

# Geometry World

## Interactive Explorer

Grades 4 to 10

Published by:  
Cognitive Technologies Corporation

*"The best all purpose geometry software on the market."*

—Warren Buckleitner, Children's Software Revue

Interactively explore geometric principles in a beautiful 3D interface. Each topic outlined on the next page has a lesson designed to teach key mathematical concepts.

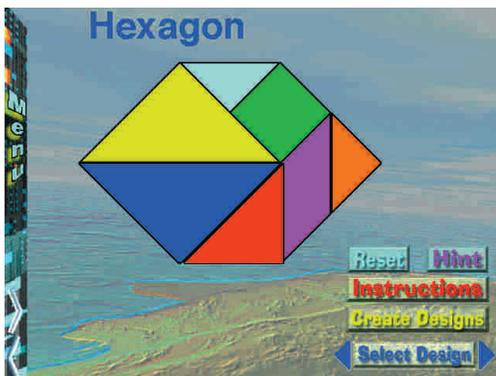
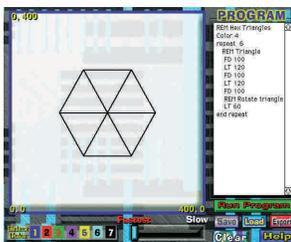
Explore geometric figures and relationships with five tools. Learn about and create tessellating patterns, tangram designs and symmetric figures. Develop logical reasoning while sorting polygons in Venn diagrams.

With the Geoboard students can create and analyze plane figures. Measure angles, lengths, perimeter and compare area. Students can create polygons and circles, and compare their characteristics (i.e., angles, lengths of sides, radius, circumference).

With the GeoDraw students learn to program the computer to create

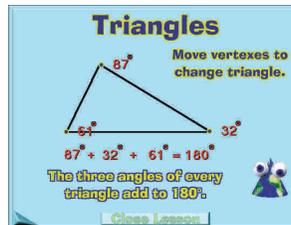
### GeoDraw:

Advanced students can write programs to create geometric figures and geometric designs by using line segments and angles.

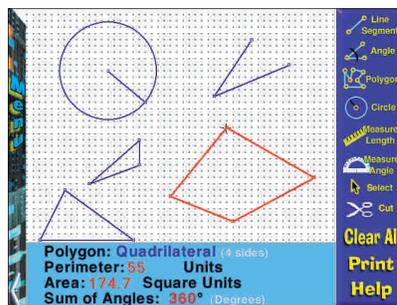


**Tangrams:** Create and share tangram designs. Students use tangram designs to develop spatial reasoning.

Interactive lessons allow students to learn and test geometric concepts.



Here students explore the sum-of-angles.



**Geoboard:** Create and explore geometric shapes.

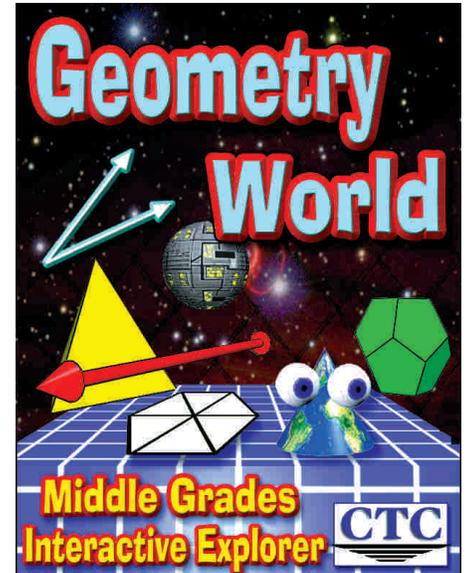
geometric patterns using a simple LOGO-like language. The GeoDraw section teaches students in a step-by-step approach how to write simple computer programs. Students learn about length, the coordinate system, rotation, interior and exterior angles, logical and geometric reasoning, as well as programming.

A geometric adventure in two skill levels tests reasoning and understanding of the mathematical concepts presented.

School versions include a teacher manual that includes suggestions on how to use and manage the software in school, answers to all geometric adventure questions, and student worksheets.

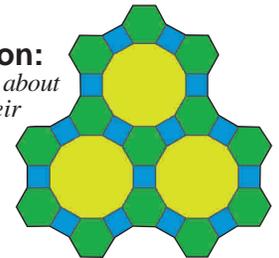
The California Instructional Technology Clearinghouse recommends *Geometry World* as Desirable.

**For FREE Demo  
Call 1-888-237-6740**



### Tessellation:

Students learn about and create their own tessellatable geometric figures and patterns.



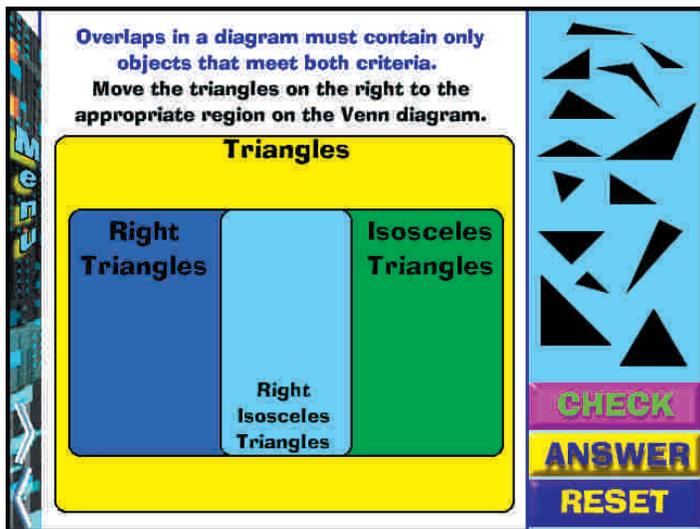
### Educational Benefits

- Identify, describe, compare and classify geometric figures.
- Develop understanding of geometric relationships.
- Develop understanding of geometric patterns.
- Geometric and spatial reasoning
- Geometric Appreciation

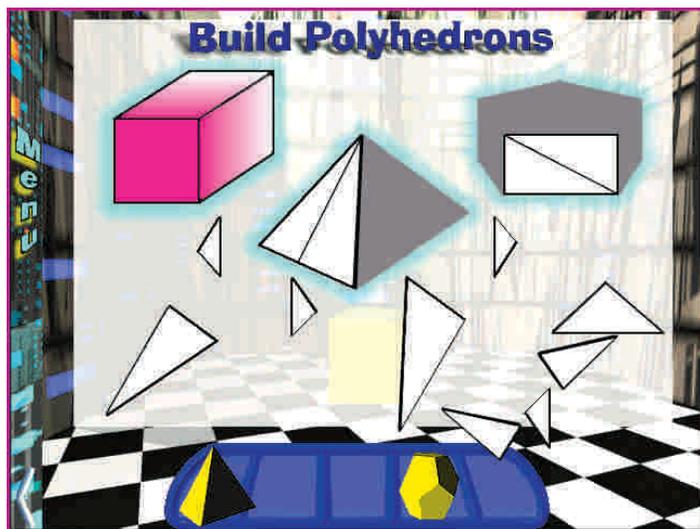


Cognitive Technologies Corporation  
4884 Cloister Drive  
Rockville, MD 20852

Order Toll-Free: 1-888-237-6740  
Fax: 1-301-581-9653



Venn Diagrams: Students move the triangles on the right to the Venn diagram on the left. Students can click the CHECK button to check their work and receive a hint. Students deepen their understanding of geometric figures and their relationships using Venn diagrams.



Geometric Adventure: Students must build polyhedrons from the triangles given to advance in the adventure. As the polyhedrons are built they light up, showing that the correct triangles were selected. Completing the adventure requires logical reasoning, spatial reasoning and an understanding of the concepts taught in the lessons.

## Features

- Student Tracking
- Five Exploration Tools
- Two Skill Levels
- Challenges/Assessment
- Math Applications

Order Toll-Free: 1-888-237-6740  
Fax: 1-301-581-9653

## Program Outline

### Introduction

- Points
- Cartesian Coordinates
- Lines
- Rays
- Line Segments
- Line Relationships
- Angles and Protractor Measuring

### Polygons

- Triangles
- Pythagorean Theorem
- Polygons
- Perimeter and Area
- Logical Reasoning with Venn Diagrams
- Tangrams
- Symmetry
- Tessellation

### Circles

- Radius
- Diameter
- Pi( $\pi$ )
- Circumference
- Area

### Solids

- Cubes/Rectangular Solids
- Polyhedrons
- Cylinders
- Spheres
- Platonic Polyhedrons
- Surface Area
- Volume

### Tools

- GeoDraw: Geometric Programming Tool
- Geoboard
- Create Tessellations
- Create Tangram Designs
- Venn Diagrams

## Geometry World

### Mac/Win CD-ROM

	Product #	
Home Version	38	\$39.95
School Version	39	\$79.95
5 Lab Pack	40	\$224.95
10 Lab Pack	41	\$369.95
20 Lab Pack	42	\$659.95
Network/Site License	43	\$999.95

Cognitive Technologies Corporation  
4884 Cloister Drive  
Rockville, MD 20852

