



Continuing ClubZOOM

So you've finished all the activities, and your kids want to keep going? There are plenty of ways you can extend ClubZOOM.

1 Continue meeting.

Try new activities using the same ClubZOOM format. Here are some places where you can find new activities.

- Each activity has a section called “ZOOM Links,” which lists related activities that can be found on the ZOOM Web site (pbskids.org/zoom/sci). 
- Visit the ZOOMtoo Web feature (pbskids.org/zoom/too) where you'll find printable science and engineering activity handouts.
- Ask your kids to suggest activities.
- Ask a librarian to recommend engineering and science activity books. 

Once you've selected a new activity, collect the materials and start preparing for your next club meeting.

2 Host an “Invite a Friend” day.

Have your kids choose a favorite ClubZOOM activity that they would like to teach to a friend. They can use copies of the corresponding Stay Tuned message as invitations. Be sure that they introduce visiting friends to all parts of a ClubZOOM meeting, from decoding the Stay Tuned message to sharing activity results and visiting the ClubZOOM Board.

3 Go on an engineering field trip.

Take a trip and see engineering in action. Find out if your science museum has any engineering exhibits. Are there engineering schools or companies in your area? Call to find out if they host tours for children. You can also visit the Sightseer's Guide to Engineering (engineeringsights.org). Click on your state, and find out about interesting places to visit with your kids.

4 Visit local engineering wonders.

You may not have the Eiffel Tower or the Hoover Dam in your backyard, but your community is sure to have many structures with interesting engineering stories waiting to be explored. To learn how to explore the buildings in your community, visit the Building Big Web site (pbs.org/wgbh/buildingbig/wonder/local.html).

5 Take part in EWeek.

EWeek takes place the third week of every February. All across the country, engineers visit schools, run activities at afterschool programs, and host events at places like malls and libraries to introduce kids to the exciting world of engineering. To find out about EWeek activities happening in your area, visit: www.eweek.org.

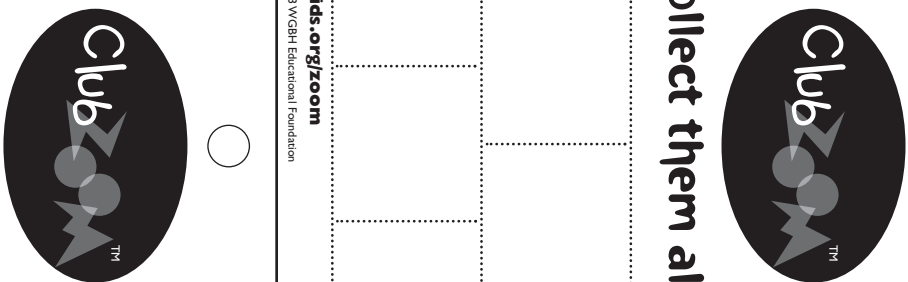
6 Visit a ZOOMzone™.

ZOOMzones are interactive areas in science and children's museums where kids can try out ZOOM activities. Check the ZOOM Web site (pbskids.org/zoom/zones) to find out if a museum in your area hosts a ZOOMzone.



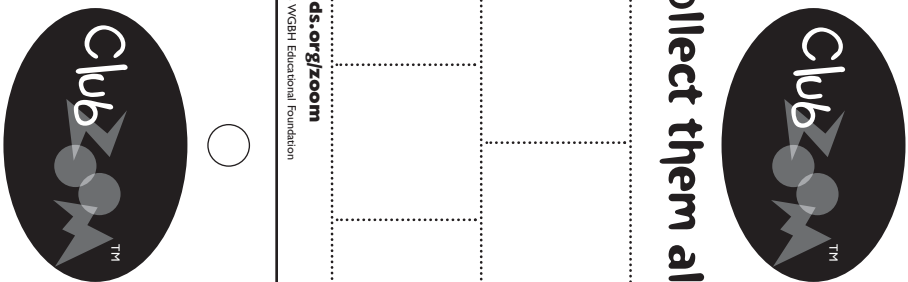
Membership Card Template

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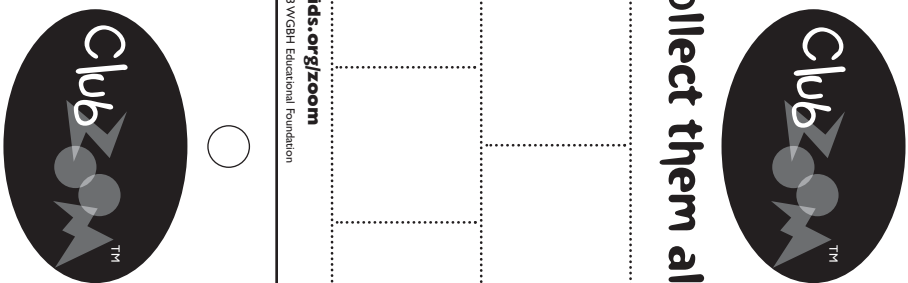
Collect them all!!!

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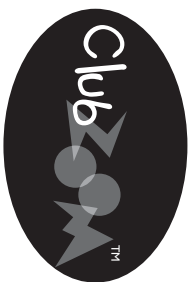
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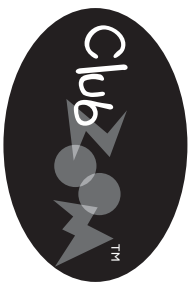
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Engineering Resources

Check out these Web sites and books for more activity ideas and information about engineering. For additional kid-friendly resources, ask the children's librarian at your local library.

Web Sites



Building Big

www.pbs.org/buildingbig

Explore large structures like bridges, skyscrapers, and dams. This site offers profiles of engineers, interactive activities, and a downloadable activity guide.

Discover Engineering

www.discoverengineering.org

Learn about different engineering careers, play games, and connect to other engineering sites.

Engineer Girl

www.engineergirl.org

This site offers profiles of women engineers, fun facts about engineering, and reasons why girls should consider engineering.

National Engineers Week

www.eweek.org

Visit the "K-12" section for hands-on activities, engineering competitions, and information about the field of engineering.

A Sightseer's Guide to Engineering

www.engineeringsights.org

Click on a state and find out about cool engineering sites you can visit.

Try Science

www.tryscience.org

Try out engineering and technology activities from science museums around the country.

Books



Cool Careers for Girls in Engineering

Pasternak, Ceel, and Linda Thronburg. Manassas Park, VA: Impact Publications, 1999.

Find out how 11 different women turned their love for engineering into exciting careers.

I Want to Be an Engineer

San Diego: Harcourt Brace & Co., 1997.

Color photographs and simple text help illustrate what it's like to be an engineer, what different kinds of engineers do, and great engineering feats.

The New Way Things Work

Macaulay, David. Boston: Houghton Mifflin, 1998.

If you're curious about how something works, it's bound to be in this book. Macaulay's engaging explanations and illustrations make learning about technology fun.

Rocket Science: 50 Flying, Floating, Flipping, Spinning Gadgets Kids Create Themselves.

Wiese, Jim. New York: John Wiley & Sons, 1995.

Kids can build different machines and learn how they work. Activities include a balloon rocket, a windmill, a fun house mirror, and more.

The Technology Book for Girls and Other Advanced Beings.

Romanek, Trudee. Tonawanda, NY: Kids Can Press, 2001.

Try the fun, interactive activities in this book and discover how everyday technology works.

Engineering Careers

Engineers use their knowledge of science and technology to solve problems—like building safe bridges, reducing noise pollution, and finding ways to manufacture new medicines. There are many branches of engineering, each focusing on solving different types of problems. Listed below is a quick overview of some of the major branches.

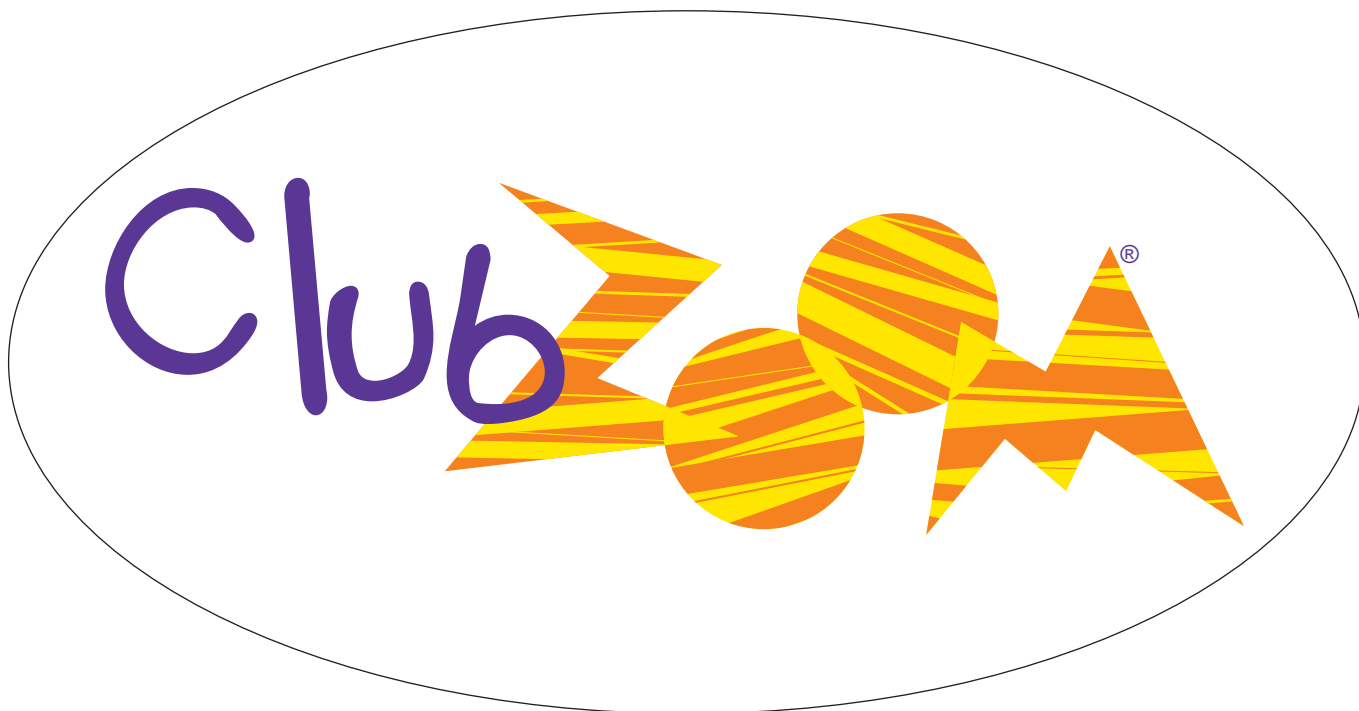
To learn more about these and other branches of engineering, visit the “About Engineers” section at www.discoverengineering.org.

Branch of Engineering	What They Do
Aerospace Engineers	Design airplanes and other things that move within gas or water, like spaceships, golf balls, and submarines.
Bioengineers	Solve problems that are connected to biology and human health, like designing ways to purify water.
Chemical Engineers	Use their knowledge of chemistry to make products, like plastics and fertilizers. They also help protect the environment by inventing cleaner technologies.
Civil Engineers	Design products that the general public uses every day, like bridges, highways, and waste treatment plants.
Electrical and Computer Engineers	Design electrical and computer-based systems found in products like cars, televisions, and microwave ovens.
Environmental Engineers	Design systems to provide clean drinking water, prevent pollution, and protect the environment.
Mechanical Engineers	Design machines and tools, like engines, factory assembly lines, and elevators.

Logo Sheet

You can photocopy these logos and use them on signs, handouts, letters, etc. for ClubZOOM only. Please follow the legal guidelines on the next page when using these logos.

All print pieces you create for your ClubZOOM must be approved by WGBH before they are printed and distributed.
Contact: Susan Buckey at 617-300-3958 or at
susan_buckey@wgbh.org



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Legal Guidelines

In addition to the handouts and signs in this guide, you may want to create your own printed materials to advertise and enhance your ClubZOOM only. Please read and follow the legal guidelines below for all printed materials (brochures, fliers, handouts, etc.) that you produce.

All print pieces you create for your ClubZOOM must be approved by WGBH before they are printed and distributed. Contact: Susan Buckey at 617-300-3958 or at susan_buckey@wgbh.org



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**Special thanks
to our pilot sites!**



- Boys & Girls Club of Brockton, Brockton, MA
- Boys & Girls Club of Buffalo, Buffalo, NY
- Boys & Girls Club of Carlsbad, Carlsbad, CA
- Boys & Girls Club of East Providence, East Providence, RI
- Boys & Girls Club of Ennis, Ennis, TX
- Boys & Girls Club of Garden Grove, Garden Grove, CA
- Boys & Girls Club of Lac Courte Oreilles, Hayward, WI
- Boys & Girls Club of Monterey Peninsula, Seaside, CA
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Club



is coming soon!



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Club



Build it, test it, solve it!



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PBS

**The Arthur Days-
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**We build
cool stuff!**



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Meet an Engineer!



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Engineering the Future!



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Mind Blaster!



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Engineers Solve Problems

Define the problem.



Think of solutions.



Choose the best one.



Design and build it.



Test it.



Did you solve the problem?

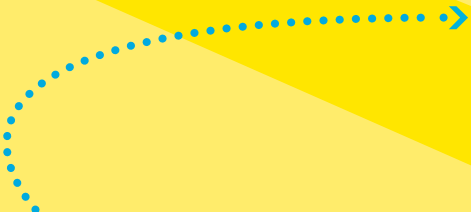
Yes



Share your results!

Make changes and redesign.

No



ZOOM congratulates

for being a **ClubZOOM Engineer!**

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**Comcast*
*Comcast**

Wentz

Kevin

Samuel

Mike

Shing Ying