

#36844, Nelsen, From Abstract to Concrete: Making Measurement Lessons Count

Agenda-Part I

- 1. Who uses the metric system?**
- 2. Educational Research: CPA – Jerome Bruner**
- 3. History of Metric System**
- 4. Benchmarks, prefixes**
- 5. Metric units – interconnected: length, capacity, mass**
- 6. Mass vs. weight, capacity vs. volume**
- 7. Teaching aids—posters, trundle wheel, pan balance, thermometer, meter stick, yard stick, graphs, activities**
- 8. Converting**
- 9. Marvelous meter stick**
- 10. Model making**

Agenda-Part II

- 1. Reviewing hands on activities**
 - i. Length**
 - ii. Mass and weight**
 - iii. Capacity and volume**
 - iv. Recipes**
 - v. Units of measurement**
 - vi. Tools**
 - vii. Historical measure**
 - viii. Nets**

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Measurement Tools Checklist**

item	area	minimum	preferred
ruler - primary	length	1 per grade	1 per child
ruler – upper (cm/in.)	length	1 per grade	1 per child
retractable tape	length	1 per class	3-6 per class
meter stick	length	1 per class	3-6 per class
yard stick	length	1 per class	3-6 per class
trundle wheel	length	1 per class	3 per class
mass pieces set (g)/(oz.)	mass	1 per class	3 sets per class
platform scale	mass	1 per grade	1 per class
spring scale	mass	1 per class	3 per class
primary pan balance (plastic)	mass	1 per grade	1 per class
upper pan balance (metal)	mass	1 per grade	1 per class
bathroom scale	mass	1 per grade	1 per grade
measuring spoons (mL, fl. oz.)	capacity	1 per grade	1 per class
graduated beaker (1000 mL)	capacity	1 per grade	1 per class
measuring cups	capacity	1 per grade	1 per class
graduated cylinders	capacity	1 per grade	1 per class
liter cube	capacity	1 per grade	1 per class
nesting liquid measure set	capacity	1 per grade	1 per class
thermometer (large)	temperature	1 per grade	1 per class
thermometer (individual)	temperature	12 per grade	12 per class
primary tocker timers	time	1 set per grade	1 set per class
stopwatch	time	1 per grade	1 per grade