Communication Around PARCC Assessment Reference Sheet for Grades 3 – 8

The PARCC reference sheet for grades 3 – 8 has been developed based on the intent of the Common Core State Standards for Mathematics. After a close examination of the Standards, it has been determined that no reference sheet is necessary for grade 3 and grade 4.

Grades 3 and 4 will not have a reference sheet because the Common Core State Standards for Mathematics for these grades do not require one. Students in grade 3 will measure lengths using rulers and measure and estimate volumes of objects. In addition, students in grade 3 will be developing conceptual understanding of area and perimeter and will not need conversions or formulas to do so.

Students in grade 4 will be required to know relative sizes of measurement units within one system of units. Therefore, the following requisite knowledge is necessary in grade 4 and will not be provided in a reference sheet for the grade 4 PARCC Assessment.

Grade 4 (not on a reference sheet)

1 meter = 100 centimeters
1 kilometer = 1000 meters
1 kilogram = 1000 grams
1 liter = 1000 milliliters
1 minute = 60 seconds
1 hour = 60 minutes
1 pound = 16 ounces

The Common Core State Standards for grade 4 mathematics requires students to apply the area and perimeter formulas for rectangles. The intent of the Common Core State Standards at this grade level is to extend the conceptual understanding and discovery of area and perimeter by using models in real world and mathematical problems. Therefore, the area and perimeter formulas for rectangles are considered requisite knowledge.

DRAFT

The PARCC reference sheet for grades 5 – 8 will not include the requisite knowledge that is listed for grade 4 as well as the additional requisite knowledge listed below.

Grades 5 – 8 (not on reference sheet)

1 foot = 12 inches
1 yard = 3 feet
1 day = 24 hours
1 meter = 1000 millimeters
1 gram = 1000 milligrams
1 liter = 1000 cubic centimeters

Area of Rectangle	$A = lw \text{ or } A = bh$

Because the Common Core State Standards for grade 5 mathematics require students to convert among different-sized standard measurement units, it has been determined that the conversions listed for grades 4 and grades 5 – 8 in this document are considered to be requisite knowledge at these grades and will not be on a reference sheet. The area of a rectangle is also to be considered as requisite knowledge for grades 5 – 8 because the intent of the Common Core State Standards in Mathematics for these grades is for students to have a conceptual understanding of area of rectangles.

One will notice that the names of the measurement formulas provided on the reference sheet only include the name of the figure or object in which the measurement formula pertains to. The intent of the Common Core State Standards in Mathematics at grades 5 – 8 is to know and apply the measurement formulas. In order for students to be able to choose the correct formula, they will need to know the formula.

The PARCC Reference Sheet for grades 5 – 8 has been developed and reviewed by the PARCC Mathematics Operational Working Group, members of the Common Core State Standards writing team, and the PARCC State Leadership Team.

DRAFT