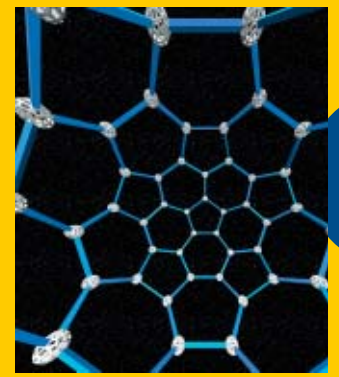


More

# BuckyBall Factoids

**Fullerenes** are a class of discrete molecules, soccer ball-shaped forms of carbon with extraordinary stability. Although the most famous of fullerenes, the BuckyBall has many **cousins**. Scientists have discovered hundreds of combinations of these interlocking pentagon/hexagon formations such as: **BuckyBabies** – spheroid carbon molecules containing fewer than 60 carbon atoms; **FuzzyBalls** – BuckyBalls with 60 hydrogen atoms attached; **Giant Fullerenes** – fullerenes containing hundreds of carbon atoms; **Nanotubes** (or BuckyTubes) – tubes of carbon created by passing an electric current between graphite rods; **DopeyBalls** – BuckyBalls which are doped with metal; **HairyBalls** – BuckyBalls that have split tubes hanging from their bodies, which could potentially be very useful in HIV research.



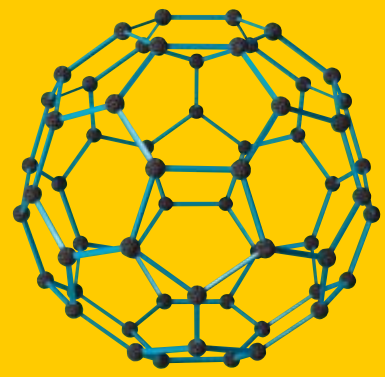
Consider the view from inside a BuckyBall. It's fabulous!

BuckyBalls are extremely stable. They can react with other atoms & molecules, and can withstand high temperatures & pressures while retaining their structural integrity.

**practical applications.** Maybe someday these most intriguing of structures will have a major impact on our lives.

Because they are **versatile** and **easily modifiable**, BuckyBalls have **enormous**

Unfold this sheet to find more BB Factoids, and step-by-step, illustrated instructions to build your very own BuckyBall Model.



Buckyballs were discovered in 1985 by R. Curl Jr. and R. Smalley, both of Rice University, Texas, and H. Kroto of the University of Sussex in England.

Considered a "playground for chemists and scientists," Buckyballs helped Curl, Smalley and Kroto earn the **1996 Nobel Prize for Chemistry**. No wonder the Buckyball won the Molecule of the Year award in 1998!



**Build the most amazingly powerful model of this century.**

**BUCKYBALLS!** Find out how they've become a stimulus to scientific research and the human imagination!

BuckyBalls promise an exciting future: Superconductors, Medicine, Nanotubes, Solar Cells, Diamond Films – even super lubrication.

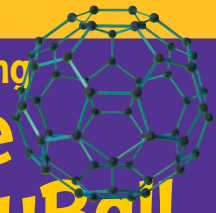
A part of the award-winning **ZOME SYSTEM**, this BuckyBall science model is easy to build, with simple, step-by-step illustrations and fun factoids inside!



**Ages 10 to Adult**

**BUCKYBALL**  
Have a Ball with this Wild Science Discovery!

The amazing **Zome BuckyBall**



**How will this teeny molecule change your future?**

Although new to science, BuckyBalls are fairly common in nature. Check it out the next time you run across some interstellar dust or geological Earth formations!

**Not just another pretty molecule!**

Explore the mysterious power of BuckyBalls in life and science. It's a brave new world – for **SCHOOL SCIENCE PROJECTS** – or just plain Zome fun!

BuckyBalls are the 3rd form of pure carbon to be discovered, after diamonds and graphite.

# BUCKYBALL

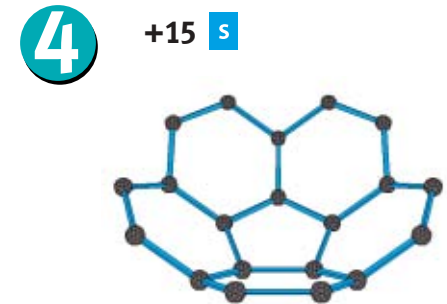
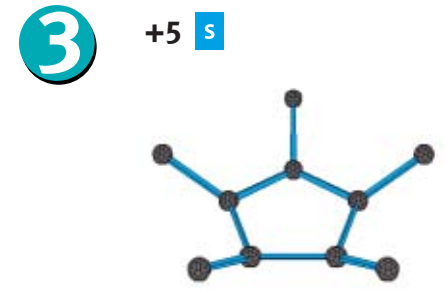
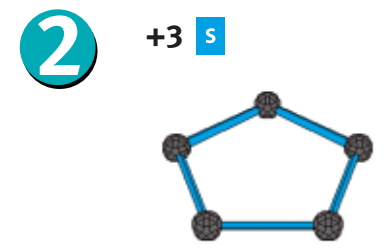
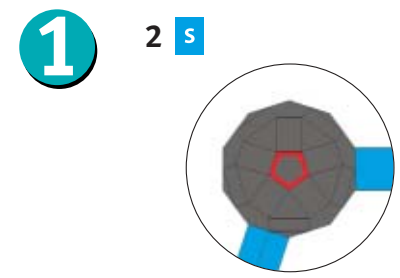
## PARTS LIST:

The Zome BuckyBall Kit contains 150 Zome Pieces, with 60 Black Zome Balls and 90 short Blue Struts.

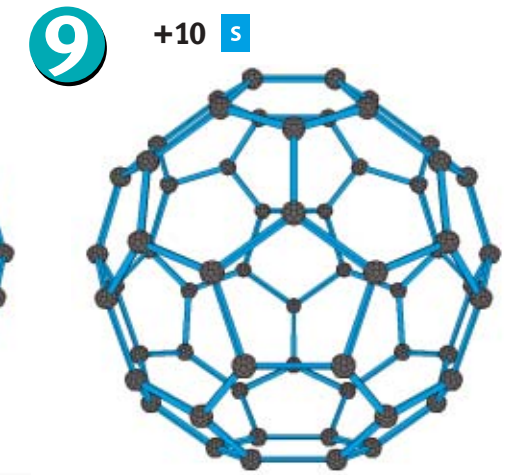
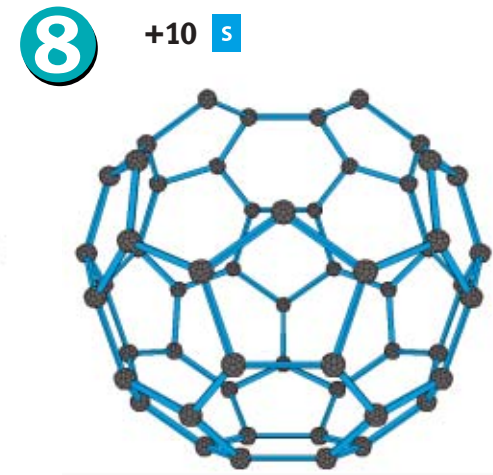
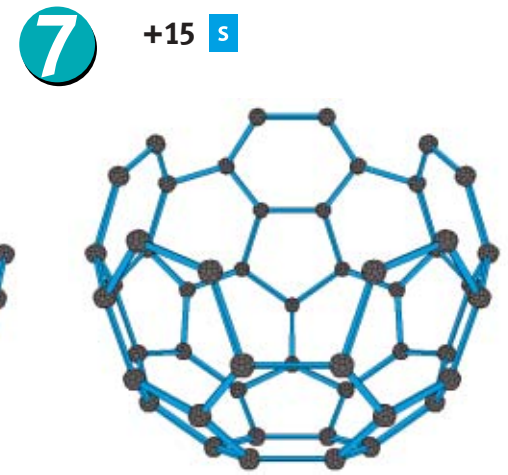
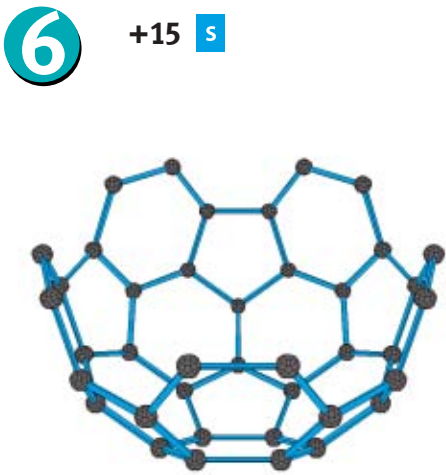
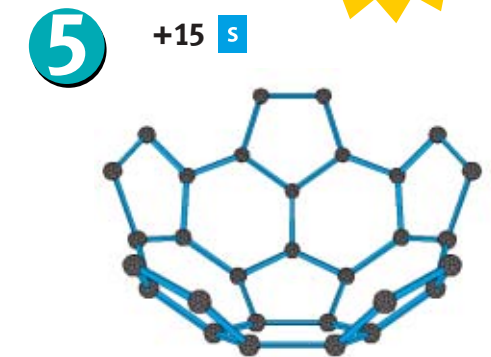
(This kit uses short Struts. These same instructions may be used with short, medium or long Blue Struts, if you have or obtain 90 Blue Struts all of the same size.)



**IMPORTANT!** For best results, as you build your model, you **MUST MAKE EACH CONNECTION VERY TIGHT!**



**!**  
**IMPORTANT!**  
For best results, you **MUST MAKE EACH CONNECTION VERY TIGHT** as you proceed!



# Did you know? BuckyBall Factoids!

What's a BuckyBall? In real life, a BuckyBall is a densely-packed crystal of carbon atoms – a



**C60 molecule**. Spherical in structure, BuckyBalls (and **fullerenes**) are named after architect **R. Buckminster Fuller** for their resemblance to his renowned geodesic domes (like those you see at Disneyworld).

Made up of 20 hexagons and 12 pentagons, **just like a soccer ball**, a BuckyBall has much more in common with a soccer ball than just looks. It **spins**, **bounces** against hard surfaces, and when squeezed and released, **springs back** to its original shape. Not bad for a molecule, huh!

BuckyBalls may even turn out to be the most **common** and **oldest** molecules in the universe!

Did you know you make BuckyBalls whenever you burn a candle or an oil lamp?!



Hailed as a **breakthrough**, BuckyBalls also have exciting uses in everything from **medical research** to **optics**, **metallurgy**, **electronics** and **fuel**.

More BB Factoids on other side.