**Grade 8 “I Can …” Statements**

**Number Strand**

N8.1

I can… find the square of a number and the positive square root of a number concretely, or pictorially and symbolically.

 (Example Square of 4=16, Square root of 4 = 2)

N8.2

I understand percent including fractional and decimal percents greater than or equal to 0%.

N8.3

I can show that I understand rates, ratios and proportional reasoning concretely, pictorially, and symbolically.

N8.4

I can understand how to multiply and divide positive fractions and mixed numbers concretely, pictorially and symbolically.

N8.5

I can multiply and divide integers concretely, pictorially and symbolically.

**Shape and Space Strand**

SS8.1

I can show how the Pythagorean Theorem works concretely, pictorially and symbolically.

I can solve problems by using the Pythagorean Theorem.

SS8.2

I can find the surface area of right prisms and cylinders.

I can sketch and construct 3D objects and nets from top, front and side views.

I can explain the effect of orientation of a right prism or cylinder on its surface area.

I can solve problems with right prisms or cylinders.

SS8.3

I can explain how area of the base of a right prism or cylinder is related to volume.

I can use formulas to find volume of right prisms or cylinders.

I can explain how the orientation of a right prism affects its volume.

I can solve problems related to volume of right prisms and cylinders.

SS 8.4

I can explain what characteristics of a shape make it possible to tessellate.

I can create tessellations.

I can identify tessellations in the environment.

**Patterns and Relations Strand**

PR 8.1

I can show understanding of linear relations concretely, pictorially and symbolically.

PR 8.2

I can model and solve problems using linear equations of the form:

* ax =b
* x/a = b, a ≠ 0
* ax + b = c ( a, b, c are integers )
* x/a + b = c , a ≠ 0
* a(x + b) = c

concretely, pictorially and symbolically.

**Statistics and Probability Strand**

SP 8.1

I can show why and where to use circle, line, bar, double bar, and pictograph graphs.

SP 8.2

I can explain, predict, test and relate the probability of 2 separate events both separately and as they relate to each other concretely, pictorially, orally and symbolically.