

NCTM Content Standards Assessment Rubric



Measurement

Student's Name: _____ Assignment: _____ Level: _____

	Level 1	Level 2	Level 3	Level 4
Understanding Measurable Attributes of Objects and the Units, Systems, and Processes of Measurement	<ul style="list-style-type: none"> Demonstrates a limited understanding of measurable attributes of objects and the units, systems, and processes of measurement 	<ul style="list-style-type: none"> Demonstrates a basic understanding of measurable attributes of objects and the units, systems, and processes of measurement 	<ul style="list-style-type: none"> Demonstrates a good understanding of measurable attributes of objects and the units, systems, and processes of measurement 	<ul style="list-style-type: none"> Demonstrates a thorough understanding of measurable attributes of objects and the units, systems, and processes of measurement
Applying Appropriate Techniques, Tools, and Formulas to Determine Measurements	<ul style="list-style-type: none"> Demonstrates limited ability in applying appropriate techniques, tools, and formulas to determine measurements 	<ul style="list-style-type: none"> Demonstrates some ability in applying appropriate techniques, tools, and formulas to determine measurements 	<ul style="list-style-type: none"> Demonstrates satisfactory ability in applying appropriate techniques, tools, and formulas to determine measurements 	<ul style="list-style-type: none"> Demonstrates strong ability in applying appropriate techniques, tools, and formulas to determine measurements

NEXT STEPS:

WEAKNESSES:

STRENGTHS:

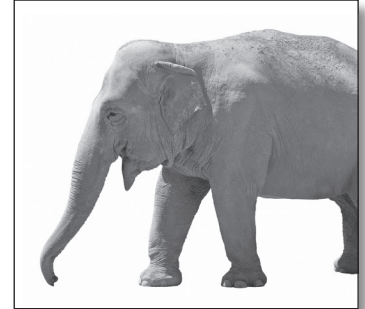
SAMPLE



Task Sheet 10

Tons, Pounds, and Ounces

10) Tia was making the following chart of items for a science report. She was listing mammals based on their weight in terms of tons, pounds, and ounces. Tia wanted to be sure she listed the weight in each unit to show just how large the mammals were. She was able to find the weight for certain animals in certain measurements. Help her complete the entire chart by calculating the missing information.



Item	Weight in Tons	Weight in Pounds	Weight in Kilograms	Weight in Ounces
Blue Whale	190			
Fin Whale	80			
Right Whale			63,503	
Bowhead Whale				2,080,000
Elephant		15,000		
Hippopotamus	3.5			
Rhinoceros			2,268	
Giraffe		3,000		
Water Buffalo	1,25			
Polar Bear				8,000

SAMPLE



Using a website or other computer reference tool, look up the difference between a "short ton" and a "long ton." What does each term mean? Why are these two separate terms sometimes used to describe a ton? Write the information you find in the space below.

NAME: _____



Drill Sheet 2

Conversions

- a) 15 yd = _____ ft 200 mm = _____ cm 90 in = _____ ft
900 g = _____ kg 480 oz = _____ lbs 2 tons = _____ lbs
5 quarts = _____ gallons 8 cups = _____ quarts 160 mL = _____ L
9 km = _____ m 30.5 ft = _____ in 5 m = _____ mm

Angle Measurement



- b) Angle One _____° c) Angle One _____° d) Angle One _____°

Short Answers

- e) What is the area of a square with a side of 5 cm (2 in)?

- f) What portion of a circle is twice as long as the radius?

- g) If a house has an area of 25 sq. ft (2 sq. m) on a floor plan and the scale is 1:10, how big is the house?

- h) What is the perimeter of an equilateral triangle with a base of 5 inches (13 cm)?

- i) Jonathan travels a distance of 150 miles (241 kilometers) by bicycle. He travels for six consecutive days, traveling the same amount of miles (kilometers) each day. How many miles (kilometers) does he travel in two days?

Money, Money, Money



You have been assigned to work with a design committee to create a new denomination of coin or bill. Your task is to complete the following tasks as you prepare to release the newest denomination within the year.



a) Determine which new denomination of coin or bill would be useful to the public.

b) Create a name for this new denomination.

c) Explain why this new denomination would be beneficial to consumers.

d) Select a person to appear on the front of the new coin or bill. This person should be a figure from history who had a positive impact. Explain why this person should appear on a unit of currency.

e) Design the new coin or bill and how it would look.

f) Unveil the new design for your classmates. Show ten ways it can be combined with other denominations to make change (for example if you invented the nickel, $\$1.00 + \text{a nickel} = \1.05).

SAMPLE