

NCTM Content Standards Assessment Rubric

Measurement – Drill Sheets

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

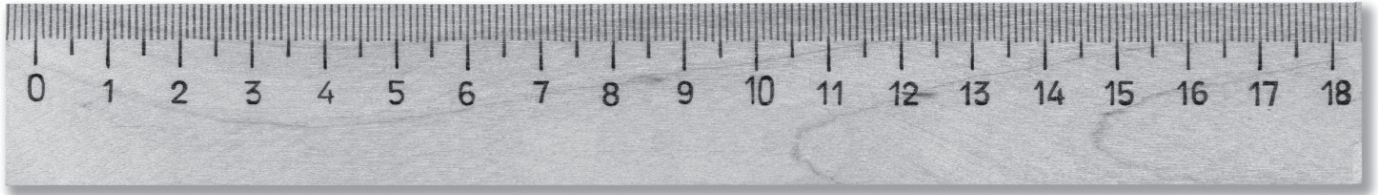
STRENGTHS:

WEAKNESSES:

NEXT STEPS:



10a) Draw the following shapes described below using a ruler. Then, find the perimeter and area of the shape you have drawn.



i) A square with a side of 1.3 in (3 cm).

Perimeter: _____

Area: _____

ii) A rectangle with a length of 0.8 in (2 cm) and a width of 1.3 in (3 cm).

Perimeter: _____

Area: _____

iii) A square with sides all equal to 1 in (2.5 cm).

Perimeter: _____

Area: _____

iv) A parallelogram with all sides equal to 1.3 in (3 cm) and a height of 0.9 in (2.3 cm).

Perimeter: _____

Area: _____

v) An equilateral triangle with a side of 0.8 in (2 cm) and a height of 0.7 in (1.7 cm)

Perimeter: _____

Area: _____

vi) A rectangle with a length of 1.6 in (4 cm) and a width of 1 in (2.5 cm).

Perimeter: _____

Area: _____

vii) An isosceles triangle with two congruent sides of your choice and height of your choice.

Perimeter: _____

Area: _____

viii) A rectangle where the length is 2 times the width. You may choose the measurements.

Perimeter: _____

Area: _____

SAMPLE

NAME: _____



Review C

a) Convert the following measurements.

- i) 18.3 yd = _____ ft ii) 1.28 cm = _____ mm iii) 0.25 tons = _____ lbs
iv) 1.025 m = _____ mm v) 198 oz = _____ lbs vi) 7.5 g = _____ kg
vii) 144 qt = _____ gal viii) 1.25 km = _____ cm ix) 40.3 ft = _____ in
x) 27.55 kg = _____ g xi) 24.5 ft = _____ yds xii) 4.25 km = _____ m
xiii) 25.25 g = _____ mg xiv) 8.25 ft = _____ in xv) 0.028 kL = _____ L

b) Answer the following quick measurement questions.

i) Steven measured the length of time it took for a science experiment to be completed. After three trials, his times were 18.25 seconds, 16.75 seconds, and 15.27 seconds. What was the average time for the experiments to be completed?

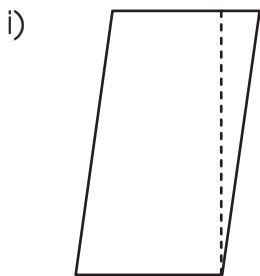
ii) A parallelogram has an area of 4.2 sq. in (27 sq. cm). What are two possible base and height measurements?

iii) Diego rode a bike for three consecutive days. He averaged 25.25 miles (40.6 km) each day. How many total feet (meters) had he traveled after three days?

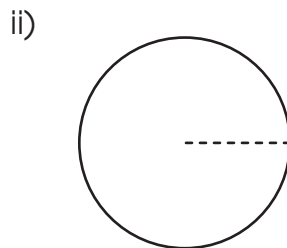
iv) A rectangular box has a length of 8 inches (8 cm), a width of 2 inches (5 cm), and a height of 5 inches (1 cm). What is the surface area?

v) The radius of a circle is 5 inches (12.5 cm). What is the area of the circle?

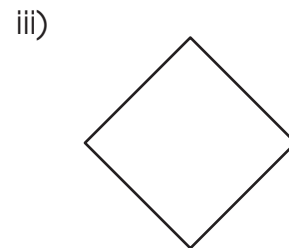
c) Use a ruler to measure the objects below. Find the area, perimeter and circumference for each object.



Area = _____
Perimeter = _____



Area = _____
Circumference = _____




Area = _____
Perimeter = _____

Area of a Circle



Look at the picture of the circle below. Discuss how you can determine the area and perimeter of the circle. Then, in a well developed paragraph, explain how to find the area.

Finally, measure the circle and find the area and perimeter.



SAMPLE

Things to consider in your answer:

1. What measurements will you need?
2. What units of measure will you use?
3. How do the measurements you need relate to each other?

Things to consider in your paragraph:

1. Make sure to include a topic sentence and conclusion.
2. Make sure your paragraph contains at least five sentences.
3. Make sure to use transition words to help explain your work.