

# Homework Menu #8



name: \_\_\_\_\_ date: \_\_\_\_\_

**Directions:** For homework this month you will be working on and completing projects of your choice. Below is a list of projects that you may choose from. If you have an idea of your own which is not listed, check with Russ for permission to try it. As you complete each project you will have a chance to share it with your classmates. Some projects may take more time than others to finish. To keep track of the time you spend on your homework projects, you and your parents will complete a homework time sheet that is to be turned in each Friday. When you finish one project, begin working on your next project as soon as you can. All projects will be due no later than the nearest Friday to the end of the month. At that time a new menu will be given out.

**Focus of the Month:** Reptiles and Amphibians

**Skills included:** Reading comprehension; interpreting/infering; data collection; communication; scientific observation; artistic representation; expository writing analysis; spatial representation; map reading; synthesis; photography; research oral and written and presenting; skills.



## Project Menu:

□ Frogs, newts, lizards, snakes - they are all amphibians or reptiles and are among the oldest species on earth. They can be found near streams, ponds, lakes, or even in deserts. Often they will inhabit gardens and yards. Set out on a small safari and find an amphibian or reptile. Observe it for awhile, taking notes on its behavior, on what plants are around, how it looks, and what date and time of day you observed it. Also take some pictures of it. Be sure to watch it from a respective distance so that it isn't frightened or harmed in any way. Go back on another day and see if it is still in the same area. If it is, perhaps you have discovered its own backyard! Keep adding to the data you have been collecting on it each time you observe the reptile or amphibian. Go to the library or look in an encyclopedia and find out what you can about its species name and its habitat. Create a poster to share that includes the pictures you took and some of the important and interesting information you found out. Bonus idea: draw a portrait of the amphibian or reptile to include with your poster.



□ Reptiles and amphibians are interesting creatures. They come in many shapes and sizes. Some are almost cuddly looking while others are quite dangerous. Find some books or internet websites about reptiles and/or amphibians. Take notes on all of the interesting facts you can find. Then, writing each of the facts on a card with matching questions, create a board game that uses the fact/question cards. Include rules for playing the game, as well as some playing pieces. Bonus idea: use clay to sculpt your playing pieces to look like reptiles and/or amphibians.

□ The world is a very large and fascinating place, full of all sorts of different creatures and the landscapes they live in. Choose a type of reptile or amphibian you are interested in. Perhaps you are intrigued by poisonous snakes, turtles, tree frogs, or newts. Whatever it is, find out everything you can about where they live. Then, using a poster-size map, mark all of the locations that they can be found. Bring your map to school to share with the class. Bonus idea: draw your own map, use labels and colors to show the habitats of the reptiles or amphibians you chose to study.

□ Frogs have long been the subject of many biology classes. They have been used to study and learn about the internal organs of animals; what they look like, and how they function. There has also been criticism of using real animals (including frogs) to study and to dissect. After all, if every student in our country dissected frogs, there soon wouldn't be any left! In comes technology "to save the day." It is now possible to dissect frogs without killing them by using computers. It's called virtual dissection. If you would like to give this a try, use the Internet to go to: [http://www.mhhe.com/biosci/genbio/virtual\\_labs/BL\\_16/BL\\_16.html](http://www.mhhe.com/biosci/genbio/virtual_labs/BL_16/BL_16.html) Once the it loads, start with the "introduction" and then follow the directions from there. **WARNING**, this website is pretty graphic and uses lifelike pictures of a frog to dissect. Once you have done the dissection of the virtual frog, find out what the different organs you dissected do. Write a short report or create a labeled poster that shows what you learned.

□ Often scientific research involves looking at the findings of other scientists, looking at the similarities and differences between them, and then compiling a report from what was learned when it is all put together. Create a research report titled Amphibians and Pollution. Some webpages you may want to visit include:

<http://www.sciencedaily.com/releases/2000/12/001212070554.htm>

<http://www.sciencedaily.com/releases/2002/11/021126203307.htm>

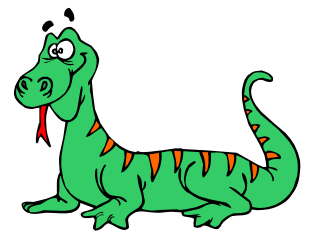
<http://www.sciencedaily.com/releases/2000/01/000106083006.htm>

<http://www.sciencedaily.com/releases/2000/02/000222064857.htm>

<https://www.sciencedaily.com/releases/2011/04/110425153633.htm>

You may also want to look in the library for magazine or journal articles on the subject. After you have read three or more articles on the subject, skim back through them and take notes on the most important things from each of them. Next organize your notes so that similar things are grouped together, not just by author. Finally combine your notes and write your report. Be sure to include an introduction that makes a point, details from the articles that support the point you are making, a conclusion that summarizes the main idea of your report, and a bibliography that shows your sources. Bonus idea: write your report using a computer, print it out, and place it in a report folder.

□ Other: \_\_\_\_\_  
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**Expectations:** It is expected that chosen projects will be finished completely, neatly, and in a timely manner. It is also expected that students will gain a depth of understanding about their project's topic upon completion. Further, while students are encouraged to work on one project at a time, it is entirely possible for students to complete any number of projects in the timeframe given. Students should also remember to keep homework interesting by challenging themselves to learn as much as possible and to do the best work they can.

**Important:** These projects will likely require mutual involvement of students and their parents. To ensure the quality and depth of understanding expected, they likely cannot be completed in one evening prior to the due date. Each student will have to use their time wisely, doing a little bit at a time until a project is complete. Use the Project Planning Form to help you successfully complete your project on time.

