Name _____ Date _____

1. Convert and write an equation with an exponent. Use your meter strip when it helps you.

1 meter = 100 cm

a.	2 meters to centimeters	2m = 200 cm	$2 \times 10^2 = 200$
b.	108 centimeters to meters	108 cm = 1.08 m	$108 \div 10^2$
c.	2.49 meters to centimeters	_____ m = _____ cm	_____
d.	50 centimeters to meters	_____ cm = _____ m	_____
e.	6.3 meters to centimeters	6.3 m = 630 cm	6.3×10^2
f.	7 centimeters to meters	_____ cm = _____ m	_____

g. In the space below, list the letters of the problems where smaller units are converted to larger units.

2. Convert using an equation with an exponent. Use your meter strip when it helps you.

a.	4 meters to millimeters	_____ m = _____ mm	_____
b.	1.7 meters to millimeters	_____ m = _____ mm	_____
c.	1,050 millimeters to meters	_____ mm = _____ m	_____
d.	65 millimeters to meters	_____ mm = _____ m	_____
e.	4.92 meters to millimeters	_____ m = _____ mm	_____
f.	3 millimeters to meters	_____ mm = _____ m	_____

g. In the space below, list the letters of the problems where larger units are converted to smaller units.

3. Read each aloud as you write the equivalent measures. Write an equation with an exponent you might use to convert.

   a. 2.638 m = _____ mm $2.638 \times 10^3 = 2{,}638$

   b. 7 cm = _____ m _____

   c. 39 mm = _____ m _____

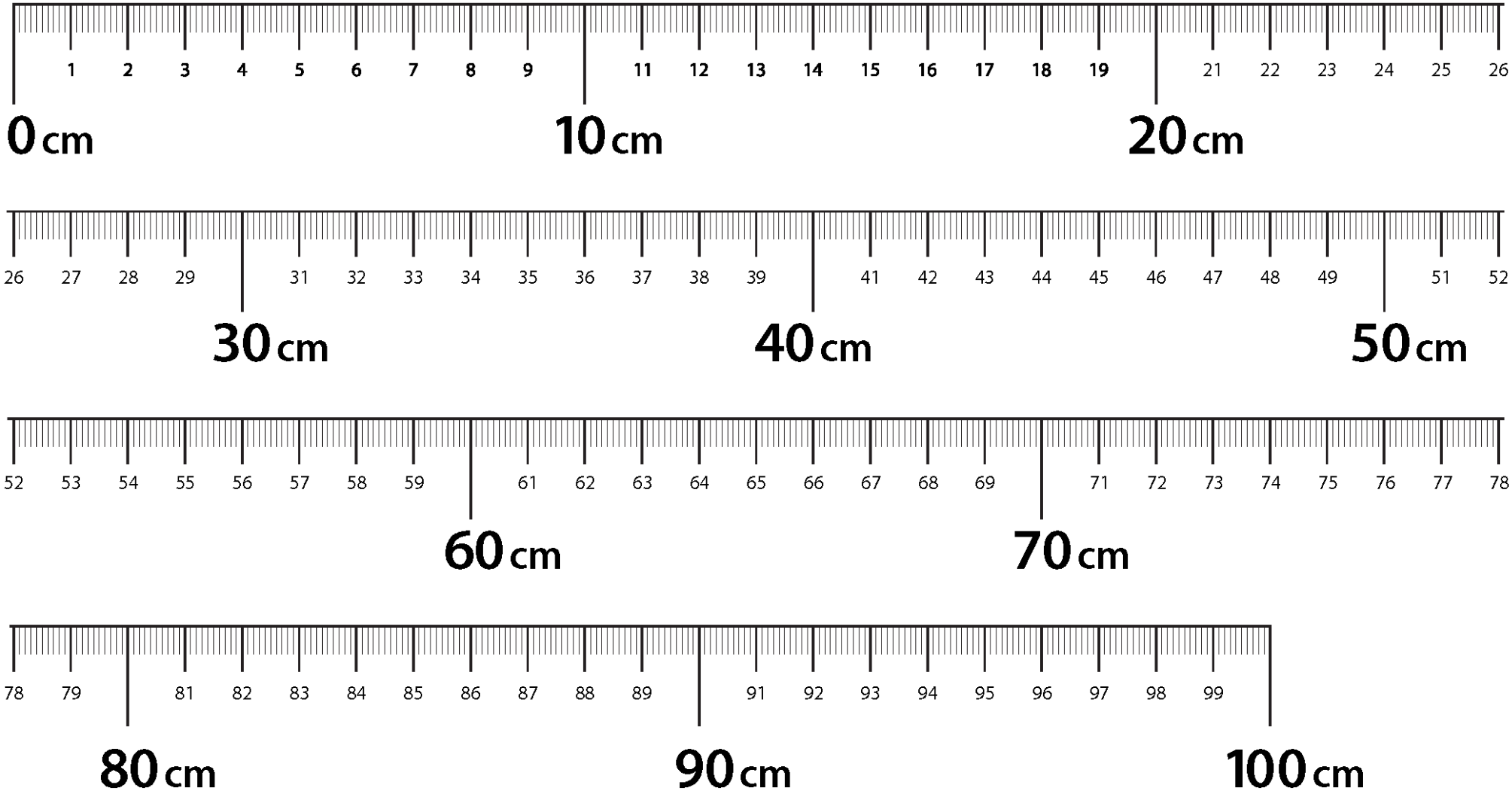
   d. 0.08 m = _____ mm _____

   e. 0.005 m = _____ cm _____

4. Yi Ting's height is 1.49 m. Express this measurement in millimeters. Explain your thinking. Include an equation with an exponent in your explanation.

5. A ladybug's length measures 2 cm. Express this measurement in meters. Explain your thinking. Include an equation with an exponent in your explanation.

6. The length of a sticky note measures 77 millimeters. Express this length in meters. Explain your thinking. Include an equation with an exponent in your explanation.



meter strip