

Unit 3  Week 4	<b>Small Groups: Down East in the Ocean Families</b> Low Support	Math SG 1	Standards: MELDS.M.CCC.PS.8 MELDS.M.MD.PS.10
---	---	--------------	--



**Guiding Math Ideas:**

- Quantity
- Growing in Classification Skills: Attribute identification and comparison

**Math Concepts from Unit Learning Progressions:**

- Beginning to count from 1 onwards when asked how many.
- Directly comparing 2 or more items on an attribute

<b>Materials:</b> <ul style="list-style-type: none"> <li>● <i>Down East in the Ocean</i> by Peter Roop</li> <li>● bucket of Sea animals from Math Materials</li> <li>● plastic or wooden numerals</li> <li>● sticky notes and pencils or markers</li> </ul>	<b>Math Vocabulary:</b>
---	-------------------------

**Preparation:**

Prior to facilitating this small group, be sure to conduct the chant from the book *Down East in the Ocean*. (to *Over in the Meadow* rhythm) in SWPLM (Week 4).

Place book in small group area along with sea animals. Identify pages of text that represent animals that are NOT included in the bucket of Sea animals mark them with a post-it (such as the ospreys).

**Procedure:**

Read the book with the children. Chant along with the children in call and response fashion *Swim* (teacher) -- *I Swim* (children) as in SWPLM.

Introduce the activity.

*This book is about animals in Maine that live in or near the ocean. There is a mommy and her children on each page- a family. Some of you might have been to the ocean and seen some of these animals.*

*We have a bucket of ocean animals and some numbers. Let's dump these animals out on our table and make some ocean families.*

Children play with the manipulatives, making groups and sorting. There are lots of animals. Help children decide which type of animal they will collect in their group, if needed.

Introduce the plastic numerals and encourage children to count their groups and place a numeral beside them. Be sure to ask the question “*How many* {lobsters, fish, crabs} do you have in your group several times during the process. Observe whether children count on as their group grows, or whether they return to the number 1 each time when counting the animals. Model writing the number and putting it on a sticky-note beside each group. Some children may also want to write the number.

Compare sizes. While these types of manipulatives are not always “true to size,” find two different ocean animals and compare them for size. In addition, refer to the ocean families in the book for the larger mommy and the smaller children on each set of pages and ask questions, and compare animal types- Which do you think is bigger- a jellyfish or a seal?

Compare the plastic animals with the book. Go through the pages with the children and match with the Maine animals. There are animals in the book that are not included in the bucket of animals, and there are animals in the bucket that are not in the book. Talk to children about the wide variety of animals that live on or near the ocean.

As time permits, count each child’s group, asking “*How many do you have all together?*”

### **Strategies to Provoke Math Thinking:**

- By this time in the year, some children are *counting on* as their group of animals grows. Many children start over at 1 and recount the group each time. Both counting strategies are developmentally appropriate for preschool children. These differing counting strategies are apparent as children play games (featured in Unit 4). Model counting on, but support counting over from 1 for those children still working on 1:1 correspondence and cardinality.
- Key math questions: The importance of asking questions that provoke math thinking is one of the simplest, but most effective teaching strategies. Do a self-check- are these questions a part of your daily practices?
  - *How many?*
  - *How many do you have **all together?***
  - *How do you know? [used when children answer a How Many question]*
  - *Show me how you know.*

These questions are essential strategies for building children’s independent logic and thinking skills as they growing in understanding of the abstract concept of number and quantity.

### **Documentation:**

Take notes about children who are already counting on. They will be ready to count dissimilar objects, and to explore the stability of sets. For children who are starting over at one, provide more activities in 1:1 correspondence and matching, and focus on small groups of under 5 objects.

***Provocation:***

- Place plastic animals in the water table.
- Encourage children to share any stories of trips to the ocean. Place the book in the writing center with the prompt , “I went to the ocean, and this is what I saw” for children to create their own Down East stories.