

Wormy Worms



Activity: Children will use yarn wormy worms to measure a variety of objects, and record and compare the length if the objects.

Objective

The children will measure and compare using a nonstandard reference.

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

Lesson

1. Measure about ten equal pieces of yarn (wormy worms) for each child.
2. Fill a basket with a variety of objects to be measured (e.g., pencil, block, small toy, and book).
3. Read the book *Inch by Inch* by Leo Lionni to the children.
4. Select an object from the basket to measure.
5. Show the children how to measure the object using the yarn wormy worms (e.g., line up the lengths of yarn in a row next to the object being measured). Count the number of wormy worms and state for the children how many wormy worms long the object is.
6. Pass out a bag of wormy worms to each child.
7. Ask a child to select an object from the basket for the group to measure.
8. Assist the children, as needed, in lining up the wormy worms in a row next to the object being measured.
9. Questions to ask during the lesson:
 - How many wormy worms will it take to measure this? Let's count to find out.
 - How do we write that number?
 - What else could we measure with our wormy worms?
 - Which is longer or which is shorter (after measuring two objects)?
10. Repeat steps seven through nine until all objects in the basket have been measured.

Materials Needed

A plastic sandwich bag of 10-15 yarn "Wormy Worms" for each child

Basket filled with a variety of items for children to measure

Book: *Inch by Inch* by Leo Lionno

Checking for Understanding

Children will demonstrate their understanding of the lesson by:

- using a non-standard reference to measure the length of an object
- comparing the length of two items
- using measurement vocabulary (e.g., longer, shorter, same, length, width).

Scaffolding

- Provide hand over hand assistance
- Limit the number of children in the small group
- Select only one item to measure
- Include verbal prompting and counting support

Extensions

- Shared writing experiences to record predictions and actual measurements
- Create a graph to record measurements of objects