2nd Grade: Measurement and Data

2.MD.3 Estimate lengths using units of inches, feet, centimeters, and meters.

Learning Targets:

- I can estimate the length of a given object in inches and feet.
- I can estimate the length of a given object in centimeters and meters.

This activity is designed to play independently in a center.

Materials:

- 1. Classroom object cards (see below) in a brown paper bag (<u>NOTE</u>: students will pick an object card, but should measure the <u>actual</u> classroom item, <u>not</u> the card.)
- 2. "Estimation Celebration!" page

Directions:

- 1. Student will pull one object card from the brown paper bag.
- 2. Student should draw/write the item in the "This is what I drew from the brown paper bag" square.
- 3. Student will estimate the length and record it in the estimation square.
- 4. Student will find the actual object in the classroom and measure it.

Considerations:

- Observe the student as he/she completes this activity. Observe full completion of this standard and record it on student/class checklist.
- Observe the student lines up the end of the object with the starting point of the ruler.
- Observe that student correctly uses the inch side of the ruler what asked to measure inches and the centimeter side when asked to measure centimeters.



Estimation Celebration!









Teacher notes:

Estimate lengths using units of inches, feet, centimeters, and meters.

Students who demonstrate mastery write a reasonable estimate and accurately measure their items.

Students who demonstrate marginal partial accomplishment might measure in inches but record it as centimeters or vice versa. Or students who need improvement may not begin a 0 on their ruler and obtain an incorrect answer because they do not find the difference between the beginning and ending points

Estimation helps students focus on the attribute being measured. When students estimate, they are curious to see how close their estimate is to the actual measurement. Use language that describes the estimate such as about, a little less than, a little more than. Estimating length helps students develop benchmarks for how long something is. They can get a mental picture of how long a foot is.

Not yet: Student shows evidence of misunderstanding, incorrect concept or procedure		Got It: Student essentially understands the target concept.	
NEEDS IMPROVEMENT (N)	WITH ASSISTANCE (W)		INDEPENDENT (I)
0 Unsatisfactory: Little Accomplishment The task is attempted and some mathematical effort is made. There may be fragments of accomplishment but little or no success. Further teaching is required.	1 Marginal: Partial Accomplishment Part of the task is accomplished, but there is lack of evidence of understanding or evidence of not understanding. Further teaching is required.	2 Proficient: Substantial Accomplishment Student could work to full accomplishment with minimal feedback from teacher. Errors are minor. Teacher is confident that understanding is adequate to accomplish the objective with minimal assistance.	3 Excellent: Full Accomplishment Strategy and execution meet the content, process, and qualitative demands of the task or concept. Student can communicate ideas. May have minor errors.

Adapted from Van de Walle, J. (2004) Elementary and Middle School Mathematics: Teaching Developmentally. Boston: Pearson Education, 65

