

## Bringing out the Science in 4-H Projects

Cindy Kinder, University of Idaho Extension Educator-Gooding/Camas County

Kids need more science. How do we “do” science? What if I don’t have test tubes, chemicals nor knowledge to mix the stuff?

Volunteers, parents and Extension staff can support the science education of our children. Science can be found in many of the 4-H activities we do. In the 4-H Scoop Newsletter have been science experiments for livestock projects. I would like to encourage livestock members to do the science experiments and challenge them to make up one of their own. Members can learn about the scientific method through their livestock projects.

The “process” of science or the scientific method is very simple:

1. There is something known out in the world; research a topic
2. A question, problem or a situation that is different has arrived
3. Hypothesize, give a theory or guess what may happen
4. Develop a method and collect the needed items to test the hypothesis • In your methods, there is a control and variable. In the control, nothing is changed. In the variable, one thing is different from the control.
5. Do the experiment; Question; Change the method and redo the experiment
6. Record any information or data
7. Summarize and interpret what happened
8. Report and apply what we learned from the experiment

The experiments printed follow this process and can be used in multiple ways: by individuals, as club activities, or during education days. Members can keep a journal for their experiments: what they tested, what they saw, smelled, or touched, any data collected, and how they can use the information in the future. Adults should ask direct questions during the experiments to challenge members to think and understand what is going on.

Experiments are printed one a month then the next month questions for previous experiment are printed. This gives leaders and members an opportunity to conduct the experiment and to revisit what was learned.

Have fun conducting your experiments and maybe some of you might do one for a county demonstration.