



2010 4-H NJSF®/SCFHS Theme: *Get SET with 4-H*

SET (Science, Engineering and Technology) is now among 4-H's mission mandates. This means the program now sees students developing skills in these areas as a priority for 4-H members.

Why?

Today only 18 percent of US high school seniors are proficient in science (NAEP 2005). A mere 5 percent of current US college graduates earn science, engineering, or technology degrees compared to 66 percent in Japan and 59 percent in China. If the US is to maintain its competitive edge in these areas—areas critical to economic stability and growth—America's youth must become proficient in science.

So What Does This Have To Do With My Club's Display?

We're looking for you to tell us about the Science, Engineering or Technology in your club. If your club deals with animals there's plenty of biology. If you're in a sewing or craft club your projects require engineering for planning the dimensions, material and shape. Horticulture clubs use science in feeding and growing their projects. There's science at work in your 4-H projects, you just need to think about it.

When do you use the following abilities?

Ways of doing Science, Engineering and Technology are collectively referred to as "SET Abilities."

The 30 most common SET Abilities are:

- Predict
- Hypothesize
- Evaluate
- State a Problem
- Research Problem
- Test
- Problem Solve
- Design Solutions
- Develop Solutions
- Measure
- Collect Data
- Draw/Design
- Build/Construct
- Use tools
- Observe
- Communicate
- Organize
- Infer
- Question
- Plan Investigation
- Summarize/Relate
- Invent/Implement Solutions
- Interpret/Analyze/Reason
- Categorize/Order/Classify
- Model/Graph/Use Numbers
- Troubleshoot
- Redesign
- Optimize
- Collaborate
- Compare

To Learn More:

Rutgers 4-H SET Website: <http://4hset.rutgers.edu/>

National 4-H SET Website: http://4-h.org/programs_mission_mandates/set.html