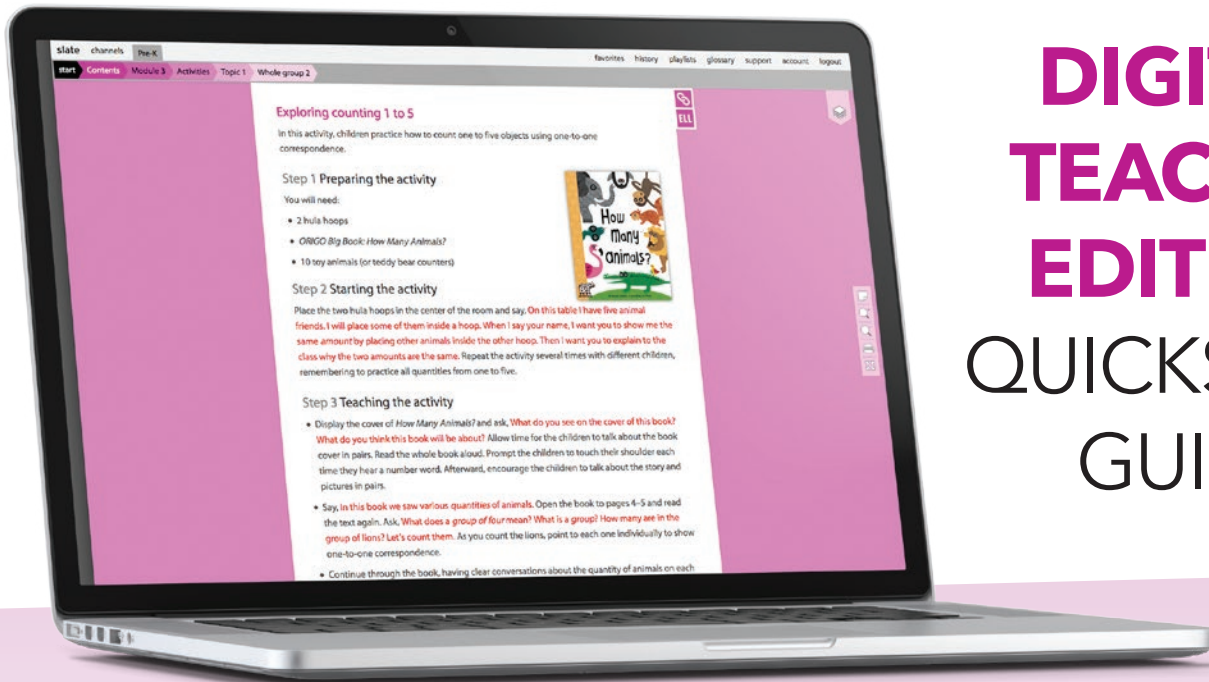


ORIGO
STEPPING STONES
COMPREHENSIVE MATHEMATICS

PRE-K



**DIGITAL
TEACHER
EDITION**
QUICKSTART
GUIDE

Introduction

ORIGO Stepping Stones Pre-K is a comprehensive curriculum that prepares children to be adaptive, productive thinkers, lifelong learners, and innovative members of society. This program gives young children the best possible preparation for their years of learning and using mathematics.

ORIGO Stepping Stones Pre-K:

- is a comprehensive Pre-K mathematics program that best prepares children on their journey to **kindergarten readiness**
- actively engages children in learning mathematics so they can **construct concepts and develop skills** by interacting with real-world situations, classroom materials, and other children in whole group and small group settings
- provides **vocabulary-rich** learning activities where each child can acquire mathematics in a natural, social, and non-threatening way with peers
- engages children with **play-based** and **arts-integrated** activities, where they acquire the mathematical concepts necessary to excel in higher elementary grades
- has a **carefully designed scope and sequence** written to promote fluency of skills and a deep, balanced understanding of mathematical concepts
- provides **social and emotional supports** to ensure a community-based learning environment is cultivated and honored.

Digital Teacher Edition Quickstart Guide Contents

This guide will quickly get you started using *ORIGO Slate*, our online digital platform. The following pages will navigate you through the *Stepping Stones Pre-K* instruction.

Navigating <i>Slate</i>	2
Navigating <i>Stepping Stones Pre-K</i>	2
Prerequisite Activities	3
Teaching a Topic	4
Maintaining Concepts and Skills	7
Assessment	8
Program Research and Family Connections	9

System Requirements

- *Slate* works best with Google Chrome or Firefox.
- Clear your internet browser history/cache before you log in to every *Slate* session. Search your internet browser's help section to find out how.

Digital Teacher Edition Quickstart Guide

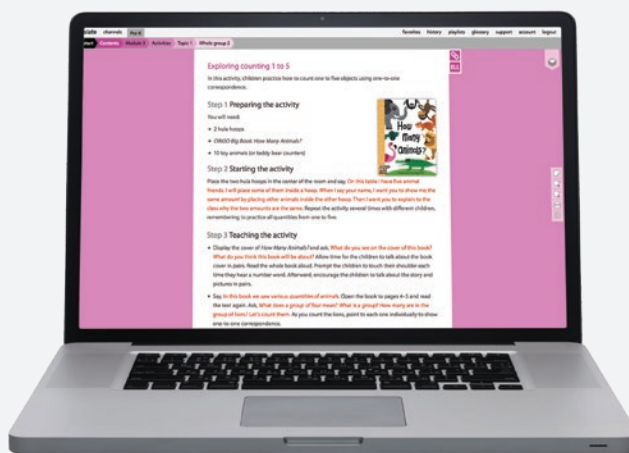
Stepping Stones Pre-K is delivered online to give teachers one central location to access all their lesson plans and teaching tools. Each Digital Teacher Edition gives instant access to all content for Pre-K. One of the greatest benefits of a digital delivery platform is the ease with which ORIGO Education can immediately update content, offer digital updates, and/or provide enhancements.

THE ONLINE CONTENT IN **STEPPING STONES PRE-K** INCLUDES...

MATHEMATICS

Each module begins with the essential background information you need to get started. Included in each module are:

- Focus
- Research into practice
- Learning targets
- English language learners
- Vocabulary development
- Newsletters for home



LESSONS

Included in each of the 12 modules are:

- 2 whole group activities
- 2 small group activities
- 2 learning centers
- 2 community centers

***Stepping Stones Pre-K* is correlated to the NAEYC and Head Start Standards.**

ASSESSMENT

Multiple methods to assess understanding and skills are provided. These include:

- In-class observations
- Portfolio samples
- Individual interviews

MORE...

Teachers looking for guidance on how to provide a smooth transition into *Stepping Stones Pre-K* can access prerequisite activities that include:

- Reflection time
- Community centers
- Attribute of color

Login Page

To access *Stepping Stones Pre-K* you must have a *Slate* account.

1. If you already have a *Slate* account, go to origoslate.com. Enter your **username** and **password** in the fields provided and click login. If appropriate, check the **Remember Me** box.
2. To create an account, go to origoslate.com, click on **Create a FREE Slate Account** and complete the form.

Navigating *Slate*

Once you have logged in, you can select the *Stepping Stones Pre-K* channel from the drop-down menu.

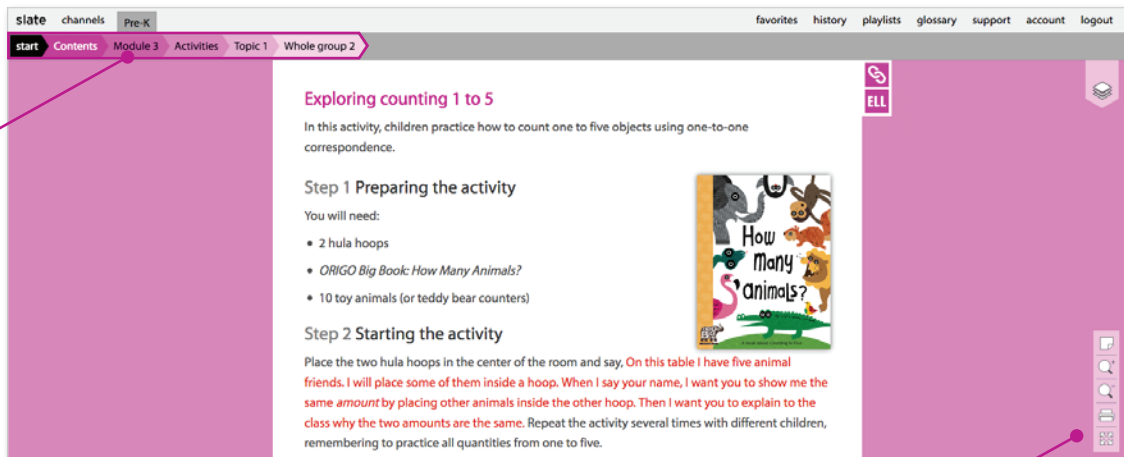
Channels – access all online resources (all resources not grayed out are available to be explored).








Navigating *Stepping Stones Pre-K*

Once you have selected the *Stepping Stones Pre-K* channel, you are ready to review the program!

Breadcrumb – shows the path of your navigation. Each move along the path allows you to select your contents, module, activities, topics, centers, etc. Click any part of the breadcrumb to go back to that page or menu.

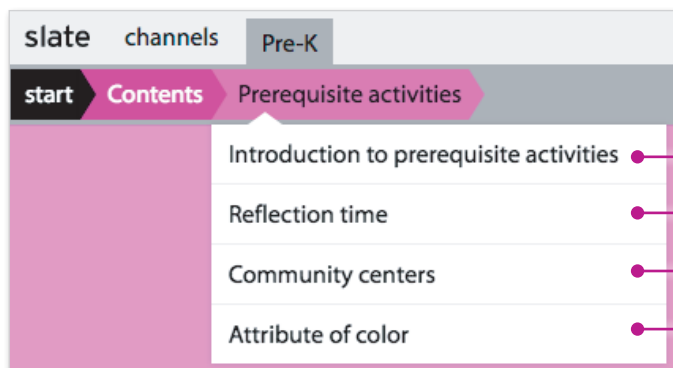


Functions

-  **Sticky note** – click to create a quick note that is saved permanently to the page
-  **Zoom in** – click to zoom in on the page
-  **Zoom out** – click to zoom out on the page
-  **Print** – click to print the lesson notes
-  **Full screen** – click to toggle between normal and full screen views

Starting *Stepping Stones Pre-K* – Prerequisite Activities

Stepping Stones Pre-K contains a number of specific activities for children to engage in to ensure a solid foundation of mathematics is established.



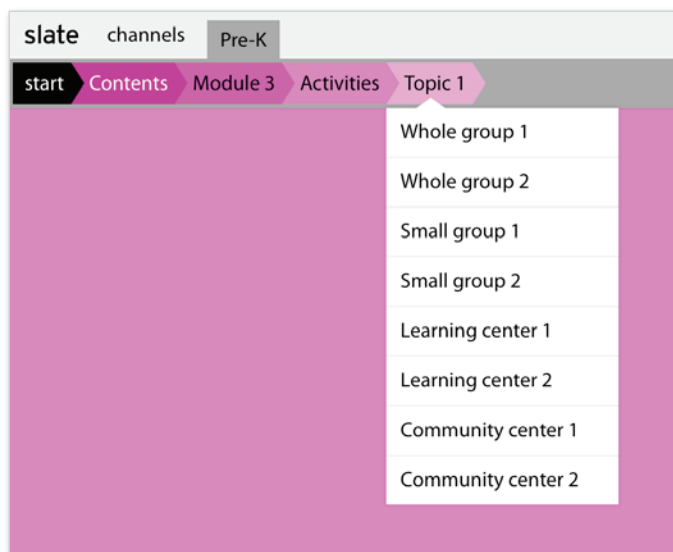
Introduction to prerequisite activities – suggested progression of prerequisite activities.

Reflection time – essential information for building a community of learners.

Community centers – developmental centers necessary for program success.

Attribute of color – activities that introduce how purposeful play should be used in the centers.

Navigating a Topic



Each module consists of two or more topics. The duration of each topic should be between three and five days, depending on the developmental level of the children. Each topic includes two whole group activities, two related small group activities, two learning centers, and two community centers.

Activity	Format	Suggested Duration
Whole group	Teacher-directed with the entire group	20 minutes
Small group	Teacher-directed with a small group of 4–6 children	15 minutes
Learning center	Student-directed and teacher-facilitated with a small group of 4–6 children	15 minutes
Community center	Student-directed independently or in a cooperative group. These centers are available for children to explore at will for the duration of the topic.	15 minutes

Teaching a Topic – Whole Group

To effectively teach using the *Stepping Stones Pre-K* program, it is best practice to use the Digital Teacher Edition in conjunction with the teacher resources. A *Stepping Stones Pre-K* lesson follows a clear structure.

DIGITAL TEACHER EDITION

Pre-K, Module 3, Topic 1,
 Whole Group 2

1. **Preparing the activity** – teachers use this information to ensure all materials required for the activity are at hand.
2. **Starting the activity** – instructions for the teacher to either review previously learned content or launch the current lesson with children.
3. **Teaching the activity** – provides guidelines and suggestions for interactive discourse during a minds-on experience for children.
4. **Reflecting on the work** – prompts teachers to engage children in Reflection Time to ensure a family environment is nurtured.

start Contents Module 3 Activities Topic 1 Whole group 2

Exploring counting 1 to 5

In this activity, children practice how to count one to five objects using one-to-one correspondence.

Step 1 Preparing the activity

You will need:

- 2 hula hoops
- ORIGO Big Book: *How Many Animals?*
- 10 toy animals (or teddy bear counters)

Step 2 Starting the activity

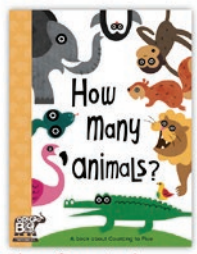
Place the two hula hoops in the center of the room and say, **On this table I have five animal friends. I will place some of them inside a hoop. When I say your name, I want you to show me the same amount by placing other animals inside the other hoop. Then I want you to explain to the class why the two amounts are the same.** Repeat the activity several times with different children, remembering to practice all quantities from one to five.

Step 3 Teaching the activity

- Display the cover of *How Many Animals?* and ask, **What do you see on the cover of this book? What do you think this book will be about?** Allow time for the children to talk about the book cover in pairs. Read the whole book aloud. Prompt the children to touch their shoulder each time they hear a number word. Afterward, encourage the children to talk about the story and pictures in pairs.
- Say, **In this book we saw various quantities of animals.** Open the book to pages 4–5 and read the text again. Ask, **What does a group of four mean? What is a group? How many are in the group of lions? Let's count them.** As you count the lions, point to each one individually to show one-to-one correspondence.
- Continue through the book, having clear conversations about the quantity of animals on each page. Ensure children understand the quantity on each page by allowing them to talk in pairs about the new language.

Step 4 Reflecting on the work

Say, **Today we counted from one to five animals.** Prompt children to sit in a circle for Reflection Time. Encourage children to share their reflections with the group. Provide an example if necessary.





Identifies the learning that may be observed.



Identifies the learning that is evidenced by children's work samples.



Provides important information for the teacher about the activity.



Provides suggestions and accommodations to support English language learners during the activity.



Correlates lessons to NAEYC and Head Start standards.

Teaching a Topic – Small Group Activities

Stepping Stones Pre-K offers teacher-directed small group activities that allow the children to understand the specific mathematical concept or skill in more depth.

Module 3, Topic 2, Small group 2



Start Contents Module 3 Activities Topic 2 Small group 2

Blowing bubbles

In this activity, children practice counting and matching a quantity shown in a picture.

Preparation

You will need:

- 1 ORIGO Big Cube
- ORIGO Big Cubes Cards: set J

Each child will need:

- bubble mixture
- bubble wand
- napkins

Activity

Say, Today we are going to blow bubbles. Raise your hand if you have blown bubbles before. I am going to show you how I take a breath to blow bubbles. Demonstrate the activity and allow the children to practice. Say, When it is your turn, you roll this cube. The number you roll will be the quantity of breaths we will take to blow bubbles. If you roll the wildcard symbol, you can choose any number from one to five. Demonstrate. Encourage the children to identify whether the number of breaths they took to blow bubbles matches the number on the cube. Allow time for the children to engage in the activity for several rounds. As each round progresses, discuss how each group of breaths is showing a number quantity.

ELL Activity in action



Teaching a Topic – Learning Centers and Community Centers

Stepping Stones Pre-K offers two more options for children to explore mathematical concepts and skills.

The student-directed learning centers give the teacher a great opportunity to listen attentively and observe the children working collaboratively to authentically assess the children’s learning needs.

The independent play-based community centers are intended to be available for the duration of the topic and to be used freely during this time.

Hit the target
 In this activity, children select the number of cubes that match a quantity on the target.

Preparation
 Each group of children will need:

- 1 set of domino dot cards 1 to 5 from *The Math Case: Green set 5*
- 1 small beanbag or similar for tossing

Each child will need:

- access to connecting cubes
- 1 plastic cup

Activity
 Place the domino cards in an array on the floor. Say, *You are going to fill your cup with cubes. When it is your turn, you toss the beanbag onto a domino card. Stand about one foot from the target to demonstrate. Then say, Look at the number of dots your toss landed on and place the same number of cubes inside your cup. Keep playing until someone in the group has filled their cup. During the activity, encourage children to count aloud to practice their stable-order counting skills and cardinality.*

Activity in action

Module 3, Topic 2, Learning center 1



Module 3, Topic 2, Community center 1

Monster faces
 In this activity, children create a monster face by matching the pictorial quantity selected with the number of facial features. Before the activity, create a few examples of different monster faces for children to use as a reference.

Preparation
 Each group of children will need:

- various crafting materials to make monster faces
- 1 set of domino dot cards from *The Math Case: Green set 5*

Each child will need:

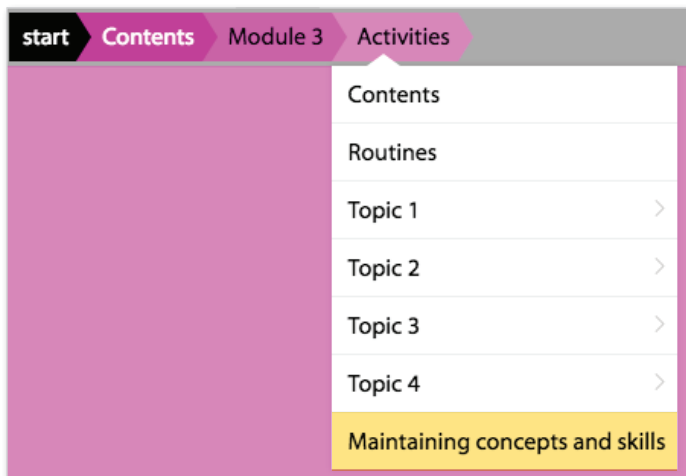
- 1 paper plate
- scissors and glue

Activity
 In the Craft Center, display your monster face models for the children to see. Say, *On this monster face there are (three noses) and (four eyes). On this monster face there is (one eye) and (four mouths). You are going to create your monster face to match the quantities on the cards. First you turn over one card, and then you choose to show that many eyes, ears, noses, or mouths. Shuffle the cards and place them facedown in a pile. Then, one at a time, have the children turn over a card and use that quantity as the (eyes) on their monster face. They then turn over the next card for the next facial feature. Children should create the following monster features: eyes, nose/s, mouth/s, and ear/s. Display the monster faces around the classroom.*

Activity exemplars

Maintaining Concepts and Skills

Ongoing practice is an essential element of the scope and sequence of *Stepping Stones Pre-K*. It is an integral part of the learning experiences children need to meet the expected standards by the end of the school year.

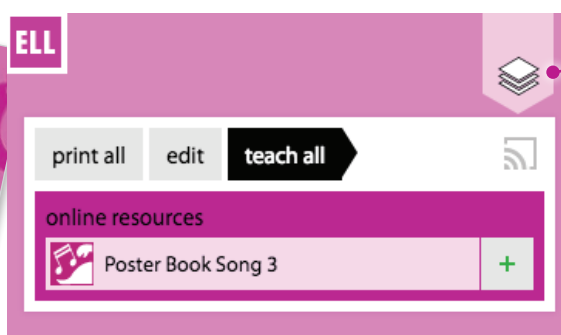


Maintaining concepts and skills – provides activities to maintain concepts and skills from the current and previous modules.

One activity is provided for each of the 12 modules so children can practice a challenging skill learned in the same module. This mirroring of a previous task is intentional, as the children will already know how to do the activity, and will be able to focus on the concept or skill being practiced.

Additional activities in Modules 3, 6, 9, and 12 offer the opportunity to revisit previously taught concepts and skills. These activities are important, as they require the children to recall and work with information over the long term. They allow educators to see if each child has retained certain concepts and skills necessary for future modules.

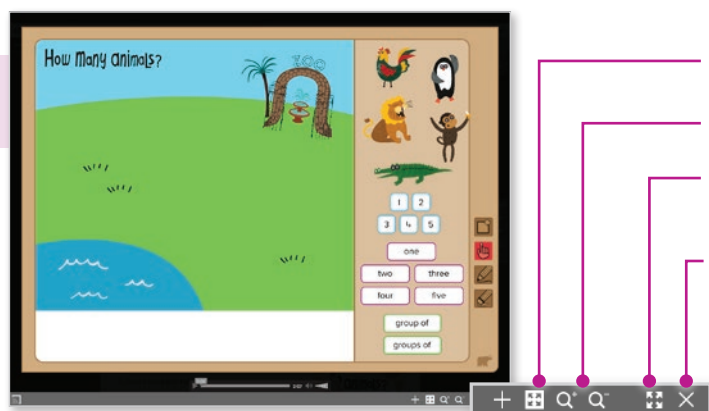
Digital Enhancements – *Poster Book Songs* and *Big Book Tools*



Resources – click to access specific resources for the activity

Module 3, Topic 1,
Whole Group 1

Module 3, Topic 4,
Small Group 2



Fit to window

Zoom in/Zoom out – click to zoom in/out

Toggle full screen – click to toggle between full screen and reduced screen views

Close viewer – click to close the viewer

Assessment

Assessment provides teachers with valuable information about the children’s performance. *Stepping Stones Pre-K* provides many assessment options as shown below.

Overview – provides an at-a-glance view of the assessment options for the module.

Observations – assessments based on classroom observations that can be used to make informed decisions to guide instruction.

Portfolio samples – concrete assessments that can be collected and used to show growth over time.

Interviews – verbal assessments used to authentically assess the child’s understanding.

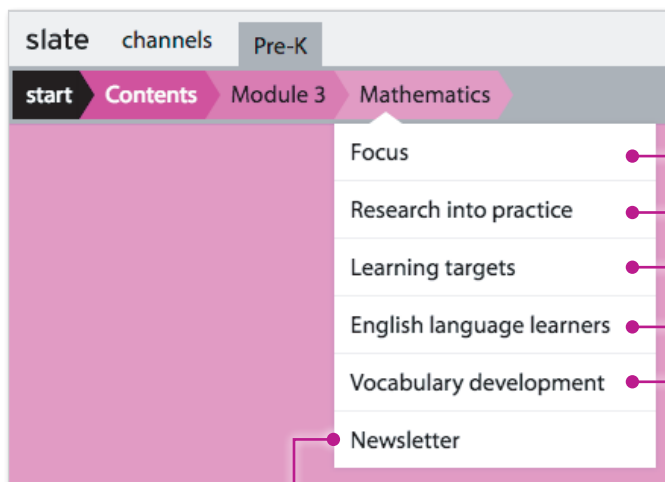
Recording – provides options for recording student data.

Related Children’s Literature

Stepping Stones Pre-K understands and believes that language is the foundation for early mathematical success. The **Related children’s literature** tab provides a list of developmentally appropriate picture books relating to the module’s learning targets.

Program Research and Family Connections

Stepping Stones Pre-K is based on sound early childhood research and best practice. The program is consistent with the developmental learning pathway of young children, as proven by *Stepping Stones Pre-K*'s comprehensive scope and sequence.



Focus – the mathematical background of the module with related professional learning videos.

Research into practice – research supporting philosophy, mathematical content, and instructional pedagogy.

Learning targets – specific and strategic standards taught and assessed in the program.

English language learners – provides targeted suggestions to support English language learners throughout the module.

Vocabulary development – the mathematical vocabulary used throughout the module; bold text indicates a new term.

Newsletter – a letter for families explaining the mathematics being taught in the module, and ways to help the child at home.

NEWSLETTER

Pre-K Module 3

ORIGO

STEPPING STONES PRE-K

Learning Focus—Working with Numbers 1 to 5
 This module gives your child experiences in rote counting to 5, then 10, counting up to 5 objects in a group, instantly recognizing (subitizing) up to 5 objects in a group, and recognizing and reading number symbols 1 to 5.

Rote count from 1 to 5, then 1 to 10
 Children practice saying the numbers 1 to 5, then 1 to 10, in counting order.

Count up to 5 objects in a group
 Many children come to school already able to count. However, to develop a good understanding of number as quantity, children need to encounter quantities in many different ways. Strong counting skills are required before moving on to more complex number concepts, such as addition and subtraction.

Encourage your child to count the number of plates, napkins, glasses, and forks (up to five) they use when setting the table. At the grocery store, ask your child to count the fruits or vegetables (again, up to five) you place inside your cart.

There are many animals in the lake. Can you count each group they make?

The ORIGO Big Book: *How Many Animals?* is used to introduce counting 1 to 5 in a group.

Subitize up to 5 objects in a group
 Subitizing means visually recognizing the total number in a group without counting the items in that group one by one. This ability is critical for supporting addition and subtraction strategies later in elementary school.

In a standard deck of cards, take out the cards that represent the quantities one to five. Use them to play games including *go fish* and *memory* with your child to help them recognize quantities by sight.

Recognize and read numerals 1 to 5
 For children to understand what a number represents, they must first be familiar with the quantity aspect of number. This follows from a natural progression of counting objects, to seeing pictorial quantities, to recognizing dot arrangements, to eventually linking these quantities to the number symbol, or numeral.

Please help by sending the following:
 Child-friendly magazines, catalogs, and mailers

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Program Map

