FETCHI Science, engineering, and fun-all rolled into onel

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.) The program demonstrates the fun of learning, problem solving, and working as a team.



FETCH!-the Web Site

The FETCH! Web site provides kids with 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, you can find out more about Ruff and the show's contestants, see behind-the-scenes photos, and stay current as contestants compete to become the FETCH! Grand Champion. Visit the FETCH! Web site at pbskidsgo.org/fetch.



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 and a game that will have kids coming back and asking for more!



FETCH! activities relate to the TV episodes

Each activity in the guide is inspired by a FETCH! challenge on TV. The related episode is listed on the back of each activity sheet. You may record any FETCH! episode and use it for educational purposes for up to one year after broadcast, or you can download FETCH! episodes anytime from iTunes (www.itunes.com).

TIPS for Leading FETCHI 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 (p. 47).

Before a FETCH! Meeting

- Determine if you want to host a multi-session club or a drop-in program.
- Use the sign on page 48 to recruit kids to your FETCH! program. Provide the date(s), time(s), and information about how to sign up.
- Read the Leader Notes thoroughly. They describe how to implement a challenge from start to finish.
- 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. Help them connect the topic to their world.
- Make copies of both sides of the activity sheet master for each kid in your group. See the Kids' Activity Sheet overview at the top of page 3.
- Post the FETCH! *Solve a Problem* sign (p. 47).

During a challenge

- Encourage teamwork, rather than team-against-team competition.
- 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 many of the steps outlined on the FETCH! *Solve a Problem* sign (p. 47). Identify each step as they do them. 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 of 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 titleMessage from Ruff



Inside Spread

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





- Related science
 careers
- Related FETCH!
 episode
- 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. Because points are awarded to the entire group whenever anyone gives a reasonable answer, they also reinforce 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.
- Suggest that kids take their challenge sheets home. They can share what they did with their families and try it again.
- Encourage kids to continue asking questions and finding answers. Suggest books and Web sites related to the activities in the guide. These are listed on pages 50–51, and on the Parents & Teachers page at pbskidsgo.org/fetch.
- If you are a librarian, consider setting up a display of books related to the day's activity. Kids can check them out at the end of the meeting.

Using FETCH! with kids of all ages

FETCH! activities are ideal for kids ages eight to ten, but with a few adaptations, younger and older kids will enjoy them, too. Here are some tips to keep in mind.

Younger kids:

- May not be able to manipulate objects easily. Try the activity yourself to determine what steps or materials you may need to help them with.
- May be less likely to share with others. Supply extra materials so kids can work individually.
- May have difficulty understanding abstract ideas. Provide concrete examples whenever possible.
- Learn best by copying others. Demonstrate key steps so kids can repeat what you do.
- Believe everyone learns and thinks the way they do. Encourage an exchange of ideas and applaud different ways of thinking.

Older Kids:

- May finish an activity sooner. Have additional activities, materials, and challenges on hand.
- May prefer to learn on their own or from peers. Provide opportunities for kids to test their ideas and to explore on their own.
- Can be excellent role models for younger kids. If they finish early, invite them to assist younger kids.



SOO UP a FETCHI CLUD

A FETCH! Club is a great way to reinforce the skills and attitudes you already promote in your library or afterschool program. Also, a club reinforces the FETCH! approach to science—exploring, working together, developing scientific ways of thinking, and having fun. This guide provides you with six activities and a game to get a FETCH! Club started. If you want to extend the club, there are more activities on the FETCH! Web site.

Recruit FETCH! Club Members

- Use the poster on page 48 to recruit kids to your FETCH! program. Provide the date(s), time(s), and information about how to sign up.
- Announce the club in your organization's newsletter or Web site, using language from the poster.
- Determine the number of kids you feel comfortable leading. 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, tables for materials, and trash containers. A storage area and sink 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! *Solve a Problem* sign (p. 47) and a chart to record points earned each week.
- Make a FETCH! Club membership card for each kid (see p. 46). Have them wear their cards as name tags.
- Establish a place to keep 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.
- At the end of each meeting, give kids a sticker to put on their membership cards. A ³/₄-inch round sticker (available at office supply stores) works well. Write the points earned that day on the line below the sticker.
- Kids like earning FETCH! points toward a prize, similar to what the show's contestants experience. Consider a sweet treat or a FETCH! viewing party (with popcorn!).
- At the final meeting, distribute certificates of completion (p. 49) to each club member.

The club format appeals to kids

Kids like belonging to a group that does fun activities together, receiving a membership card, and having experiences that build over time.