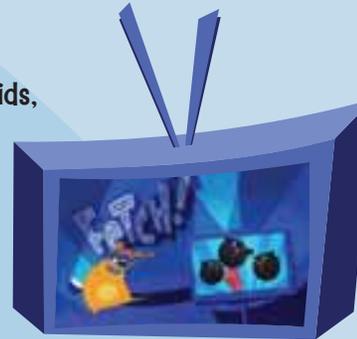


# FETCH!™ engages kids in Science and engineering

## FETCH!—the Television Show on PBS

Part game show, part reality TV, and part spoof, FETCH! features real kids, real challenges, real science, and an unreal host—Ruff Ruffman. (Yes, he’s an animated dog.) Developed especially for six- to ten-year-olds, the program shows the fun of learning, problem solving, and working as a team. FETCH! is fun, spontaneous, unscripted, educational, and full of twists. (Check your local listings.)



## FETCH! challenges relate to the TV episodes

The challenges in the guide are inspired by the FETCH! challenges on TV. Visit [pbskidsgo.org/fetch](http://pbskidsgo.org/fetch) to see how the guide’s challenges align with specific episodes. You may tape any FETCH! episode and use it for educational purposes for up to one year after broadcast.

## FETCH!—the Web Site

The FETCH! Web site provides kids both online and hands-on challenges that enable them to explore a topic further and solidify their understanding of science and engineering. On the Web site, people can find out more about Ruff and the show’s contestants, see behind-the-scenes photos, and stay up to date with the show’s contests. Visit the FETCH! Web site at [pbskidsgo.org/fetch](http://pbskidsgo.org/fetch).

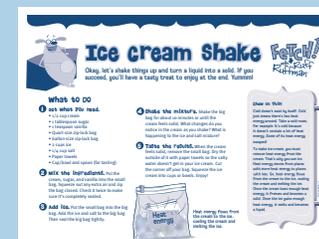


## FETCH! challenges focus on exploration

This guide provides kids with fun, hands-on science and engineering challenges. The focus is on allowing kids to explore and learn about the science process and to develop critical thinking skills.

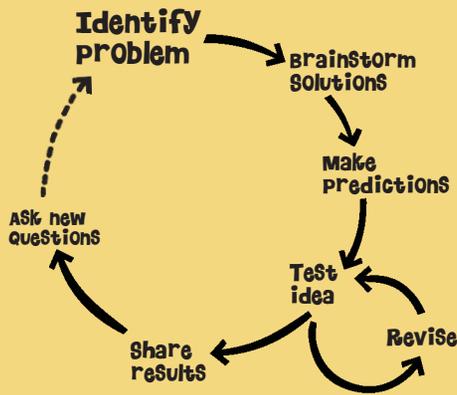
## FETCH!—the Activities

FETCH! activities offer fun and engaging ways for kids to investigate and understand their world. This easy-to-use guide has everything you need to lead FETCH! challenges with eight- to ten-year-olds, including six challenges that will have kids coming back and asking for more!



# TIPS for Leading FETCH! challenges

The FETCH! challenges in this guide engage kids ages eight to ten in hands-on science and engineering experiences. The challenges let kids succeed in multiple ways. It's not about getting a single right answer. Instead, it's about exploring, working together, and having fun.



## The FETCH! approach to solving a problem

Each challenge's procedure and discussion questions reinforce these seven problem-solving steps. They are presented on the FETCH! Solve a Problem sign (page 30).

## Before a FETCH! Meeting

- Determine if you want to host a multi-session club or a drop-in program.
- Post the FETCH! Solve a Problem sign (page 30).
- Read the leader notes, which describe how to introduce and implement a challenge. In particular, review the discussion questions (*and answers*) in the Discuss What Happened section to understand a challenge's key ideas.
- Do the challenge yourself so you'll know what to expect and where kids may need help.
- Gather any materials that you may not already have on hand.
- Find out what kids already know about the topic. Determine how you can help them connect the topic to the world around them.
- Make copies of both sides of the challenge-sheet master for each kid in your group. See the Kids' Activity Sheet overview at the top of page 3.



## During a challenge

- Remind the group that each challenge offers a variety of ways to succeed. Teamwork, rather than team-against-team competitions, is a key to success in these challenges.
- Give all the instructions before distributing materials. Kids tend to stop listening once materials are in their hands!
- Visit each group. Ask kids to describe what they're doing and to share their ideas. By explaining their plan to you, kids may make a connection that wasn't clear earlier.
- As kids progress through a challenge, they will be doing the steps outlined on the FETCH! Solve a Problem sign. Have them identify when they do each step. Tell kids that when they follow these steps, they're using the same process scientists and engineers use to solve problems.
- Use the Discuss What Happened section found in the leader notes to help kids understand a challenge's key ideas. Use the questions (*and answers*) and discussion topics in this section to help kids reflect on what they did, share outcomes, and talk about how group results compare with their predictions.

## The Kids' Activity Sheet

Each of the guide's challenges has a two-sided activity sheet, located just after the leader notes. First, copy both sides for each kid in your group. Then fold the sheet on the dotted line to make a booklet.



### Front Cover

- Activity title
- Greeting from Ruff



### Inside Spread

- Challenge introduction
- Materials list
- Step-by-step procedure
- Kid-friendly explanation of the science idea

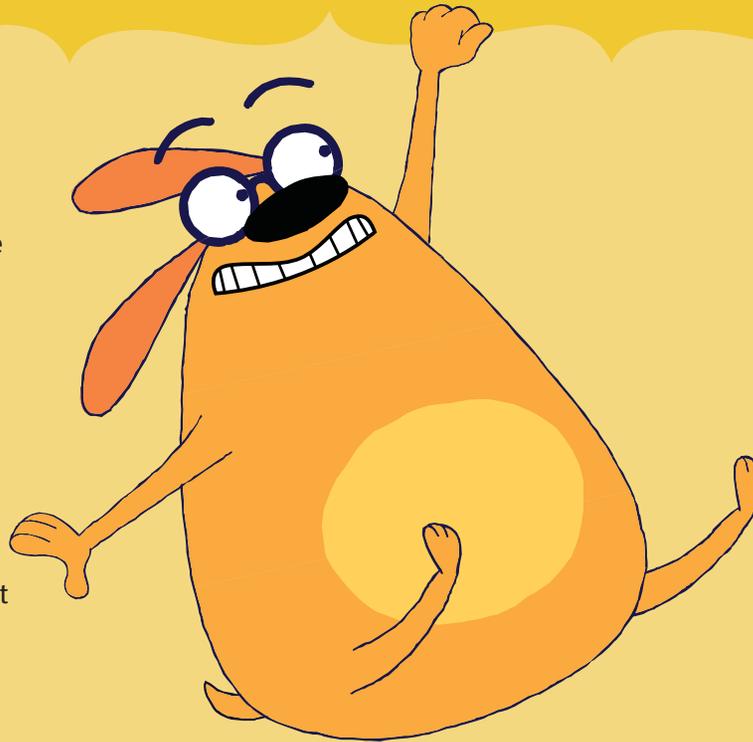


### Back Cover

- More ways to explore the topic
- FETCH! Web site

## After a challenge

- Award FETCH! points. FETCH! points serve a double purpose. They are a fun way to review the challenge's key science concepts, and because points are awarded to the entire group whenever anyone gives a reasonable answer, they reinforce the idea that kids are part of a group that values teamwork, exploration, and creativity.
- If you are running a FETCH! Club, give kids an attendance sticker to put on their membership cards. Also, have them write the points earned that day below the sticker.
- Make the learning relevant by connecting the challenge to things the kids know about.
- Encourage kids to take their challenge sheets home. They can share what they did with their families and try the Dig Deeper extension activities.
- Encourage kids to continue pursuing their questions. Suggest some of the age-appropriate books and Web sites about science and engineering topics in the Resources section of this guide and on the FETCH! Web site resource page at [pbskids.org/fetch](http://pbskids.org/fetch).



## Learn more about leading Science activities

Explore the ZOOMsci Training at [pbskids.org/zoom/grownups](http://pbskids.org/zoom/grownups).

- Get tips on easy ways to expand the learning potential of FETCH! challenges (and any science challenge) for your kids.
- Build your confidence both in using questions to expand kids' thinking and in getting kids to think like scientists and engineers.
- Learn about facilitating science activities even when you don't know a lot about the particular topic.

# Set UP a FETCH! club

A FETCH! Club is a great way to reinforce the skills and attitudes you already promote in your afterschool program. Also, a club reinforces the FETCH! approach to science—exploring, working together, developing scientific ways of thinking, and having fun. With the challenges in this guide, the FETCH! Challenge Pack, and the Web site, there are enough activities to run a club for at least nine sessions.

## Recruit FETCH! club members

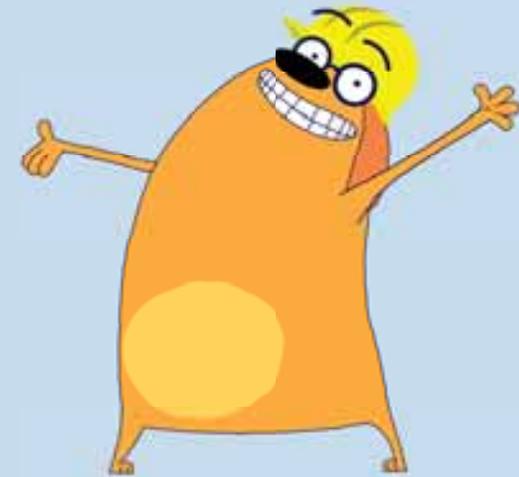
- Use the poster found in the Challenge Pack to create a Coming Soon bulletin board. Make signs with teasers about the challenges and tell kids how to sign up.
- Advertise the club in your organization's newsletter. Use language from this guide to describe the show and the challenges that kids will do. Tell families how to sign up their kids.
- Determine the number of kids you feel comfortable working with. If more sign up, consider dividing the club into two sessions, or keep a waiting list for the next time you offer the club.

## Schedule a meeting place and dates

- Select and reserve a space for your FETCH! Club that has ample room and tables for materials. A storage area, sink, and trash containers are helpful but not mandatory.
- Decide how many weeks your club will meet and schedule your meeting place accordingly.

## Make Your FETCH! club fun and distinctive

- Post the FETCH! poster, the Solve a Problem sign (page 30), and a chart to record the points the group earns each week.
- Establish a place to set out the FETCH! Club membership cards so kids can find them at the start of each meeting and return them when it's over.
- Make a bulletin board for sharing what kids are doing in the club. Post photos and examples of the challenges so others can see what happens at FETCH! Club meetings. You'll have a waiting list for the next session in no time!
- At the end of each meeting, give kids an attendance sticker to put in the grid on the back of their membership cards. Use a 3/4-inch round sticker (available at office supply stores) or choose your own. Have kids write the points earned that day on the line below the sticker.
- Kids like earning FETCH! points toward a prize, such as a special treat or celebration at the end of the final meeting, similar to what the contestants on the TV show experience. Consider making a Ruff Ruffman cake!
- At the final meeting, distribute the certificates of completion to each club member.



## The club format appeals to kids

Kids like belonging to a group where they have fun together, receive a membership card, and have an ongoing experience that builds over time.