ExploreLearning Gizmos® are award-winning, interactive simulations that bring research-proven instructional strategies to life and make learning fun.

Try them online at ExploreLearning.com

Students use Gizmos to interact with and explore hundreds of math and science topics ranging from heredity to trigonometry.

Teachers use Gizmos as dynamic “what-if” tools to help students move beyond memorizing to true understanding.

Inquiry-based lessons
Each Gizmo comes with a step-by-step, inquiry-based Student Exploration Sheet that can be used as-is, or is easily customizable by teachers.

Students also learn key terms they will encounter in the exploration on the Vocabulary Sheet.

Teacher materials
Each Gizmo comes with a Teacher Guide that describes learning objectives, a suggested lesson plan, related activities, background information, and relevant Web resources.

Teachers also have access to an Answer Key for each Student Exploration Sheet.

Exceptional support for teachers
- First-rate professional development
- Teacher home pages for easy class management and lesson planning
- Extensive online help center
- Email and toll-free phone support

Assessment & reporting
Students can immediately check their understanding and get helpful feedback after every Gizmo. Teachers can use real-time reporting of results to guide instructional decision-making.

Correlations to standards & textbooks
Gizmos are correlated to over 300 leading textbooks, state standards, and the Common Core State Standards, so finding the right Gizmo is a breeze.
### Mathematics: Middle/High

**Number and Operations**
- Order of operations
- Percents, fractions and decimals
- Adding and subtracting fractions
- Multiplying and dividing fractions
- Estimating population size
- Percent of change
- Square roots
- One-step and two-step equations

**Algebra 1**
- Points in the coordinate plane
- Linear functions
- Point-slope form of a line
- Slope-intercept form of a line
- Quadratic functions
- Simple and compound interest
- Distance-time graphs
- Linear inequalities

**Geometry**
- Conditional statements
- Polygon angle sums
- Area of parallelograms
- Classifying quadrilaterals
- Similar figures
- Triangle angle sum
- Pythagorean theorem
- Circles: circumference and area
- Right triangle trigonometry
- Rotations, reflections, and translations
- Prisms and cylinders

**Data Analysis and Probability**
- Theoretical and experimental probability
- Independent and dependent events
- Geometric probability
- Histograms

**Algebra 2/ Pre-Calculus**
- Systems of linear equations
- Linear programming
- Polynomials and linear factors
- Fourth-degree polynomials
- Rational functions
- Radical functions
- Logarithmic functions
- Exponential functions
- Conic sections
- Sequences and series
- Sine, cosine, and tangent functions
- Simplifying trigonometric expressions

### Mathematics: Elementary/Middle

**Number and Operations:**
- Number line estimation
- Factoring numbers
- Base-10 blocks
- Area and grid models
- Decimals on the number line
- Fraction tiles
- Modeling multiplication
- Division with remainders

**Algebra**
- Functions and tables
- Line graphs
- Coordinates
- Graphing skills

**Geometry**
- Volume
- Symmetry
- Transformations

**Data Analysis and Probability**
- Pictographs and bar graphs
- Mean and median
- Graphs and statistics

### Science: Middle/High

**Biology**
- Cell structure and division
- Cell energy cycle
- Photosynthesis
- Food chains
- Adaptations (Galapagos finches)
- Mendelian inheritance
- DNA structure
- RNA and protein synthesis
- Natural selection
- Human evolution
- Dichotomous keys
- Human perception, reflexes, and learning

**Earth and Space Science**
- Reading topographic maps
- Rock classification
- Plate tectonics
- Earthquakes

**Chemistry**
- Atomic structure
- Electron configurations
- Ionic and covalent bonds
- Balancing chemical equations
- Chemical equilibrium
- Titration
- Collision theory
- Stoichiometry
- Solubility

### Science: Elementary/Middle

**Earth and Space Science**
- Pollination
- Food webs and ecosystems
- Circulatory and digestive systems
- Homeostasis
- Patterns of inheritance

**Physical Science**
- Density
- Phases of matter

---

ExploreLearning is a member of Cambium Learning® Group