, between.



## O O Place Value

#### Setup

Create a Bundles Station by labeling three containers to hold craft sticks. Label one container Hundreds, the second *Tens*, and the third *Ones*. Designate an additional container for sticks and rubber bands.

#### Introduce Place Value

Indicate the containers: Hundreds, Tens, and Ones. Each day your child will add one stick to represent the day and place it in the ones container. Every tenth day of school, bundle the ten sticks and place them in the tens container.



#### **Extending the Number Line and Place Value Routine**

Use the "Place Value" activity in the Add & Subtract section of Starfall.com to reinforce the Place Value Routine that will continue throughout the year.



#### **Hundredth Day Chart**

Prepare a Hundredth Day Chart with the numbers face down. Each day your child will reveal a number.



# **Daily Routines**















#### *To Start the Day (5-7 minutes)*

The daily routines (Calendar, Weather, Number Line, Place Value, and Hundreds Chart) are designed to be integrated into your morning routine. This takes place apart from the math lesson component. These routines will take slightly more time at the beginning of the year while you and your child become familiar with them. (See Daily Routine descriptions on pages 5 & 6.)

#### Math Block

#### *Magic Math Moment (10 minutes)*

Magic Math Moments are short exercises that serve as transitions to and warm-ups for the day's activities.

#### Math Lesson (45 minutes)

Daily Math Lessons are spiraled and arranged sequentially in units. Suggested literature should be integrated where possible.

A lesson with related activities is presented on Days 1, 2, 3, and 4. Each lesson contains a Formative Assessment.

Day 5 is Learning Center Day. Children rotate every 12-15 minutes through five center rotations:

- Activity 1: Computer component
- Activity 2: Varies by weekly theme
- Activity 3: Varies by weekly theme
- Activity 4: Teacher's Choice (optional)
- Activity 5: Summative Assessment

You may want to invite other home schoolers to join you on the day you conduct Learning Centers.

During the Summative Assessment, your child will often complete a worksheet or other activity. Information gathered from the Summative Assessments is used to help determine whether reteaching of concepts is necessary.

Your child should always participate in the Computer component center and the Summative Assessment Center. Then, present several of the other center suggestions for your child to choose from.

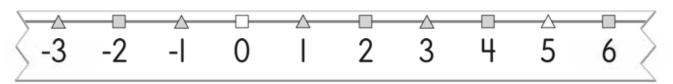


#### **Materials**

#### Downloadable Teacher's Guide

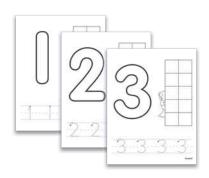
- Teacher's Guide, Semesters 1 & 2
- Assessment Package
- 100th Day Supplement
- Blackline Masters
- Supplements





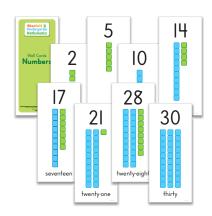
#### **Classroom Number Line**

The complete *Classroom Number Line* begins at -5 and continues to 180. Post this in the classroom. The children will use it daily, learning important number concepts.



#### **Number Activity Mats**

A set of sturdy, laminated mats for numbers 1 through 9. Your child can practice number formation with play dough, dry erase markers, and other manipulatives.



# Wall Cards for Numbers 0 through 30

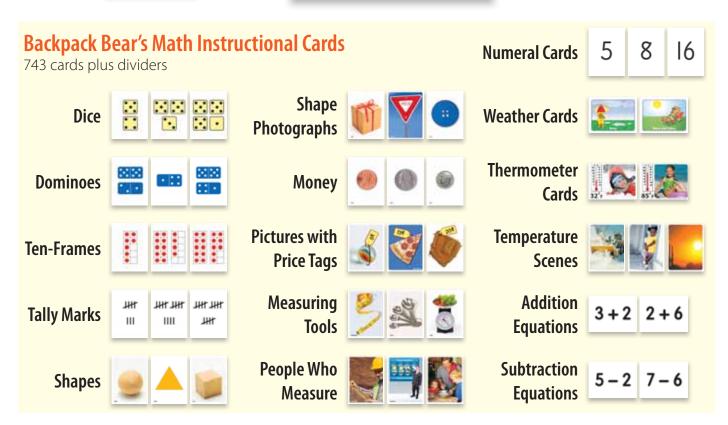
These *Wall Cards* each include the numeral, the number word, and blocks which clearly illustrate place value.

# Backpack Bear's Math Games

This game set has 12 different board games, plus number and money Bingo cards, and a large ten-frame and five-frame! It also includes 6 different spinners and 6 playing pieces. Your child will have hours of fun learning math while playing these games.

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8" x 10" edition for homeschool

# Treasure Hunt!

#### **Backpack Bear's Treasure Hunt**

Find shapes on each page.

#### **Backpack Bear's Math Book**

#### Backpack Bear's Math Book is a

reference book that your child will revisit throughout the year as he or she learns new mathematical concepts. It includes: Shapes, Money, Numbers, Position Words, Sorting, Measurement, Addition, Subtraction, and a Math Dictionary!



#### Where Oh Where Is **Backpack Bear?**

Backpack Bear is hiding. Where can he be? (a book about position words)



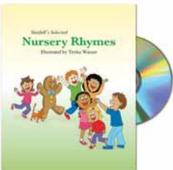
#### **Thermometers**

Learn about many different kinds of thermometers



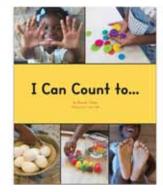
#### **Estimate with Backpack Bear**

Practice making smart guesses.



#### Starfall's Selected **Nursery Rhymes**

Book and audio CD



#### I Can Count to...

Learn the numbers 10 to 20.



#### **Starfall Math Melodies**

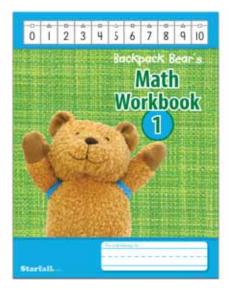
Audio CD and lyric book.

## Media

Starfall.com is an interactive, visual, auditory, and kinesthetic technology that enables children to independently preview, explore, practice and review skills. For educators, the Parent-Teacher Center (at teach.starfall.com) is stocked with practice page generators, resources, and supplementary materials. The lesson plans are also available for download.

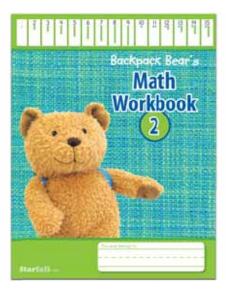


## **Student Materials**



# Backpack Bear's Math Workbook 1

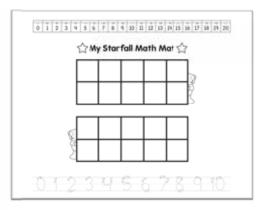
- Numbers 1-20
- Patterns
- Measurement
- Shapes
- Subitizing and math bonds ... and more



# Backpack Bear's Math Workbook 2

- Number review
- Addition
- Subtraction
- Measurement

... and more



#### My Starfall Math Mat (Downloadable)

This Math Mat helps define the working space for your child, and includes a number line, ten frames and numerals for reference.



#### **Math Bag**

The Math Bag is used to store your child's math manipulatives.



# Scope and Sequence

#### Semester 1

| Unit                                      | Focus   |   |  |
|---|---|---|--|
| Unit 1<br>Let's Get Started               | <ul> <li>Introduce Daily Routines:</li> <li>Calendar</li> <li>Graphing weather</li> <li>Number Line (including negative numbers)</li> <li>Place value procedure</li> <li>Hundredth Day chart</li> </ul> | Introduce lines and angles Measurement (length) Preview numbers 1-5 Preview 2D shapes Introduce patterns  |  |
| Unit 2 Numbers Everywhere                 | Magic Math Moment Introduce Equations Introduce Learning Centers "How Many Days Have We Been in School?" Number Focus: 1-8 Counting on from a given number Preview one-to-one correspondence            | What number is missing? Introduce ten-frames 2D shape attributes One less/one more Greater than/Less than Creating patterns                         |  |
| Unit 3 Fun with Numbers                   | Number focus: 9, 0, 10 Sorting by attributes Extending patterns Polygons Measurement (length/height) Ordinal numbers  | Story problems One-to-one correspondence Place Value - Bundles of Ten Introduce Positive/Negative Numbers and the Meaning of Zero One more/one less |  |
| Unit 4 Shapes & Coins                     | Introduce the penny, nickel, & dime<br>Creating and combining shapes<br>Positional words<br>Graphing shapes and coin tosses<br>Greater than/Less than   | Compare coins Working with five- and ten-frames Solving for missing numbers Equations   |  |
| Unit 5 Troublesome Teens                  | Number focus: 11-20 Tens and ones Before and after Identifying numbers out of sequence  | Writing equations Money equivalency Story problems Estimation   |  |
| Unit 6 2D & 3D Shapes                     | Properties of 3D shapes: faces, vertices, edges<br>Compare/contrast 2D and 3D shapes<br>Review 2D shape properties<br>Math Nets<br>Graphing   | Composing numbers using ten-frames Roll, Stack, Slide experiments Measurement (height) Extend patterns Estimation                                   |  |
| <b>Unit 7</b> Subitizing and Number Bonds | Subitizing Number bonds Odd and even numbers Commutative Property of Addition Counting on from a given number   | Number Representations 1 - 10 Review penny, nickel, dime and their values Sorting Number combinations Arrays  |  |

#### Semester 2

| Unit  | Unit Focus   |   |  |
|---|--|---|--|
| <b>Unit 8</b> Addition                                | Solving for x Strategies for solving story problems Writing addition equations Story maps Review money   | Applying knowledge of money to addition (shopping) Ordering numbers Introduce operation   |  |
| <b>Unit 9</b> Subtraction                             | Introduce Subtraction  Decomposing numbers in different ways  Subtraction equations  Story problems  | Story maps Subtraction strategies Subtraction with coins  |  |
| <b>Unit 10</b> Addition & Subtraction Review          | Addition & subtraction strategies Story problems Equations   | Adding & subtracting with money   |  |
| Unit 11 Basic Measurement                             | Measure length and height Order by length Inclines Perimeter/Area  | Capacity Measuring tools Introduce fractions Estimation   |  |
| Unit 12 Place Value, Number Collections, Review 10-20 | Writing equations horizontally and vertically Review place value using coins Create collections of 2s, 5s, 10s Place value to 100 Counting on Story problems | Review coin values Introduce the quarter Create representations of a given number Review and practice Tens and Ones Estimation  |  |
| Unit 13 Measurement                                   | Measurement review Review length, height, & area Probability Estimation Weight and Capacity  | Time and Temperature:  Introduce thermometers  Effects of time on temperature (seasons, weather, etc)  Telling time to the hour  Relate time to events  Sequence events |  |
| Unit 14 Cumulative Review                             | Review "Our Math Dictionary"  Estimation  Composing and Decomposing Numbers 6-10  Addition Game Day  Position Words  Subtraction Ball Toss                   | Patterns Money Operations More than / Less than Shapes Graphing   |  |
| Supplement  | Hundredth Day Plans  |   |  |

#### Standards & Benchmarks

#### Starfall Standards

| Counting & Cardinality |   |  |
|------------------------|---|--|
| CC.1                   | Identify numerals out of sequence.                                  |  |
| CC.2                   | Supply missing number in a sequence.                                |  |
| CC.3                   | Count backward from a given number.                                 |  |
| CC.4                   | Count to 100 by twos and by fives.                                  |  |
| CC.5                   | Identify ordinal numbers.   |  |
| CC.6                   | Identify odd and even numbers.                                      |  |
| CC.7                   | Compare two numbers between 1 and 10 presented as written numerals. |  |

#### Money

M.1 Identify the value of coins.

#### **Operations & Algebraic Thinking**

**OA.1** Identify, describe, or extend simple patterns.

#### **Measurement & Data**

MD.1 Identify and use time measurement tools.

MD.2 Use and interpret graphs.

**MD.3** Measure using nonstandard units.

#### **Estimation**

**E.1** Understand the meaning of estimation.

**E.2** Make predictions to determine reasonable answers.

#### Common Core Standards

Progress on the following standards and benchmarks will be made through the course of this unit. For your convenience, applicable learning outcomes are listed alongside each lesson in summary form.

| Coun | Counting & Cardinality Inline Summary Form  |   |
|------|---|---|
| A.1  | Count to 100 by ones and by tens.   | Count to 100 by ones and by tens.                               |
| A.2  | Count forward beginning from a given number within the known sequence (instead of having to begin at 1).  | Count forward from a given number.                              |
| A.3  | Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).  | Write numbers from 0 to 20.                                     |
| B.4  | Understand the relationship between numbers and quantities; connect counting to cardinality.  | Understand the relationship between numbers and quantities.     |
| B.4a | When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.   | Say number names in order, pairing each object with one number. |
| B.4b | Understand that the last number name said tells the number of objects counted.  The number of objects is the same regardless of their arrangement or the order in which they were counted.  | The last number counted tells the total number of objects.      |
| B.4c | Understand that each successive number name refers to a quantity that is one larger.  | Each successive number refers to one more.                      |
| B.5  | Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects. | Count to answer "how many?" questions                           |
| C.6  | Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.  | ldentify greater than,<br>less than, and equal to.              |
| C.7  | Compare two numbers between 1 and 10 presented as written numerals.   | Compare two numbers as written numerals.                        |

#### Common Core Standards (Continued)

| Oper | ations & Algebraic Thinking  | Inline Summary Form  |
|------|--|--|
| A.1  | Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.                              | Represent addition and subtraction in a variety of ways.     |
| A.2  | Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.   | Solve word problems with addition and subtraction within 10. |
| A.3  | Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$ ). | Decompose numbers<br>less than 11.                           |
| A.4  | For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.                              | For 1-9, find the number that makes 10.                      |
| A.5  | Fluently add and subtract within 5.  | Fluently add and subtract within 5.                          |

#### **Number & Operations in Base Ten**

#### **Inline Summary Form**

**A.1** Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., 18 = 10 + 8); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

*Understand numbers* 11-19 are ten ones plus more ones.

| Meas | urement & Data  | Inline Summary Form                                     |
|------|---|---|
| A.1  | Describe measurable attributes of objects, such as length or weight.<br>Describe several measurable attributes of a single object.  | Describe measurable attributes of objects.              |
| A.2  | Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter. | Compare two objects with a common measurable attribute. |
| B.3  | Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.   | Classify, count, and sort objects.                      |

| Geon | netry  | Inline Summary Form   |
|------|--|---|
| A.1  | Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.  | Describe objects<br>using shapes and<br>relative positions. |
| A.2  | Correctly name shapes regardless of their orientations or overall size.  | Correctly name shapes.                                      |
| A.3  | Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").  | Identify shapes as two-<br>or three-dimensional.            |
| B.4  | Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length). | Analyze and compare two-and three-dimensional shapes.       |
| B.5  | Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.   | Build and/or<br>draw shapes.                                |
| B.6  | Compose simple shapes to form larger shapes. For example, "Can you join these two triangles with full sides touching to make a rectangle?"   | Compose simple shapes<br>to form larger shapes.             |

# Frequently Asked Questions

#### What kind of program design does Starfall use?

Starfall Kindergarten Mathematics uses a spiral approach in which learning is spread out over time, rather than concentrated in short time periods. Material is revisited multiple times throughout the curriculum. This is a contrast to most traditional math programs in which skills are "massed" or "blocked," and learning of specific concepts is concentrated.

#### Why is a spiral approach more effective than a massed approach?

Spiraling helps learners develop connections over time, which creates more robust pathways for recalling information. Using multiple strategically-spaced lessons produces deeper, more conceptual learning. Some feel that "massing" leads to higher performance, which may be true in the short term. However, this is not true if the goal is long-term learning.

#### Do you use the Common Core State Standards?

Yes, all of the Common Core State Standards are used, but not exclusively. Since there are some areas that Starfall feels are not represented adequately in the Common Core, we developed an additional set of Starfall standards and benchmarks to augment the existing standards.

#### Do you address Unit Planning?

Each unit begins with a unit summary. The summary includes a description of the unit, Essential Questions, Enduring Understandings, and a list of the standards addressed during the unit. Because Starfall Kindergarten Mathematics is spiraled in nature, the overviews differ slightly from traditional Unit Plans, where there is one focus and every plan centers around that main focus. Since many objectives are addressed during each unit, there is a core focus supplemented with a variety of different concepts throughout the unit.

#### Why did you divide your curriculum into Daily Routines and a Lesson?

The Daily Routines provide regular practice using numbers as they apply realistically in our everyday lives. These routines are typically done at the beginning of the day, rather than linked to the actual math lesson. Starfall has used this opportunity to build on such routines to practice skills the children are learning throughout the year. Additional routines such as attendance, lunch count, and birthday graphs are not highlighted in the program, but they also offer opportunities to practice math skills in a practical way.

- Calendar Routine provides practice with ordering numbers, reading a graph, adding "one more," practicing equivalent sets, ordinal numbers, and the list goes on!
- Weather Routine provides an experience with a different way to graph numbers through the use of tally marks. The children learn and practice predicting, estimating, more than, less than, equal, and probability as they chart the daily weather.
- The Number Line Routine establishes at an early age that numbers do not begin at zero but are infinite in both directions. The premise is that children will use the number line as one way to chart how many days they have been in school. Its uses are unlimited: counting forward from a given number, counting backward from a given number, skip counting by 2s, 5s, 10s, 25s, 50s, ordering numbers, and adding one more.
- Place Value Routine is linked to the Number Line routine. This is probably the single most important routine in which a child learns, from a very young age, that our number system contains only 0-9 digits and then regrouping is necessary to form additional numerals. Your child will "bundle" every ten days, setting the stage for understanding place value.
- Hundredth Day Chart also reinforces number order and intuitively sets up a visual for how numbers are organized by groups. It provides another experience of how to chart numbers.

As the year progresses, you will find additional skills linked to each of these routines to extend and expand upon its purpose.

The Daily Lesson provides a focus on a particular skill. Each lesson includes:

- Magic Math Moment
- Introduction to and/or review of the skill
- Practice using the skill
- Related activity often including cooperative learning strategies
- Formative Assessment

The Magic Math Moments are more than warm up activities. They are short activities that reinforce concepts and are not always related to the lesson, but put into practice the skills the children have learned or preview skills they will learn. Magic Math Moments are springboards for the children to interact with mathematics.

#### Why does the first Unit look different from the other Units?

Unit 1 contains lessons that will be conducted by day for the first ten days. These lessons provide an opportunity to establish the daily routines and link activities related to the number of days the children have been in school. It is a preview of numbers and shapes, both of which will be developed more fully throughout the curriculum.

#### The lesson format shows four days of instruction and one day of learning centers. Should learning centers always take place on a Friday?

Not necessarily. The lessons are set up in week/day format for organizational purposes. After each set of four lessons there is a reinforcement and assessment day with Learning Centers. This may fall on any day of the week. The Learning Centers are designed to review and practice skills taught in the previous four sessions. They include two activities, plus a computer center, and a teacher-directed activity combined with a Summative Assessment. The children rotate approximately every 12-15 minutes. If you have flexibility in your schedule, consider allowing additional time on learning center days. Starfall does not supply math manipulatives, and the Learning Centers were created with this in mind. You may substitute your own materials in place of those suggested.

#### How can I include Learning Centers with my child at home?

Your unique situation presents many opportunities to provide creative learning experiences for your child. We encourage you to create your own centers to include activities that a classroom can not provide, such as cooking, gardening, or craft projects.

Another modification is to contact other home schooling parents and create a Learning Center day where several children can play together in one of the centers. This also provides wonderful opportunities for you child to experience cooperative learning.

#### How is technology integrated?

Starfall.com is used throughout the program. The math activities provide practice and reinforcement for each of the concepts introduced. The Teachers' Lounge on Starfall.com provides support materials for the program.

#### Can I access Starfall.com on an iPad or Android device?

To access Starfall.com on a mobile device, search for and download the Starfall FREE app from the App Store (Apple) or Google Play (Android). After downloading the app, activate it and enter the email address and password for your Starfall.com account.

#### How does Starfall address assessments?

Starfall Math includes three types of assessments:

#### Entry, Mid-year, and Exit Assessments

(The Entry Assessment should be administered individually during the first two weeks of school.)

#### Formative Assessments

(Formative Assessments are conducted at the conclusion of each daily lesson.)

#### Summative Assessments

(Summative Assessments are conducted weekly during each Learning Center session.)

#### *Is literature incorporated in the Starfall Math program?*

Literature for the Starfall Math program includes:

- Where Oh Where Is Backpack Bear
- Estimate with Backpack Bear
- I Can Count to...
- Backpack Bear's Treasure Hunt
- Thermometers

A list of additional books that are suitable for a variety of mathematical concepts is provided in the introduction of each unit. Incorporating literature at ANY time is always encouraged.

#### Do you use Math Journals?

Starfall does not specifically address math journals in the lessons as this is something that we think should be left to the individual teacher's discretion. However, we certainly encourage the use of math journals and do reference and give suggestions for their use in the second semester.

#### Does Starfall Math include everything needed for a successful Math program?

Starfall has created a framework and scope and sequence that ensure that children will encounter all of the kindergarten concepts needed to be successful mathematicians. The teacher is the critical component of the program. An effective math teacher is continually assessing the progress of the child. Some children will need more reinforcement than others. That's where you come in. For example you might:

- Add an additional session between two given sessions. Develop an activity, or introduce a specific game you want your child to learn to review skills as needed.
- Include a literature selection and develop a lesson focused around the story.

So you see, not all of the work is done for you! You, and only you, know the needs of your child. It is as important to provide modification to the program to meet the needs of your child as it is to follow the outlined lessons.