MATH / 8th Grade

Expressions & Equations

DIGITAL GAMES

Expressions & equations: know and apply the properties of integer exponents to generate equivalent numerical expressions — CCSS.MATH.8.EE.A.1

Evaluate square roots of small perfect squares and cube roots of small perfect cubes — CCSS.MATH.8.EE.A.2

Use numbers expressed as single digit times a power of 10 to estimate large or small quantities — CCSS.MATH.8.EE.A.3

Perform operations with numbers in scientific notation; know when to use scientific notation — CCSS.MATH.8.EE.A.4
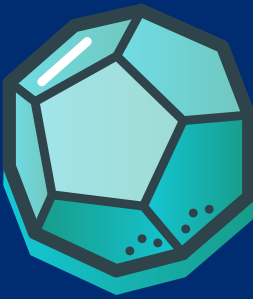
KIT-REQUIRED GAME

Evaluate expressions and equations — CCSS.MATH.8.EE.A

Functions

KIT-REQUIRED GAME

Use functions to model relationships between quantities — CCSS.MATH.8.F.B

Geometry

DIGITAL GAMES

Verify the properties of rotations, reflections, and translations through experimentation — CCSS.MATH.8.G.A.1

Describe a sequence of transformations that exhibits the congruence between two figures — CCSS.MATH.8.G.A.2

Describe effect of dilations, translations, rotations, reflections on 2-d figures using coordinates — CCSS.MATH.8.G.A.3

Given two similar 2-d figures, describe a sequence of transformations that exhibits similarity — CCSS.MATH.8.G.A.4

Use informal arguments to establish facts about angles — CCSS.MATH.8.G.A.5

Explain a proof of the Pythagorean Theorem and its converse — CCSS.MATH.8.G.B.6

Apply the Pythagorean Theorem to determine unknown side lengths in right triangles — CCSS.MATH.8.G.B.7

Apply the Pythagorean Theorem to find the distance between two points in a coordinate system — CCSS.MATH.8.G.B.8

Know and apply the formulas for the volumes of cones, cylinders, and spheres — CCSS.MATH.8.G.C.9

KIT-REQUIRED GAMES

Understand congruence and similarity — CCSS.MATH.8.G.A

Understand and apply the Pythagorean Theorem — CCSS.MATH.8.G.B

Understand when and how to calculate volume for solid objects — CCSS.MATH.8.G.C

Understand when and how to calculate volume for solid objects — CCSS.MATH.8.G.C
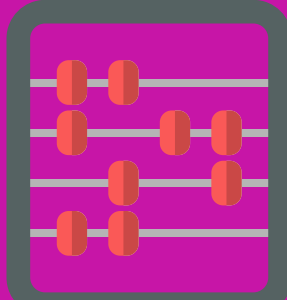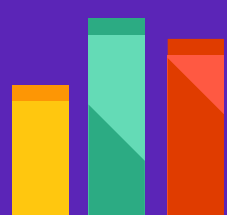
The Number System

DIGITAL GAMES

Understand informally that every number has a decimal expansion — CCSS.MATH.8.NS.A.1

Use rational approximations of irrational numbers to compare, locate, and estimate values — CCSS.MATH.8.NS.A.2

KIT-REQUIRED GAME

Understand and calculate with rational and irrational numbers — CCSS.MATH.8.NS.A

Statistics & Probability

DIGITAL GAMES

Construct/interpret scatter plots for bivariate data; investigate association between 2 quantities — CCSS.MATH.8.SP.A.1

Informally fit a straight line in a scatter plot; use to assess relationships between data points — CCSS.MATH.8.SP.A.2

Use linear equation model to solve bivariate measurement data problems; interpret slope/intercept — CCSS.MATH.8.SP.A.3

Construct/interpret a 2-way table summarizing data on two categorical variables from same subjects — CCSS.MATH.8.SP.A.4

KIT-REQUIRED GAME

Understand bivariate data — CCSS.MATH.8.SP.A

VIEW ADDITIONAL RELATED GAMES