WEBELOS/AOL ELECTIVE ADVENTURE: ADVENTURES IN SCIENCE

Additional checkoff sheets and helps are available from ScouterMom.com.

Complete the following requirements										
1. An experiment is a “fair test” to compare possible explanations. Draw a picture of a fair test that shows what you need to do to test a fertilizer’s effects on plant growth.										
2. Visit a museum, a college, a laboratory, an observatory, a zoo, an aquarium, or other facility that employs scientists. Prepare three questions ahead of time, and talk to a scientist about his or her work.										
3. Complete any four of the following:										
3A. Carry out the experiment you designed for requirement 1										
3B. If you completed 3A, carry out the experiment again, but change the independent variable. Report what you learned about how changing the variable affected plant growth										
3C. Build a model solar system. Chart the distances between the planets so that the model is to scale. Use what you learned from this requirement to explain the value of making a model in science.										
3D. With adult supervision, build and launch a model rocket. Use the rocket to design a fair test to answer a question about force or motion.										
3E. Create two circuits of three light bulbs and a battery. Construct one as a series circuit and the other as a parallel circuit.										
3F. Study the night sky. Sketch the appearance of the North Star (Polaris) and the Big Dipper (part of the Ursa Major constellation) over at least six hours (which may be spread over several nights). Describe what you observed, and explain the meaning of your observations.										
3G. With adult assistance, explore safe chemical reactions with household materials. Using two substances, observe what happens when the amounts of the reactants are increased.										
3H. Explore properties of motion on a playground. How does the weight of a person affect how fast they slide down a slide or how fast a swing moves? Design a fair test to answer one of those questions										
3I. Read a biography of a scientist. Tell your den leader or the other members of your den what the scientist is famous for and why his or her work is important.										
Completed										
Presented										