



Colorado State University
Extension

4-H STEM Survey

	Yes	Not Sure	No
I liked doing the activities in this STEM program.	😊	😐	☹️
I want to learn more about STEM.	😊	😐	☹️
I like STEM.	😊	😐	☹️
I think STEM is useful in my everyday life.	😊	😐	☹️
I know more about <i>(insert STEM content)</i> now.	😊	😐	☹️
I know more about careers and jobs related to STEM.	😊	😐	☹️
I can ... <i>insert STEM ability question(s)</i>	😊	😐	☹️
I can ... <i>insert STEM ability question(s)</i>	😊	😐	☹️
I can ... <i>insert 21st century skill question(s)</i>	😊	😐	☹️
I can ... <i>insert 21st century skill question(s)</i>	😊	😐	☹️
I used something I learned in this program outside of 4-H.	😊	😐	☹️
What did you do?			

STEM Ability Survey Questions

Customize the end-of-program survey to the STEM Ability that your program focused on. Copy and paste the appropriate question(s) into the survey where indicated.

STEM Ability	Survey Question
Build/Construct	I can build something by putting materials together.
Categorize/Order/Classify	I can put objects or events in groups or classes.
Collaborate	I can work with others.
Collect Data	I can record information about objects and events in an organized way.
Communicate/Demonstrate	I can communicate information to another person.
Compare/Contrast	I can identify and describe similarities and differences.
Design Solutions	I can create a written plan that identifies a problem to be solved and the needs of the solution (time, money, tools, materials).
Develop Solutions	I can create an organized plan to develop many possible solutions to solve a problem.
Draw/Design	I can use graphics or images to represent a plan of action for a process or an idea for something tangible like a building.
Evaluate	I can examine and judge data.
Hypothesize	I can make an educated guess about how things work.
Invent/Implement Solutions	I can create and apply a solution to solve a problem.
Infer	I can explain an observation based on my previous experience.
Interpret/Analyze/Reason	I can find a pattern within a collection of data.
Measure	I can use a measuring tool to find a numerical value (such as weight, height, length, volume).
Model/Graph/Use Numbers	I can create a graphic, diagram, or chart that will explain information to others.
Observe	I can use my senses to get information about myself or the world around me.
Optimize	I can make the best or most of a condition.
Organize/Order/Classify	I can gather objects or ideas and arrange them in a way that makes sense.
Plan Investigations	I can use the Scientific Method.
Predict	I can foresee future observations based on previously known information.
Problem Solve	I can think through a problem and possible solutions to find the best way to handle it.
Question	I can ask a question about something I observe that can be answered by collecting data.
Redesign	I can revise a drawing, sketch or plan based on new information.
Research a Problem	I can explore an issue to find and understanding its facts.
State a Problem	I can assess a need in order to define the problem to be solved.
Summarize	I can make a brief statement giving the main points or substance of a matter.
Test	I can conduct an experiment to find if a hypothesis can be supported.
Troubleshoot	I can find the source of a problem so that it can be solved.
Use Tools	I can use instruments to understand science.

21st Century Skills Survey Questions

Customize the end-of-program survey to the 21st Century Skills that your program focused on. Copy and paste the appropriate question(s) into the survey where indicated.

21 st Century Skill	Survey Question
<p>Critical Thinking (thinking deeply; thinking differently) Students analyze information, solve problems, and create new knowledge</p>	Using technology, I can identify real issues for my school, community, or world and state real questions to explore.
	Using technology, I can plan and manage activities for completing a project or solving a problem.
	Using technology, I can collect and analyze data to accomplish a variety of tasks and to solve problems.
	Using technology, I can explore an issue from many sides and suggest more than one possible solution.
<p>Collaboration (working together, learning together) Students communicate and work collaboratively to support learning and contribute to the learning of others</p>	I can work with others to develop technology-based presentations or exhibits.
	I can communicate information and ideas to others using a variety of formats.
	I can use technology to interact with people from other cultures, communities, or countries.
	I can contribute to a team project that explores and shares specific information.
<p>Invention (creating solutions) Students assess real-world problems and invent new solutions. A focus on creativity is essential to prepare students for the future</p>	I can use my knowledge to think of new ideas to solve challenges.
	I can express myself in creative ways.
	I can use models to explain results.
	I can see trends and make guesses about future results based on information I've gathered.
<p>Self Direction (own your learning) Students set goals, organize their assignments and manage their academic time to develop a strong, balanced work ethic.</p>	I use technology in safe, legal and responsible ways.
	I can select and use technology to improve how I communicate, collaborate, be productive, and achieve goals.
	I can describe how I select and use technology in my personal learning and for school projects.
	I can identify and talk about the effects of technology on individuals, society, and the world.
<p>Information Literacy (untangling the web) Students use tools to gather and evaluate information to determine validity and reliability.</p>	I can plan the steps I will take to investigate a question.
	I can use technology to find and organize important and reliable information from a variety of sources.
	I can compare and contrast the effectiveness of two or more information resources and select the best one to accomplish an assigned task.
	I can use technology to process data and report results.
	I can demonstrate that I understand and can use technology to complete learning tasks.
	I can select and use appropriate technology applications for use in my learning.
	I can troubleshoot common computer problems.
	I can apply what I know about technology to new technologies and situations.