## MATH NEWS

2nd Grade Math<br>Unit 2: Addition and Subtraction of Length Units<br>Math Parent Letter

Topic C: Measure and Compare Lengths Using Different

## Length Units

## Words to Know:

Compare- how something is similar to or different from something else.

Standard Unit- Commonly used units of measurement: inches, feet, yards, centimeters, meters, etc.

Non-standard Unit- A unit of measure that is not part of a consistent system; paperclips, shoes, coins, etc.


## Objectives of Topic C

1. Measure and compare lengths using centimeters and meters.
2. Measure and compare lengths using standard metric length units and nonstandard length units; relate measurement to unit size.

## Focus Area- Topic C

## Measure, Compare

Students measure and compare to determine how much longer one object is than another. They also measure objects twice using different length units, both standard and nonstandard, thereby developing their understanding of how the total measurement relates to the size of the length unit. Repeated experience and explicit comparisons will help students recognize that the smaller the length unit, the larger the number of units, and the larger the length unit, the smaller the number of units.

## Examples of <br> Measure and Compare using Standard Units

## Line E



## Line F



Line G


Line E measured about $\qquad$ cm . Line F measured about $\qquad$ cm . Line G measured about 5

Lines E, F, and G are about 14 cm combined. $(3 \mathrm{~cm}+6 \mathrm{~cm}+5 \mathrm{~cm}=14 \mathrm{~cm})$
E is about $2 \ldots \mathrm{~cm}$ shorter than Line G. $(5 \mathrm{~cm}-3 \mathrm{~cm}=2 \mathrm{~cm})$
Line F is about_1_ cm longer than Line G. $(6 \mathrm{~cm}-5 \mathrm{~cm}=1 \mathrm{~cm})$
Line $F$ doubled is about 7 cm longer than Line $G$.
$(6 \mathrm{~cm}+6 \mathrm{~cm}=12 \mathrm{~cm}, 12 \mathrm{~cm}-5 \mathrm{~cm}=7 \mathrm{~cm})$
Line E is about 3 cm shorter than Line F. $(6 \mathrm{~cm}-3 \mathrm{~cm}=3 \mathrm{~m})$

Carol's ribbon is 76 centimeters long. Alice's ribbon is 1 meter long. How much longer is Alice's ribbon than Carol's?

1 meter $=100 \mathrm{~cm}$

$$
\begin{gathered}
100 \mathrm{~cm}-76 \mathrm{~cm}=\underline{24 \mathrm{~cm}} \\
\wedge \\
70+6 \\
100-70=30 \\
30-6=24
\end{gathered}
$$

> Examples of
> Measure and Compare using Non-standard Units

Line L


Line M


Line L is 3 paper clips. Line L is 7 cm long.
Line M is 2 paper clips. Line M is $4 \mathbf{~ c m}$ long.
Line L is 2 paper clips longer than Line M. $(3-1=2)$
Line M doubled is 1 cm longer than Line L .
$(4 \mathrm{~cm}+4 \mathrm{~cm}+8 \mathrm{~cm}, 8 \mathrm{~cm}-7 \mathrm{~cm}=1 \mathrm{~cm})$

