



# SPY HOUNDS

A pilot broadband project that actively engages children and families in science learning, by combining animated storytelling and appointment viewing, like television, with the interactivity of the Web and offline, real-world activities.

**SPYHOUNDS** extends the value of the successful NSF-funded TV series *FETCH! with Ruff Ruffman* by moving to a new media platform and revamping the storyline. The popular character Ruff Ruffman becomes a super spy and must complete top-secret missions. Ruff needs help (both on and offline) from kids at home, his spyhounds. Each mission is designed to have kids watch new animation, complete online activities designed to promote STEM exploration, and participate in offline activities that require kids to investigate real world phenomena.

## Pi

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## PATHWAYS GRANT AWARD #

DRL-1114690

## TARGET AUDIENCE

6- to 10-year-olds and their families

## CURRICULUM

Science and Math

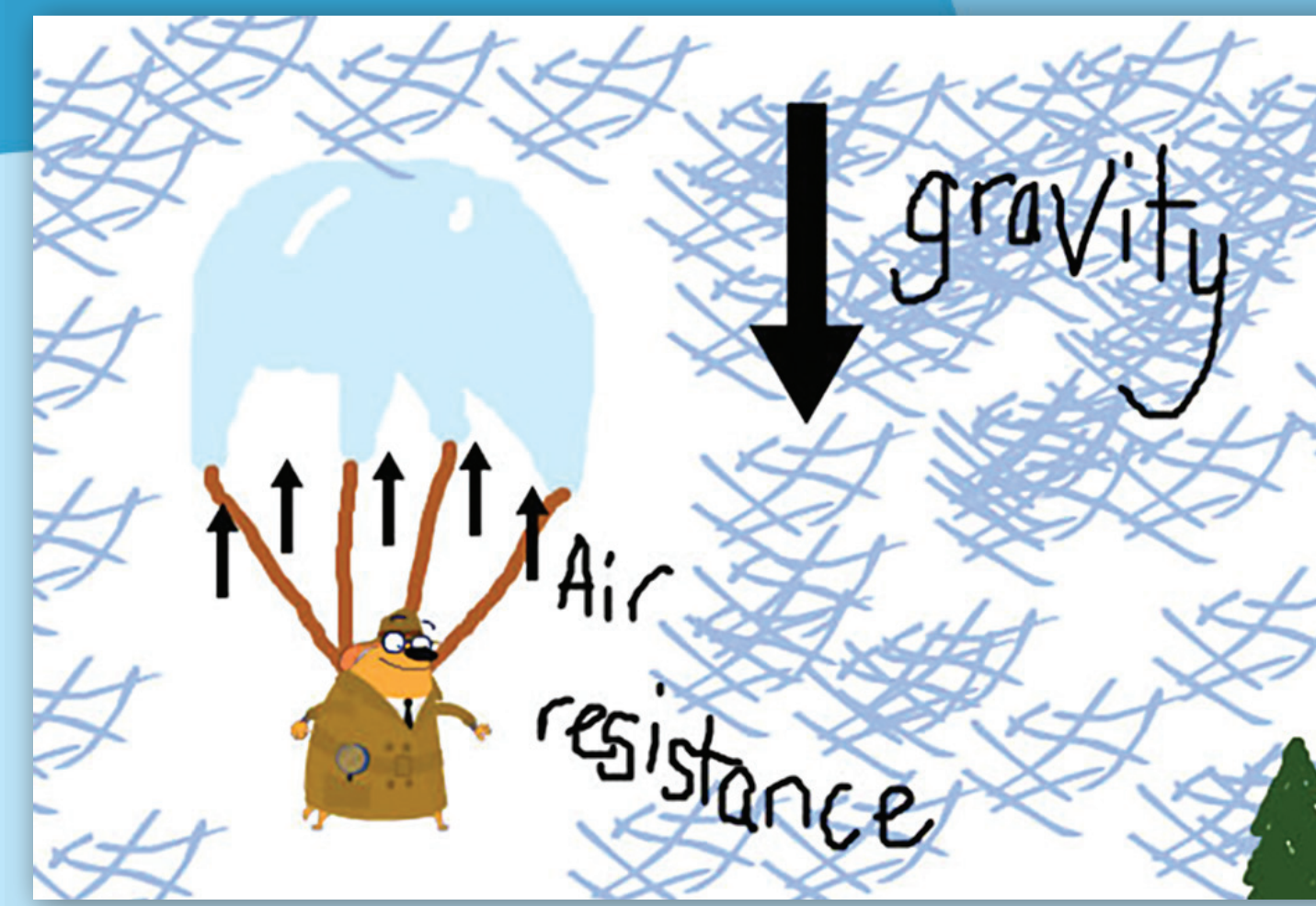


## PILOT EXPERIENCE & DELIVERABLES

“SPYHOUNDS: In Search of the Poodle Diamond,” is a Web-based narrative-driven adventure. Propelled by Ruff’s compelling storyline, kids complete a month-long mission: 20 days of content rolled out daily over four weeks. (<http://pbskids.org/fetch/spyhounds/index.html>)

- The adventure begins with an animated clip in which Ruff introduces the mission. A large diamond has gone missing. Ruff needs kids’ help to track down the villain and return the diamond!
- Short **ANIMATION CLIPS**, **AUDIO UPDATES**, and **EMBEDDED GRAPHICS** update kids on Ruff’s progress.

# YOUR MISSION: FIND THE POODLE DIAMOND IN 20 DAYS!



- A combination of **ONLINE AND OFFLINE ACTIVITIES** are woven throughout the story to teach kids science and math. For example:
  - ◆ Kids learn about gravity and air resistance by building parachutes. Kids then play a related online game, experimenting with different-sized parachutes and noticing their rate of fall. When kids have determined the right size parachute for Ruff, he takes the leap ... and arrives safely.
  - ◆ Kids explore kinetic and potential energy by building their own slingshot at home and playing a related game.
  - ◆ Kids learn about the physics of sound by building their own musical instrument at home and playing a related sound-matching game online.
- **KIDS REPORT BACK** to Ruff with drawings and photos showing their work.
- Daily **SOCIAL MEDIA UPDATES** through Facebook and Twitter.

## RESULTS OF THE PILOT

The pilot “In Search of the Poodle Diamond” was a rousing success both in terms of appeal and learning!

- In its first five weeks online, Poodle Diamond received over 4 million pageviews.
- Kids submitted 146,000 drawings and 55,000 messages to Ruff.
- 73% of visitors who gave their age were in the target age range, 6 to 10 years old.
- Rigorous **FORMATIVE EVALUATION** by Concord Evaluation Group, LLC (home-based study of 115 kids/97 families, comparing pre- and post-data) found that:
  - ◆ Children showed significant positive gains in science content knowledge after participating. The average score on a test of five physics concepts rose 48% from pre-test to post-test. These gains spanned across all subgroups, including gender and ethnicity.
  - ◆ Children and parents significantly improved their attitudes about science.
  - ◆ 97% of kids said they had fun playing Poodle Diamond.

## NEXT STEPS

WGBH is seeking Full-Scale Development funding to launch 12 SPYHOUNDS missions to engage kids in science and math exploration for a full year.

Our network of **OUTREACH PARTNERSHIPS WILL ENABLE US TO EXPAND OUR REACH BY INTRODUCING HANDS-ON SCIENCE TO NEW AND UNDERSERVED AUDIENCES**. With SPYHOUNDS, we will be able to build on the deep relationships we’ve forged over the years with thousands of youth-serving organizations. Many of our longstanding partners—including the Girl Scouts, YMCA, and Boys & Girls Clubs of America—serve disproportionately female, urban, and minority children, thus expanding our reach to traditionally underserved students. We are excited to introduce the SPYHOUNDS Agency materials to these groups.

