

Name _____

Research Rousers!

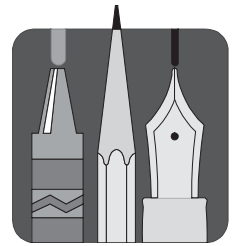
Integrating laboratory animal science into classroom activities can be easy and fun with these Research Rousers. These activities may be assigned as extra credit, classroom time-fillers, group projects, homework, field trips, or even as rewards. Browse through the list of activities and decide which one(s) to share with your students. You may select activities based on your schedule and/or curriculum topic.

Class-oriented Activities (teacher-guided):

- Have your students compile a list of questions they may have about the use of animals in research. As time allows, select a question and research to find the answer.
- Visit the States United for Biomedical Research website (www.statesforbiomed.org) to see if your state has its own biomedical research advocacy organization. If so, a speaker may be arranged to talk to your classes about research using animals.
- Invite a veterinarian or veterinary technician to visit your classroom. Ask them to talk about the design of their clinic and how they got into their careers or, if possible, take a field trip to a local veterinary clinic. Have the students take photos and put together a visual presentation to share with their classmates or younger students.
- As a class, visit the *Guide for the Care and Use of Laboratory Animals* online at <http://bob.nap.edu/readingroom/books/labrats>. After reading some of the sections, have the students discuss their thoughts and ideas about these requirements. Some sections that might be of interest to students are Physical Environment and Husbandry.
- Have students bring in a recent newspaper or magazine article that relates in some way to animal research and testing. As a class, read and then discuss the articles. What impact does the content have on class members? Their families? Their pets?

Research Activities:

- Select a common pet vaccine or medicine and learn about the disease it prevents. Is it a virus or bacteria or parasite? Is it spread by contact between animals or by insects such as mosquitoes or ticks? Can people or other animals get the same disease? Suggested topics: Rabies, Canine Distemper, Feline Leukemia, Tetanus, Canine Hepatitis, Heartworm, Lyme Disease.
- What are the rules that protect people and animals that are subjects in medical research? Who enforces those rules? Topics to think about: The Tuskegee experiments (U.S., 1932-1972) or Nazi Concentration Camps (Germany, World War II).
- What childhood vaccinations have the students in class received? Can the students make a list? Do they know anyone who has had Polio? Whooping Cough? Who was Edward Jenner and what role did cowpox play in developing vaccinations?
- Research about the Greek scientist, Aristotle, and how he used animals to make discoveries about the body.
- What is the "Three Rs principle" (search keywords: Russell and Burch,) and how does it help assure appropriate animal use in research?
- List and discuss the steps involved in developing a new drug from a concept to availability at the drug store. Visit this website for more information: www.fda.gov/fdac/special/newdrug/ndd_toc.html.
- What is an Institutional Animal Care and Use Committee (IACUC)? Why is it so important? Read about it at www.aphis.usda.gov/ac/iacuc.pdf.



Project Activities:

- Create a poster about how our pets, wildlife, farm animals, or zoo animals have benefited from results of research conducted on animals. Topics to think about: assisted reproduction for endangered species, vaccinations, nutrition.
- Create a poster showing tips for keeping your pets safe during all seasons. What is needed for pets that live outdoors? What is needed for pets that live in a classroom?
- Do an inventory of products under the sink in a bathroom or kitchen in your house. Do the products carry safety warning labels? What actions would the students take if a pet or child ate or drank one of the products? How do Poison Control Centers know what to recommend when they get a call? Visit the website of the American Association of Poison Control Centers (www.aapcc.org) to learn more.
- Interview someone you know who has benefited from medical research. Write about the medical problem, and what advances in medicine helped (surgery, anesthetics, antibiotics, plastic or reconstructive procedures, bone repair, insulin treatment for diabetes, dental implants, laser eye surgery, hernia repair, etc.). Check out www.living-proof.us for stories of how medical research has benefited other people.
- Select a common lab animal species and create a shadowbox describing how it has helped humans and animals via research. Learn about the various lab animals on the "animal" link on the Kids-4-Research website (www.kids4research.org).
- Select a childhood disease that is preventable through vaccination and create a poster about it. Some ideas might include: Rubella (German measles), Varicella (chickenpox), or Pertussis (whooping cough). Here's a great resource: www.cdc.gov/nip/diseases/child-vpd.htm.
- Make a wall-size timeline of major medical breakthroughs over the past 100 years. Have students contribute illustrations, photos, and facts. See an example at www.fbresearch.org.
- Take a trip to a local drugstore or beauty salon to investigate shampoo labeling. How many products are identified as "cruelty free" or "not tested on animals"? What are the federal guidelines for such labeling? Check out more details at www.cfsan.fda.gov/~dms/cos-lbl.html.

Home Activities:

- Help elderly neighbors or grandparents by walking their pets or assisting them with taking their pets to the veterinarian.
- Ask if you can arrange a tour of your pet's veterinary clinic or a local pet shelter hospital. What areas in the veterinary hospital are also found in a hospital for people?
- Interview your close friends and family or people in your community about their perceptions on the use of animals in medical research. Are their ideas realistic or not? Do you agree with them? Why or why not?