

Sea Creatures



Activity: Children will use goldfish crackers (e.g., a nonstandard reference) to measure sea creatures.

Objective

The children will use a nonstandard reference (e.g., goldfish crackers) to measure the length of objects, with teacher support and multiple experiences over time.

V. Mathematical Thinking

V.F.1. Measures object attributes using a variety of standard and nonstandard tools.

http://www.floel.org/standardsresource/standards.html#d=V&a=four_year_olds

Before You Begin the Lesson

1. Use the *Florida Early Learning and Developmental Standards for Four-Year-Olds* to review the Targeted and Related Standards for Four-Year-Olds included in this lesson.

Review the following vocabulary terms or concepts:

Non-standard reference – a *non-standard reference* (unit) may be a paper clip, hand, foot, pencil, goldfish cracker, crayon, block, etc. As long as the items used to measure with are all the same size (e.g. paper clips, hands, feet, pencils, goldfish crackers, crayons, blocks) they are suitable to use.

Standard reference – a *standard reference* (unit) for measuring length is an inch, foot, yard, centimeter, or meter, and is measured using rulers and other measuring devices.

3. Select a variety of objects (e.g., sea creatures) for the children to measure.
4. Measure each of the objects that you have selected with the goldfish crackers. If any of the objects are longer than 20 goldfish crackers, you will need to provide each child with more goldfish crackers or choose objects that shorter than 20 goldfish crackers.
5. Count out 20 goldfish crackers for each child and place them in a paper cup.
6. Choose a book about sea creatures to share with the children. See the optional books listed under **Materials** for ideas.

Materials Needed

Goldfish crackers (20 for each child), small paper cups, objects (e.g., small toys/paper cut outs of sea creatures)

Books: *Ocean Life From A to Z and DVD* by Cynthia Stierle

Sea Creatures (Look Closer) by DK Publishing

Checking for Understanding

Children will demonstrate their understanding of the lesson by:

using a non-standard reference (e.g., goldfish crackers) to measure sea creatures.

Scaffolding

-Using verbal and visual clues help children know what to do.

-Work in small groups with children in need of additional support, measuring additional items.

Extensions

-Literacy Center: Include a variety of sea creature puppets and related books.

-Science Center: Add non-fiction books about sea creatures, magnifying glasses, objects to measure (e.g., plastic toys/paper cut outs of sea creatures) and a non-standard reference (e.g., linking chains or large paper clips). Encourage children to explore the objects and measure the sea creatures using the non-standard reference.

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Lesson (Small Group)

1. Read one of your favorite books about sea creatures or choose one of the optional books listed under **Materials**.
2. Place the objects (e.g., sea creatures) you have selected on the table in front of the children. Explain to the children that sea creatures come in many sizes and they will each have a chance to measure one of the sea creatures using goldfish crackers.
3. Choose a sea creature and show the children how to measure it by lining up the goldfish crackers (e.g., a non-standard unit of measure) side-by-side next to it. After you have measured the sea creature, count the goldfish and describe how long it is (e.g., “The whale is 11 goldfish long.”).
4. Give each child a cup with 20 goldfish crackers.
5. Allow each child to choose a sea creature and measure it with the goldfish crackers. After the children have measured their sea creature ask them to count the goldfish and describe how long their sea creature is (e.g., “My jellyfish is 20 goldfish long.”). Assist the children with measuring, counting the goldfish, and describing the length of their creatures, as needed.
6. Repeat step five until all of the children have had an opportunity to measure at least two different sea creatures.
7. Allow the children to eat their goldfish crackers.