TOPICS FOR DISCUSSION:
Before viewing the program, discuss the work of a scientist. What are some different areas that scientists study? What are the tools of a scientist? How does a scientist get information? Why is the work of a scientific important?

Before viewing the program, discuss the kinds of activities that children typically do at camp. What are some different types of camps that children attend? Have students relate some of their own camp experiences.

After viewing, review the concept of “trial and error” presented in the program. Have students discuss activities in which they have had to try different approaches to a problem. Discuss the style in which the book Archibald Frisby, is written, so students recognize that the story is told in rhyme, instead of the narrative style of most stories that they read.

Discuss ways in which Archibald’s experience at camp was an “experiment” in itself. In what ways might he be different when he comes home from camp? In what ways will he still be the same Archibald?

CURRICULUM EXTENSION ACTIVITIES:
Have students make a record of Archibald’s camp activities, written from his point of view. This could take the form of daily diary entries, a series of letters or postcards home to his mother, or a scrapbook.

Brainstorm a list of areas studied by scientists. Use print and multimedia resources to locate the names of these listed areas (e.g., plants - botany, rocks - geology) and what scientists who study them are called (e.g., animal - zoologist, fossils - paleontologist etc.).

View other READING RAINBOW programs to learn more about the work of some of these scientists. The following programs might be helpful: Bringing the Rain to Kapiti Plain (meteorologist); Desert Giant (herpetologist); Digging Up Dinosaurs (paleontologist); Hill of Fire (geologist); Jack, the Seal and the Sea (marine biologist); Nosey Mrs. Rat (primatologist); Space Case (astronomer); Sunken Treasure (oceanographer), and many others. (See the READING RAINBOW Subject Index for additional suggestions). Discuss some of The work related characteristics that these scientists have in common, e.g., they ask questions, they use their observation skills, they collect and record information, etc.

Set up a “science camp” in the classroom. Have students generate a list of areas that would be interesting to study at such a camp. Choose three or four of their ideas and establish co-operative groups to plan and set up each experience. What will they call their station? How will they set up the station? What experiment or activity will visitors to their station do? What materials will they need? What kinds of directions will they need? Invite other classes to attend the camp. Students will need to “advertise” the camp and issue invitations. What will they call their camp?

Go out to the school playground and try some scientific principles first hand. Go down the slide (gravity), swing on the swings (momentum and gravity), (around on the merry-go-round (centrifugal force), hang from the monkey bars (gravity), try the teeter-totter (a lever at work), and run (friction).

Keep the explanations simple and pose problems whenever possible. For example, have students experiment with sitting at different distances from the centre the teeter-totter or try it with students of different weights. Encourage the children to hypothesize what might happen if the scientific principles were not at work.
Gather together a collection of simple ‘inventions’ that are part of the everyday lives of children. Have students study the object, experiment with it and arrive at an explanation of how it works. They can either write or demonstrate their explanations for the class. Objects they investigate might include: a zipper, Velcro, the crank-type pencil sharpener found in classrooms, a door latch, ball-point pen, handheld can opener, and similar items.

Using an assortment of materials (boxes of all sizes, cardboard rolls, container lids, film canisters, popsicle sticks, cans, etc.), have students ‘invent’ something. They need to name it, tell its purpose, and explain how it works. Encourage them to use their imaginations.

Depending upon available resources in the community, take a trip to a science lab. A local university or community college, hospital, or industry might be willing to host a tour.

RELATED THEMES:
• inventions
• ingenuity

RELATED READING RAINBOW PROGRAMS:
• Alistair’s Time Machine
• Galimoto

About The Author:
Michael Chesworth is a book jacket designer and illustrator who studied civil engineering and worked as a medical illustrator before turning to book illustration. He also illustrated Rainy Day Dream, a wordless adventure. Chesworth lives with his wife and daughter in Connecticut.

BOOKS REVIEWED BY CHILDREN:
WHAT MAKES POPCORN POP?: AND OTHER QUESTIONS ABOUT THE WORLD AROUND US by Jack Myers (Boyd’s Mills Press)
I WONDER WHY SOAP BUBBLES: AND OTHER QUESTIONS ABOUT SCIENCE by Barbara Taylor (Kingfisher)
Science Magic SERIES (SOUND, LIGHT AIR, WATER) by Chris Oxlade (Barron’s)

SUPPLEMENTARY BOOKLIST:
101 GREAT SCIENCE EXPERIMENTS by Neil Ardley (Darting Kinderstey)
WHY CAN’T YOU UNSCRAMBLE AN EGG? by Vicki Cobb, Illus. by Ted Enik (Lodestar)
GRAVITY by Norma L. Gentner, Illus. by Diana Magnuson (The Wright Group)
WHICH WAY IS UP? by Gail Kay Haines, Illus. by Lisa Amoroso (Atheneum)
MISTAKES THAT WORKED by Charlotte Foltz Jones, Illus. by John O’Brien (Doubleday)
ACCIDENTS MAY HAPPEN by Charlotte Foltz Jones, Illus. by John O’Brien (Doubleday)
HOW TO THINK LIKE A SCIENTIST by Stephen P Kramer, Illus. by Felicia Bond (HarperCollins)
THE WAY THINGS WORK by David Macaulay (Houghton Mifflin)
MAKE IT MOVE (FIRSTSCIENCE SERIES) by Julian Rowe and Molly Perham (Children’s Press)
MY FIRSTSCIENCE BOOK by Angela Vwilkes (Knopf)