



GRADE 3 / WATCH MR DJ SOLVE

MEASURING AND LINE PLOTS

Start with the same example used in the lesson slides.

**WATCH MR DJ SOLVE**

A ruler starts at 0. An object ends at $1 \frac{3}{4}$ inches. Write its length and explain the quarter marks.

- 1** Count 1 whole inches.
- 2** Then count three fourth-inch intervals.
- 3** The starting edge is at zero.

Answer: $1 \frac{3}{4}$ in**REMEMBER** measure in half and quarter inches and organize lengths in a line plot.

Read each step and explain why it is valid. The next pages demonstrate the methods in more detail. Then use the large work areas on the numbered practice pages.



GRADE 3 / WORKED METHODS

MEASURING AND LINE PLOTS

Read a complete example before trying the matching method.



Use these examples as a reference. Keep each quantity and its unit visible. A different valid method is welcome unless a question specifically requests one.

A ruler reading

$2\frac{3}{4}$ inches

1. Start the object at zero.
2. Count 2 whole inches and 3 quarter-inch intervals.
3. Read $2\frac{3}{4}$ in. Use a real ruler for physical measuring.



Labeled inch model / use a real ruler to measure

GRADE 3 / WORKED METHODS

MEASURING AND LINE PLOTS

Read a complete example before trying the matching method.

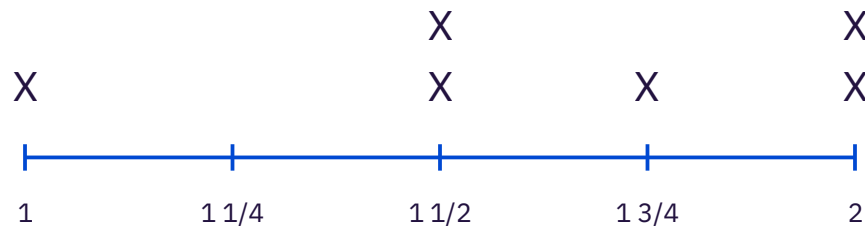


Use these examples as a reference. Keep each quantity and its unit visible. A different valid method is welcome unless a question specifically requests one.

A measurement line plot

Six lengths, six Xs

1. Data: 1, 1 $\frac{1}{2}$, 1 $\frac{1}{2}$, 1 $\frac{3}{4}$, 2, 2 inches.
2. Use equal quarter-inch steps on the scale.
3. Stack an X for each object at its measurement.



Length in inches / one X = one object

GRADE 3 / MATHEMATICAL WORK TOOL

MEASURING AND LINE PLOTS

Use labels and a clear scale.



Measure real classroom objects with your own ruler to the nearest half or quarter inch. Record lengths in inches. Use the blank lines for line plots with equal intervals. This page is not a calibrated ruler.



GRADE 3 / PRACTICE

MEASURING AND LINE PLOTS

Show the method, label your work, and explain the reasoning requested.



Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

☛ Mild

1. Lengths in inches: 1, 1 1/2, 1 1/2, 1 3/4, 2, 2. How many objects are 1 1/2 inches long?

Grid area for working on problem 1.

My answer / conclusion: _____

☛ Mild

2. Lengths in inches: 1, 1 1/2, 1 1/2, 1 3/4, 2, 2. Which length occurs most often?

Grid area for working on problem 2.

My answer / conclusion: _____



GRADE 3 / PRACTICE

MEASURING AND LINE PLOTS

Show the method, label your work, and explain the reasoning requested.



Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

🔊 Medium

3. Make a line plot for lengths (inches): 1, 1 $\frac{1}{2}$, 1 $\frac{1}{2}$, 1 $\frac{3}{4}$, 2, 2. Mark whole, half and quarter units.

My answer / conclusion: _____



Date _____

MEASURING AND LINE PLOTS

A cartoon fox mascot with orange fur, large eyes, and a purple scarf, holding a yellow pencil. It is positioned in the top left corner of the slide.

Medium 4. Use your own ruler to measure 3 real objects to the nearest $\frac{1}{4}$ inch. Record a labeled table.

My answer / conclusion: _____



GRADE 3 / PRACTICE

MEASURING AND LINE PLOTS

Show the method, label your work, and explain the reasoning requested.



Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

◀ Medium

5. Lengths in inches: 1, 1 $\frac{1}{2}$, 1 $\frac{1}{2}$, 1 $\frac{3}{4}$, 2, 2. How many objects measure at least 1 $\frac{3}{4}$ inches?

My answer / conclusion: _____



GRADE 3 / PRACTICE

MEASURING AND LINE PLOTS

Show the method, label your work, and explain the reasoning requested.



Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

🔥🔥🔥 Spicy

6. Digit calls $1\frac{3}{4}$ inches “ $\frac{4}{4}$ inches.” Explain the whole units that were lost.

Grid area for student response.

My answer / conclusion: _____



GRADE 3 / PRACTICE

MEASURING AND LINE PLOTS

Show the method, label your work, and explain the reasoning requested.



Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

🔥🔥🔥 Spicy

7. Why does a line plot for lengths 1, $1\frac{1}{2}$, $1\frac{1}{2}$, $1\frac{3}{4}$, 2, 2 need equal spacing even where no object has a measurement?

Grid area for drawing or writing.

My answer / conclusion: _____



GRADE 3 / PRACTICE

MEASURING AND LINE PLOTS

Show the method, label your work, and explain the reasoning requested.



Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

Extra Spicy

8. Invent six lengths using whole, half and quarter inches near 1. Make a line plot and explain how to check it.

My answer / conclusion: _____