

Student Activity Worksheet: Create Your Own Unit of Measure

Directions: By following the prompts below, you will come up with your own unit of length and use it to measure something in class. You will then compare your unit with a partner's and use dimensional analysis to create a conversion between the units.

For good measure

1. Come up with your own unit of length and create a ruler that defines one length unit. For example, your unit of length could be your fingernail's width, and the length of the ruler you make would be equal to the width of your fingernail.
2. Use your ruler to determine the length of something in your classroom. For example, the length of your desk could be 110 fingernails. Then add the most appropriate metric prefix to scale the measurement between 1 and 10. For example, the length of the desk could be 1.1 hectofingernails. Share your unit and measurement with a partner, and check each other's work.
3. Determine a unit conversion from your length unit to your partner's. Use dimensional analysis, or the factor label method, to convert the length of your object as measured in your units into your partner's units. Check your answer by measuring the width of your object with your partner's ruler.

