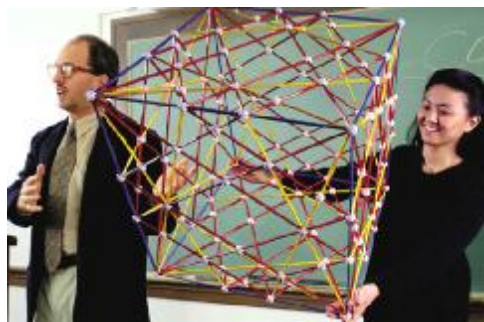


Mindspark

Toys to spark the imagination

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Email: sales@mindspark.biz
Web: www.mindspark.biz



“Applause! This is what we hear after a quick demo of Zome to our science and math peers... When you can get the interest of teachers – from kindergarten through high school, from simple geometry to fractals, in the same room at the same time – then you have a heck of a teaching tool!”

*Augustine Frkuska,
San Antonio Independent School District*

*“In 25 years of teaching, Zome was a Peak Experience!
It had tremendous impact.”*

Kathy Zentmyer, Carbondale Middle School

Zome Makes Real Learning Exciting!

Zome is a new way to explore the numbers and structures connecting math, biology, chemistry, fine art, architecture and technology. Your students will become involved, motivated and ready to learn more--it's the ultimate manipulative!

Zome Bridges Disciplines, Genders, Abilities and Age Groups.

Zome helps students of all abilities build conceptual skills, spanning differences in gender, culture and age. Zome is also used by leading mathematicians, scientists, artists, engineers and architects around the world. Students from 6 years up can progress from basic to advanced concepts.

A Unique Angle on Mathematics.

Zome is a masterpiece of technology! Color- and shape-coded parts integrate the concepts of shape, number and vector into one coherent system. Components are designed to incorporate the Fibonacci sequence and the Golden Proportion (tau)—the very same proportions that govern the growth of cells, crystals and other natural forms.

$t = \frac{1 + \sqrt{5}}{2}$ Each Zome connector node provides 62 buildable directions in space. This allows thousands of structures that can't be built in any other system. The system is so precise that students are never frustrated by dead ends. There's always a connection, so even a new user can build truly advanced models.



Are Support Materials Available?

We have comprehensive Lesson Plans written and tested by teachers

Introducing Zome to your school is easy. Lesson Plans and other teaching materials are available in print, alone or in product bundles; or download individual plans in PDF format free of. All lesson plans address U.S. national standards and contain assessment guides for grades 1-12. The book *Zome Geometry* provides expanded explorations appropriate for both upper secondary and college-level courses of study.



Which Kit Do I Need?

For A Classroom of 25:

2 Creator Kits or 2 Advanced Math Kits allow for free-form activities for the entire class of 25.

1 Creator Kit allows for free-form activities for up to 10 students, or targeted activities for a classroom.

For Small Pull-Out Groups:

The **Explorer Kit** is suitable for groups of 3 to 6 students.

The **Adventurer Kit, ScienceZone Kits and Mind 'n Matter Discovery Kits** are suitable for individual or home use, but can be used with single center activities for 1 to 3 students.

The **Pioneer Kit** is a good classroom trial kit, for individual use, or in single center activities for 1 to 2 students.

What Can I Teach with Zome?

Zome can deliver a wide range of concepts in the classroom.

Elementary School Level:

- Number sense: Connecting numbers to shapes in the real world
- Geometry: angles, area, perimeter and polygons
- Working with 2 and 3 dimensions
- Symmetry and proportion
- Tessellations and pattern recognition



Middle School Level

- Geometry connections: manifestations in science and fine arts
- Numbers and structure in physics and architecture
- Intermediate geometry, polyhedra and projection modeling
- Mineral crystals and molecular structures
- Advanced tessellations and packings in 2 and 3 dimensions

High School Level

- Advanced geometry, fractals and topology
- Modeling of DNA molecules, Buckyballs and crystalline lattices
- Trigonometry and algebra
- Fibonacci numbers and the Golden Mean in math, biology and art
- Geometry in 4th and higher dimensions



Kits for Elementary to High School

Creator Kit

Explore advance concepts and create dazzling structures from 2, 3, and higher dimensions. This kit is excellent for classroom use when purchased with the Zome Lesson Plans. Allows for free-form activities for up to 10 students, or targeted activities for up to 25. 968 pieces. (Ages 6 to adult)



Explorer Kit

This is an ideal kit for avid builders to explore the Platonic solids, tilings, packings, and more. Suitable for small pull-out groups of 3 to 6 students. 484 pieces. (Ages 6 to adult)

Lesson Plans

Written and tested by teachers, Zome Lesson Plans includes 64 easy-to-follow, math-based, illustrated lessons for grades 1-12, with art, biology, physics and architecture extensions. The plans meet U.S. NCTM standards and contain assessment guides. 220 pages.



Pioneer Kit

A Zome Intro for math/science explorations for 1 student. Build polygons and many polyhedra. 121 pieces. (Ages 6 to adult)

Adventurer Kit

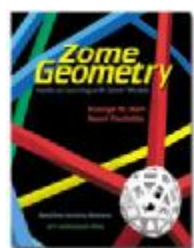
This kit builds the Platonic solids and more. It offers math/science exploration for 2 students. 242 pieces. (Ages 6 to adult)



Kits for Upper Secondary Through College

Advanced Math Kit

This kit is most appropriate for advanced Zome builders, upper secondary and college-level students. This expanded Creator Kit includes the Greenlines Expansion Kit and more nodes to let you build in an additional 60 directions. The Zome Geometry Book is highly recommended with this kit. 1308 pieces. (Ages 16 to adult)



Zome Geometry Book

This book offers upper secondary and college level enthusiasts more than 60 easy-to-follow activities and over 150 explorations into the geometry of nature. Sequenced challenges help build conceptual, spatial, visualization and geometric skills. Each lesson contains blackline activity masters, teacher notes and solutions. Best used with the Advanced Math Kit. 264 pages.

ScienceZone Kits



Crazy Bubbles Kit

Make a square bubble! Build basic 3-D shapes to dip into soap solution and create amazing bubbles. This kit also tells you how to make a bubble recipe using ordinary dishwashing soap, making bubble-sculpting a breeze. Makes a great gift and as an introduction to Zome. Includes step-by-step color instructions with lots of fun factoids on the science of bubbles. 72 pieces. (Ages 6 to adult)



DNA Kit

How does your nose know how to grow? The secret lies in a tiny "computer program" in every cell of your body – DNA! Uncover the mystery of the blueprint of life as you build your own "DNA model. A perfect science project and a great gift, complete with suggested readings, fun factoids, and step-by-step color instructions. 71 pieces. (Ages 10 to adult)

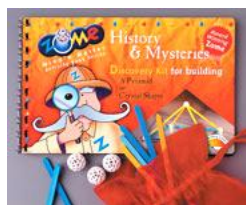


BuckyBall Kit

Discover a molecule so exciting, it's the state molecule of Texas. "BuckyBall" is the nickname for a Carbon 60 molecule, a key part of carbon nanotechnology. Buckyballs will be used for superconductors, drugs, batteries, solar cells and super-lubricators. Step-by-step instructions help you build your BuckyBall into a great science project, complete with loads of fun facts to know and tell. Kit is also good for exploring tessellations. 150 pieces. (Ages 10 to adult)

Mind 'N Matter Discovery Kits

Discovery kits come with an activity book filled with facts and activities, and uses imaginative stories and Zome models to bring history, culture, science and nature together. Each kit differs in degree of simplicity, from Easy (1) to Complex (10).



History and Mysteries

Join professor Z and his explorers as they discover the secret of the Great Crystal in the Great Pyramid of Egypt. This 12-page booklet explains 4 different activities using the 35 Zome pieces included. Simplicity level is 1. (Ages 7-12)



Construction Challenges

Join Zack Hammer in South America as he builds a truss bridge and dome-shaped homes to help villagers. This 10-page booklet explains 2 different activities using the 51 Zome pieces included. Simplicity level is 5. (Ages 7-12)



Wonders of Nature

Join Buzz the turquoise bee to gather nectar from flowers in the King's royal garden, and make turquoise honey. This 10-page booklet explains 3 different activities using the 59 Zome pieces included. Simplicity level is 8. (Ages 7-12)