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| Unit 5  Week 1 | <i>Small Groups: Tall, Tall Tree Game*</i> High Support | Math SG 1 | Standards: MELDS.M.MP.PS.5 MELDS.M.CCC.PS.7 MELDS.M.CCC.PS.8 MELDS.S.LS.PS.6 |
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Guiding Math Ideas:

- Rational Counting
- Quantity- Reinforcement of all related concepts
- Beginning composing and decomposing numbers.

Math Concepts from Unit Learning Progressions:

- Science and Math are a natural fit.
- Numerals communicate and represent math ideas.
- Drawing or describing how number names relate to groups of objects or living things.
- Using the number line for counting.

Note: This Activity also meets a Science Standard.

Materials:

- *Tall, Tall Tree* by Anthony Fredericks
- Tall Tall Tree Bookmarks resource- 2 sets
- Small manipulatives- 1 “ cubes, counters
- Plates
- Sticky notes and pencils/pens
- Number line or number chart
- Number cards (Optional)

Math Vocabulary:

- Bookmark: something that we use to help us find a page in a book
- Numerical order: When we count, we arrange numbers in the same way that doesn't change

Preparation:

Copy 2 sets of the *Tall Tall Tree* Bookmarks (there will be 24 in all- 20 of them have numbers on them. The 4 bookmarks without numbers are the “wild” cards”. In the introductory matching game, they will be used to match pages just as the numbers bookmarks. In the set-creating game children can brainstorm about what they want to do with the “wild” cards.

This game starts with simple matching. Then, children create sets. For additional challenge, some children may begin to make simple equations. You can also use Number Cards, without the pictures.

Procedure:

Place book *Tall Tall Tree* on the Table, along with the bookmarks. As many as 8 children at a time can play this game.

Remember our book *Tall Tall Tree*? Here are some **bookmarks**. Each **bookmark** is a small section of the pictures on each page. We will look at the whole page to see ALL the animals.

Show the bookmarks and invite children to identify numbers and talk about the animals.

Deal the bookmarks so that each child has at least 2. If amounts of cards don't come out evenly, use the extra cards as yours.

When I get to the page that has your number on it, put your bookmark on the page. There will be more than one of you who will have that bookmark. You can count the animals by yourself or with a partner. If you know the name of the animal, tell us!

Look through the book together. Children will look through their "hands" and match the numbers to the pictures. Continue until all numbers have been placed in the book.

As the activity ends, ask the children to arrange their bookmarks in numerical order from 1-10. They will create 2 "sets" of 10 numbers. Encourage the children to problem solve about what they want to do about the "wild" cards" which do not have numbers. [Or remove them, if you wish]

*Let's put these groups in **numerical order** and count together. What do I mean by **numerical order**?*

Children give ideas.

When we count from 1 to 10 our numbers are always in the same order.

Show a number chart or number line if you have one displaying in the classroom.

Remember—there are 2 groups for each number! Is that the way we usually count?

Children answer No.

Let's count this silly way—and then the regular way.

Silly:

1-1, 2-2, 3-3, 4-5 (etc.)

Regular

1 2 3 4 (etc.)

If you have additional time, continue with the following activity. If not, place all items in a Center and children can experiment with creating sets during Center Time.

Creating Sets: This is a semi-open-ended activity. Children do take turns drawing cards, but they can create number sets as they wish, choosing manipulatives and working alone or with a partner. Place plates and manipulatives on table and stack the bookmarks in the middle of the table, face down. As a child draws a number, he/she get a plate and creates a group using manipulatives. Have sticky-notes and pencils and encourage children to write the number beside the group. Continue until all the cards are used up. There are 2 bookmarks per number, so at the end there will be 20 groups of numbers on the table.

Strategies to Provoke Math Thinking:

- "Silly" Counting: Find creative ways to count together. As you count the animals on each page, ask the children to count in a voice that they imagine the animal would use. These methods keep the fun in math while reinforcing the stable order of numbers.
- Science/Math: Maine is full of forests, but not all children live near one. Take the opportunity to discuss forests and the important homes that they provide for animals. Identify any animals that the children think might live in Maine, or that they have seen.

Adaptations for Additional Challenge:

- Missing numbers: Remove some bookmarks. As the children play, some will notice that numbers are missing. Ask them the classic math questions, How do you know? and listen to their explanations.
- Equations: Some children may be ready to find number partners- making equations with the cards to equal a designated number. Support these children by providing + and equal signs as they compose and decompose numbers.

Documentation:

- Assessing the Stable Order Rule: Missing numbers and mixed up numbers are very effective ways to double-check whether children know the individual names of numerals, or whether they are running the names together as in the word *Onetwothree*. Mixing up the numbers also gives you the opportunity to assess whether children are counting with understanding.

Provocation:

- Connect to Science Standards: **MELDS.S.LS.PS.6** and concepts of geography: Use a U.S. map and locate the area in Northern California where giant redwoods grow. Compare it to our location in Maine. Use Google maps to calculate the miles between the two states and talk about how we measure long distances. By reading about the redwoods and their special environment (they only grow in Northern California), children learn about the important relationship between plants, animals and their environments. If children show interest, continue to use maps and technology to put animals and plants that are described in books and activities into context

**This activity is adapted from Dawn Publishers Suggested Free Teacher Activities for the book Tall Tall Tree*