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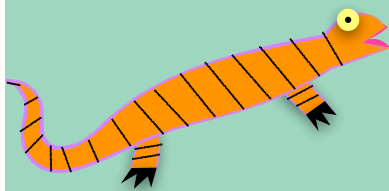
ILLUSTRATOR:
JoAnn Adinolfi

Lizards of all stripes, spots, and colors come from far and wide to put on the Great Leaping Lizard Show! Count along by five and ten to get all fifty lizards ready for the show.

Ages: 4 to 8 years

ATOS Reading Level: n/a

Lexile: n/a

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Leaping Lizards

Will there be enough lizards for the show?

Topics: counting, skip counting by 5s and 10s

Activities To Do Together:

Use *Leaping Lizards* to introduce and practice skip counting by 5s and 10s. Practicing counting by fives and tens sets your child up for success with counting money, telling time, place value, and multiplication.

Before reading the book:

- Find ten objects and together, practice the counting sequence to ten.

- Sing 5, 10, 15, 20, 25, 30 several times and ask your child if they'd like to sing these numbers with you. Sing it several times together until your child is comfortable with the sequence.

- Explore skip counting by five together. Take turns saying the next number in the sequence. For example, if you say five, your child would say ten, you'd say fifteen and so on.

While reading the book:

- Encourage your child to count the lizards. Guide their finger to touch each lizard as it is counted, practicing one-to-one correspondence. Then encourage them to skip-count the lizards on each page.

When you have finished reading the book.

- Discuss with your child why we skip count.

- Gather some small items. Encourage your child to arrange the items in an array of five items in each row. Ask them to count the items one by one. Then show your child how to skip count each row by fives. Rearrange the items into rows of ten and skip count by tens.

"5"

"10"

- Practice skip counting with nickels and dimes.


"15"

Early Math Project

Questions for Mathematical Thinking:

1. In what situations do you often see fives and tens?

2. How could you use skip counting?

3. When could you use the multiples of five and ten?

4. Using a 100 chart (print one here bitly or make your own), color in all the multiples of 5. Then color in all the multiples of 10 in a different color. What do you notice? What do you wonder?

Early Math Project Resources:

Visit Leaping Lizards Activities (earlymathca.org/leaping-lozards)

Follow this link or visit earlymathca.org/external-resources for additional online resources.
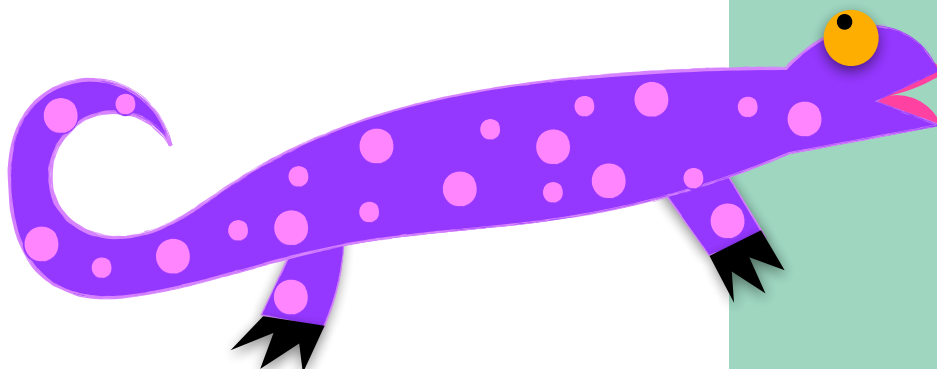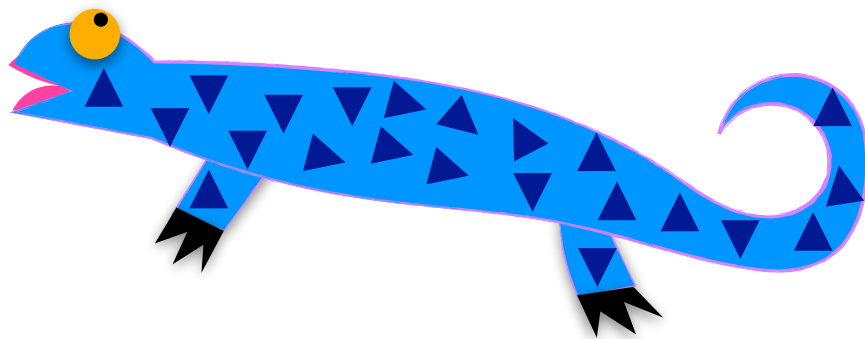
Vocabulary

Math words found in the story: add, altogether, count, fifteen, fifty, first, five, forty, four, half, more, one, soon, ten, thirty, three, twenty, twenty-five, two

Related math words: array, skip counting

Words to build reading comprehension: lazy, lizard, skeeters, weather

Related Books: *How Many Seeds in a Pumpkin?* by Margaret McNamara; *One Hundred Hungry Ants* by Elinor J. Pinczes

Click this link to the World Catalog or enter bit.ly/3PE8gW4 to find *Leaping Lizards* in the public library.

Early Math Project

Math Connections: *Leaping Lizards* is a fun introduction to skip counting by 5s and 10s.

Five and ten are both important landmark numbers in our base 10 number system. We have 5 fingers on each hand for a total of 10 fingers; and 5 toes on each foot for a total of 10 toes.

Skip counting is an important introduction to multiplication. When we skip count, we are saying the multiples of a number. For example if skip counting by 5s: 5, 10, 15, 20,… these are the multiples of 5. Talk about skip counting and practice with different numbers. For example to practice skip counting by 2, count pairs of shoes: 2, 4, 6, 8…

The way the lizards are shown in the book is an *array*. Arrays show objects in an organized way that makes counting easier. Using arrays leads to conceptual knowledge of multiplication, not just memorization of multiplication facts. Ask your child to arrange a collection in an array to make counting easier. Then use the array to discuss how it is related to multiplication. For example, an array that is 5 rows of 3 represents 5 x 3 and an array that is 4 rows of 6 represents 4 x 6.
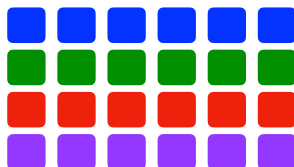
Counting by 5s is useful for telling time on an analog clock. Skip counting by 5 supports a child's success in learning to tell time. The numbers on the face of a clock signify the passage of 5 minutes. When children know this and are comfortable skip counting by 5, they begin to associate the number 1 on the clock with 5 minutes, 2 with 10 minutes, 3 with 15 minutes, and so on. To count the elapsed time (the amount of time that has passed) between 1:45 and 2:10, count by 5s starting at 1:45: 5 (1:50), 10 (1:55), 15 (2:00), 20 (2:05), 25 (2:10) = 25 minutes.
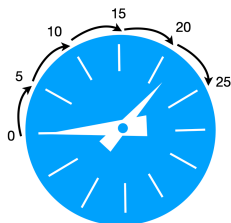
Ten is the basis of place value. In a multi-digit number, each time you move over one place to the right or left, the value of the digit changes by a factor of 10. Tens are also the basis of our system of money. Practice counting a group of nickels to count by 5s or a group of dimes to count by 10s.

Early Math Project

Age Level	Related **Preschool Foundations**, and **CA State Standards**
Preschool/TK	**Number Sense 1.1** Recite numbers in order with increasing accuracy. **1.4** Count objects, using one-to-one correspondence (one object for each number word) with increasing accuracy. **1.5** Understand, when counting, that the number name of the last object counted represents the total number of objects in the group (i.e., cardinality).
Kindergarten	**Counting and Cardinality K.CC.1**, **K.CC.2**, **K.CC.3** Know the number names and the count sequence. **K.CC.4**, **K.CC.5** Count to tell the number of objects.
Grade 1	**Operations and Algebraic Thinking 1.OA.5** Relate counting to addition and subtraction **Number and Operations in Base Ten 1.NBT.5** Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
Grade 2	**Operations and Algebraic Thinking 2.OA.4** Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns… **Number and Operations in Base Ten 2.NBT.2** Count within 1000; skip-count by 2s, 5s, 10s, and 100s. CA
Grade 3	**Operations and Algebraic Thinking 3.OA.1** Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each. **3.OA.7** Fluently multiply and divide within 100 **Number and Operations in Base Ten 3.NBT.3** Multiply one-digit whole numbers by multiples of 10 in the range 10–90

Early Math Project