

# NCTM Content Standards Assessment Rubric



## Measurement

Student's Name: \_\_\_\_\_ Assignment: \_\_\_\_\_ Level: \_\_\_\_\_

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

SAMPLE

**NEXT STEPS:**

**WEAKNESSES:**

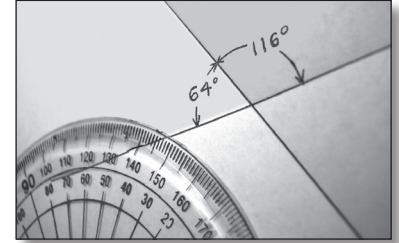
**STRENGTHS:**



# Task Sheet 4

## A Protracted Arrangement

- 4) For the following activity, you are going to need a protractor. Then, look at the clues in each box. Draw the angle that is being described with the clue. Then, write how many degrees each angle will have.



**Angle One:** Draw an angle that equals one-half a right angle.

How many degrees is the angle? \_\_\_\_\_

**Angle Two:** Draw a supplementary angle to an angle that is  $100^\circ$ .

How many degrees is the angle? \_\_\_\_\_

**Angle Three:** Draw a complementary angle to an angle that is  $60^\circ$ .

How many degrees is the angle? \_\_\_\_\_

**Angle Four:** Draw an angle that is one-third the size of a  $45^\circ$  angle.

How many degrees is the angle? \_\_\_\_\_

**Angle Five:** Draw an angle that equals one and one-half right angles.

How many degrees is the angle? \_\_\_\_\_

**Angle Six:** Draw an angle that is  $30^\circ$  less than a straight angle.

How many degrees is the angle? \_\_\_\_\_

SAMPLE



# Review A



## Measurement Conversions

- a) 10,560 feet = \_\_\_\_\_ inches \_\_\_\_\_ yd \_\_\_\_\_ miles
- 6000 m = \_\_\_\_\_ mm \_\_\_\_\_ cm \_\_\_\_\_ km
- 1000 lbs = \_\_\_\_\_ oz \_\_\_\_\_ tons
- 16 quarts = \_\_\_\_\_ cups \_\_\_\_\_ pints \_\_\_\_\_ gallons

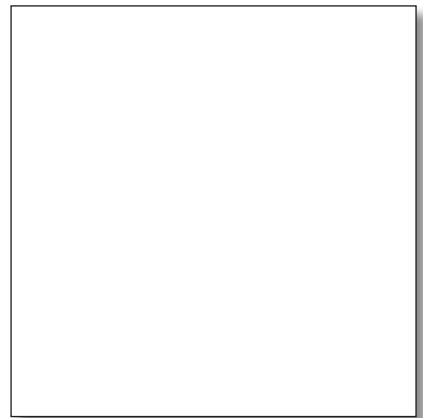
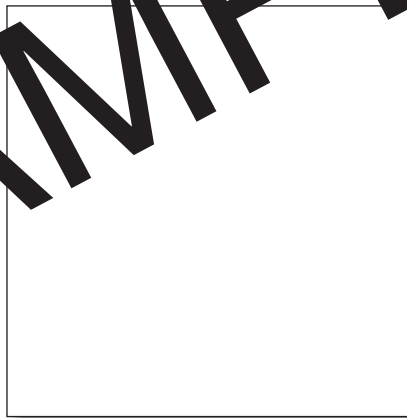
## Measurement

- b) Draw the three figures described below. You may use a centimeter ruler and protractor or other measurement devices to help you.

Figure 1: a square with a perimeter of 10 cm (4 in)

Figure 2: an equilateral triangle that measures 10 cm

Figure 3: a triangle with a base of 1 inch (3 cm)



SAMPLE

## Open response

- c) Using two to five sentences, explain how you would find the area and perimeter of a rectangle. You may draw a diagram below to help explain your response.

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# Draw it to Scale



You have been hired by the Scholastic Architectural Firm to design a new classroom. Your job is to draw the design of your state-of-the-art classroom, complete with tools that you think will be useful for students in your class or grade. For this, you are asked to do the following:

- a) Design a floor space for your classroom on a regular piece of white paper. Explain the scale of your drawing (for example 1 inch (1 cm) in your drawing might equal 1 foot (1 meter)).
- b) Identify the area and perimeter of the classroom you have designed.
- c) Add at least three pieces of furniture to your classroom (you do not need to put student desks in your design, but do need to have an area for it). Label the furniture and draw it to scale.
- d) Draw three educational tools that will be incorporated in the floor design. Label the items and draw it to scale.
- e) Explain why your new classroom would be an innovation over current classrooms.
- f) Add the scale to your drawing.