

## Preparing to Convert Metric Measurement Using Deconstruction

Name: \_\_\_\_\_

Date: \_\_\_\_\_

### Preparing to Convert Metric Measurement Using Number Bonds

<b>K</b> ing	<b>H</b> enry	<b>D</b> ied	<b>U</b> nusually	<b>D</b> rinking	<b>C</b> hocolate	<b>M</b> ilk
Kilo	Hecto	Deca	Unit <b>Meter</b> <i>(length)</i> <b>Liter</b> <i>(liquid volume)</i> <b>Gram</b> <i>(mass/weight)</i> <b>1 Unit</b>	Deci	Centi	Milli
10 x 10 x 10 x LARGER than a unit	10 x 10 x LARGER than a unit	10 x LARGER than a unit		10 x SMALLER than a unit	10 x 10 x SMALLER than a unit	10 x 10 x 10 x SMALLER than a unit
1 kilo = 1,000 units	1 hecto = 100 units	1 deca = 10 units		10 deci = 1 unit	100 centi = 1 unit	1000 milli = 1 unit
km = kilometer kL = kiloliter kg = kilograms	hm = hectometer hL = hectoliter hg = hectogram	dam = decameter daL = decaliter dag = decagram	m = meter L = liter g = grams	dm = decimeter dL = deciliter dg = decigram	cm = centimeter cL = centiliter cg = centigram	mm = millimeter mL = milliliter mg = milligram

Example 50 kilo

50 hecto

500 deca

5,000 units

50,000 deci

500,000 centi

5,000,000 milli

**DIVIDE** numbers by **10** if you are getting bigger (same as moving the decimal point 1 space to the left)

**MULTIPLY** numbers by **10** if you are getting smaller (same as moving the decimal point 1 space to the right)



## Preparing to Convert Metric Measurement Using Deconstruction

Name: \_\_\_\_\_

Date: \_\_\_\_\_

### Part A: Thinking About Metric Units

Use a meter stick or the chart above to answer the questions below. The most common units are in bold .

1.

10 millimeters = \_\_\_\_\_ centimeters

10 centimeters = \_\_\_\_\_ decimeters

10 decimeters = \_\_\_\_\_ meters

10 meters = \_\_\_\_\_ dekameters

10 dekameters = \_\_\_\_\_ hectometer

10 hectometers = \_\_\_\_\_ kilometers

2.

1 meter = \_\_\_\_\_ centimeters

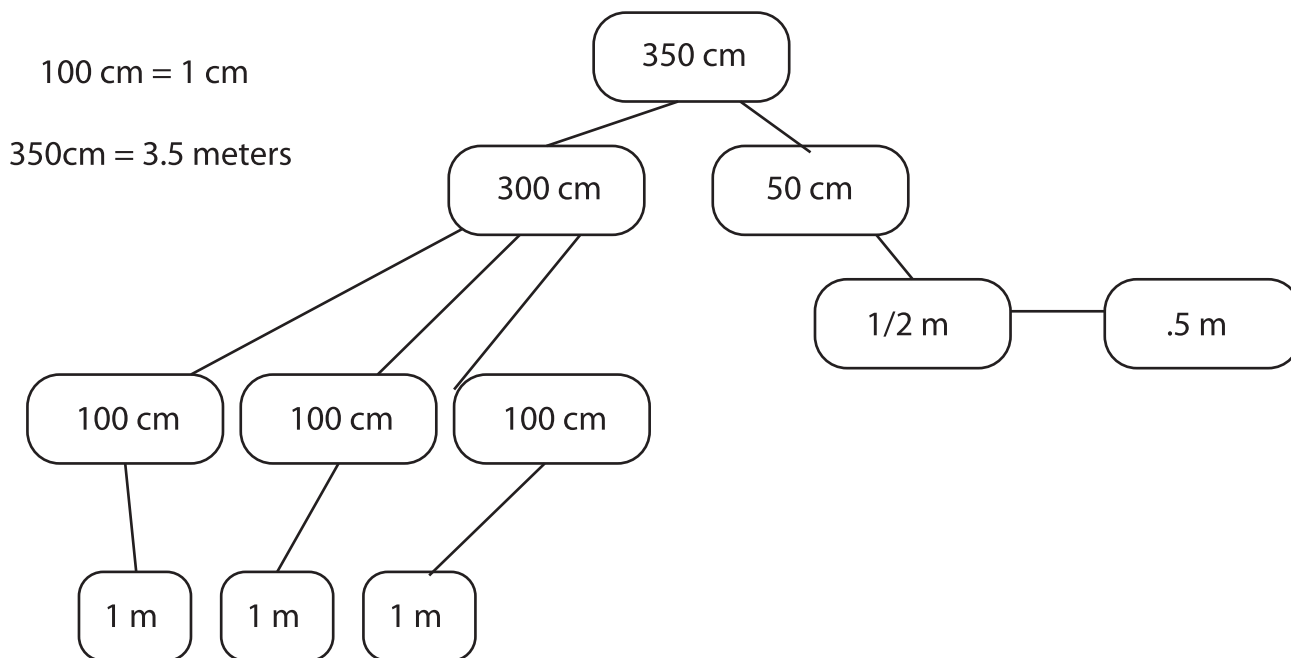
1 meter = \_\_\_\_\_ millimeters

50 cm = \_\_\_\_\_ meters (this number will be less than 1)

10 cm = \_\_\_\_\_ meters

### Part B: Converting Measurements by Deconstructing

Now, examine the deconstructed number below. The measurement in the top circle has been converted into meters.



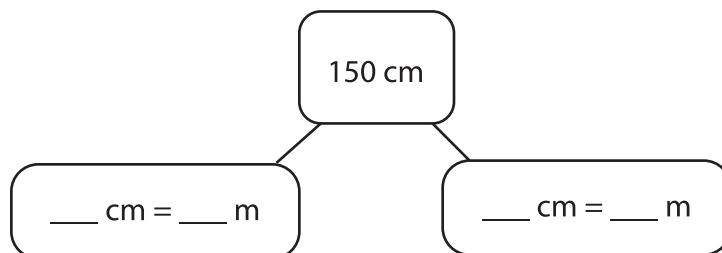
Using the example above as a guide, deconstruct the measurement in the top circle and convert it to meters.



## Preparing to Convert Metric Measurement Using Deconstruction

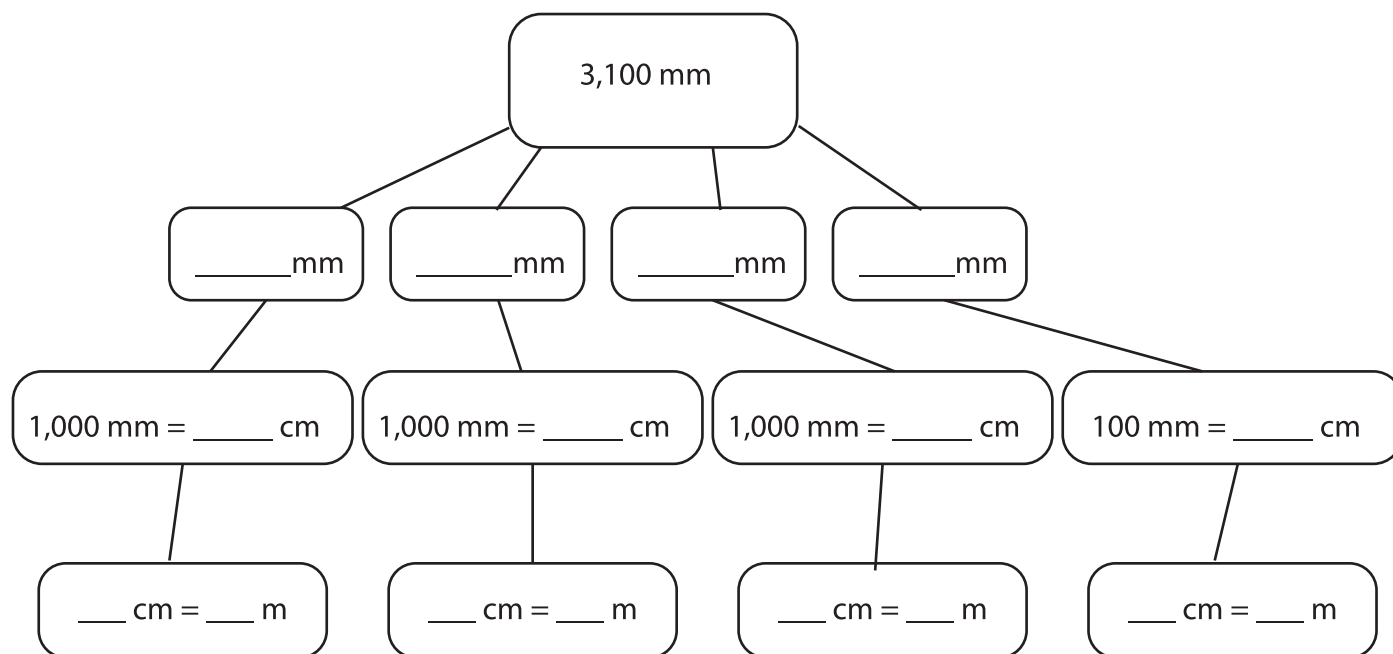
Name: \_\_\_\_\_ Date: \_\_\_\_\_

3. Convert 150 cm to meters using deconstruction method below.



Add the meters in the bottom circles. 150 cm is equal to \_\_\_\_\_ meters.

4. Now convert 3,100 mm to meters using deconstruction method below.



Add the meters in the bottom circles. 3,100 mm is equal to \_\_\_\_\_ meters

### Questions for Discussion

Compare the original measurement and measurement in meters. What do you notice? Is there a pattern? How could you use this pattern to convert metric units more easily?