

Technology Engines and

GPS/GIS

Mechanical

Sciences

Robotics

Transportation

equipment.

problems.

activities.



No

Yes

No

Yes

#### 4-H PROJECT AREAS AND DEFINITION

Project Title	Definition	Science Ready
SCIENCE, ENGI	NEERING, AND TECHNOLOGY	
	Consumer and Family Science	
Child	Programs, activities, and projects related to family-related skills including babysitting,	No
Development, Child Care	parenting, family life education, etc.	
Clothing &	Programs, activities, and projects related to clothing construction, fabric selection, and design.	No.
Textiles	Includes programs such as buymanship, sewing, etc.	
	Biological Sciences	
Aquatic Science	The discipline and knowledge base applied to life and living processes in lakes, rivers and	No
	streams. Also includes marine science programs and 4-H aquarium projects.	
Biological Sciences	The discipline and knowledge base applied to life and living processes.	No
Entomology & Bees	The study of zoology that pertains to insects and beekeeping.	No
Meat & Food Science	The studies of nutrients in that nourish, sustain, or supply mankind, including the study of animal tissue used for human consumption.	No
Plant Science	The study of plants and how they grow. Plant genetics, reproduction and plant responses to the environment.	No
Poultry Science & Embryology	The branch of biology dealing with poultry embryos and their development.	No
Veterinary Science	The study of prevention, alleviation or cure of animal diseases and injury.	No
	Technology and Engineering	I
Aerospace	The physical science that deals with flight, the earth's atmosphere and space.	No
Computer & Digital	Use and integration of computers and established and emerging digital technologies (iPod, QR codes, iPad, smart phones, games) as tools for science discovery and 4-H projects.	No

Programs, activities and projects related to apparatus used for transportation, agricultural

production, lawn or garden applications, including automotive, engines, tractors and field

Includes programs, activities and projects related to the use of GPS/GIS technologies and skills

with application in real world settings to enhance understanding of our world and solve real

Associated with mechanical arts made, performed or operated by machinery including wood

The design, construction, operation and application of robots and computer systems for their

control, sensory feedback, and information processing, including LEGO, VEX and FIRST robotics

science and industrial arts, designing and using technical plans, developing dexterity and familiarity with tools, machines and process for construction and repair engineering.

### **Physical Sciences**

	Physical Sciences	
Physical Sciences	Programs, activities and projects related to the natural sciences that deal primarily with nonliving materials, including Astronomy, Chemistry, Mathematics, and Physics.	No
	Environmental Education/Earth Sciences	
Environmental	Programs, activities and projects related to energy, electricity, green and bioenergy and soil	No
Resource	conservation.	
Management		
Environmental	The general study of human life and its relationship to other life forms on earth and the	No
Science and	physical, biological and chemical environments and cultivation of a personal commitment to	
Natural	responsible resource management. Includes programs, activities and projects related to	
Resources	environmental stewardship, earth, water and watersheds, wetlands, air, geology and minerals,	
	weather and climate, composting, vermiculture (worm farming), waste management, recycling	
	and household hazardous waste, forestry, Jr. Citizen Planner, Trackers and 4-H Youth	
	Conservation Councils.	
Outdoor	Programs, activities and projects that involve being in, using, enjoying or interpreting the	No
Education/	natural environment, including Outdoor Adventure Challenge, Project FISH, hiking,	
Recreation	backpacking, canoeing, kayaking, orienteering and ropes courses.	
Shooting Sports	Programs, activities and projects related to the use of firearms and archery equipment to	No
	facilitate personal goal setting, sportsmanship, confidence and safety.	
Soils & Soil	Studies of soils as plant growth media, construction materials and naturally occurring bodies.	No
Conservation	Soils represent the place where earth's crust, the atmosphere, living things and water are most	
	intimately mixed.	
Wildlife &	Programs, activities and projects related to studies of wildlife and fish species in terms of	No
Fisheries	ecosystems, geographic distribution, biodiversity, habitat, human utility, management, native	
	and invasive species, including sports fishing and hunting.	
	Ag in the Classroom	
Ag in the	In-school exploration of agriculture	No
Classroom		
	Animals	
Alpacas and	Domesticated South American mammals having fine, long wool.	No
Llamas		
Animal	Learning about horse judging, livestock evaluation and dairy judging.	No
Evaluation		
Beef	Domesticated bovine developed primarily for the efficient production of red meat.	No
Birds and Poultry	Domesticated birds, chickens, pigeons, waterfowl and other warm-blooded feathered animals	Yes
Cats	Domesticated feline animals most commonly referred to as house cats.	No
Dairy Cattle	Domesticated bovine bred and developed chiefly for milk production	No
Dogs	A domesticated carnivorous mammal (Canis familiaris) related to the foxes and wolves and	Yes
	raised in a wide variety of breeds	
Emus and	Large, flightless, ratite birds, having a feathered head and neck and rudimentary wings.	No
Ostriches		
Goats	Includes dairy, meat, hair and pygmy goats.	Yes
Horse & Pony	Breeding, care, training for riding, pleasure or draft purposes	No
Horseless	Programs, activities and projects related to equine science that does not require ownership of	No
Projects	an animal. Includes horse judging, hippology and horse bowl activities.	
Proud Equestrian	Riding and horsemanship for persons with disabilities	No
Program		
Rabbits/Cavies	Any of several small, domesticated mammals related to ordinary hares or to rough-haired	Yes
	South American rodents in the Caviidae family, such as guinea pigs.	1
Sheep	Ruminant mammals of the genus Ovis, of the family Bovidae, bred in a number of	No

domesticated varieties for the production of meat or wool

Small Animals/ Pocket Pets/ Lab Animals	Includes all other small, domesticated mammals raised and cared for not listed in any other Animal category	No
Swine	Any of a family (Suidae) of omnivorous, artiodactylous mammals with a bristly coat and elongated, flexible snout; esp., a domesticated pig or hog.	No

### **Plant Science**

Agronomy	Programs, activities and projects related to crops, weeds, pest management, soils and soil conservation.	Yes
Horticulture	Programs, activities and projects related to plants, flowers, house plants, vegetables	Yes
	ornamentals and herbs, including programs such as Jr. Master Gardeners and those connected	
	to the 4-H Children's Gardens through science, theme gardens, plant experiments and/or	
	technology integration.	

### **CITIZENSHIP**

## **Civic Engagement**

Citizenship and	Preparation for roles as a member of society, public policy and interrelationships. Includes	No
Civic	programming such as Capitol Experience, Citizenship Washington Focus, Wonders of	
Engagement	Washington and local citizenship academies.	
Global and	Programs, activities, and projects designed to build knowledge and skills related to global and	No
Cultural	cultural competency. Includes programming around global and cultural awareness,	
Education	exploration, documentation, diversity and pluralism and projects such as FOLKPATTERNS, intra-	
	and inter-state exchanges, international exchanges (hosting and traveling), China Art and Dance	
	programs, Michigan 4-H History Project and Backpack to Adventure: Youth leaders in a Global	
	World.	

## **Community/Volunteer Service**

Community	Acquiring personal skills and knowledge in the process of performing service for others through	No
Service	an organized experience. Includes, club or individually designed community service projects	
	and Youth Experiencing Action (YEA) activities.	
Service Learning	Acquiring personal skills and knowledge in the process of performing services to others through school-based or community-based organized programs that includes intentional planning	No
	followed by personal reflection.	

# **Leadership and Personal Development**

Business and	The study of the principles underlying commerce, merchandising and entrepreneurship.	No
Entrepreneurship	Examples of this project area include: business plan development, fundraising, pricing,	
	marketing service or product (such as livestock), economics and distribution and sales.	
Career	Learning about alternatives to jobs, permanent callings and professions, the expectations and	No
<b>Exploration and</b>	rewards of each and workforce preparation/employability skills. Examples of this project area	
Workforce	include: career assessment and research, post-secondary training options, portfolio	
Preparation	development, job search techniques, applications, resumes, interviewing, internships, job	
-	shadowing and job fairs.	
College and	Preparing for life post-high school – educationally, financially, physically, socially and	No
Independent	emotionally. Includes participation in pre-college programs, post-secondary education	
Living Readiness	opportunities, access/readiness trainings.	
Financial Literacy	Examples of this project include: budgeting-spending, saving, investing, credit, club treasury,	No
	comparison shopping and consumer education, National Endowment for Financial Education	
	(NEFE) High School Financial Planning programs, Money Smart Week sessions, etc.	
Introductory 4-H	General exploration of 4-H programs and projects for newer and/or younger members,	No
Projects	including Cloverbuds, mentees in mentoring programs, and other areas designed to give youth	
,	exposure to 4-H opportunities.	
Leadership Skills	Communication, conflict management, decision-making, facilitation, planning, goal-setting,	No
Development	problem-solving, inclusion, diversity, and self-confidence. Includes activities such as teen	

	leaders, youth officers and decision makers, Natural Helpers, National Congress/Conference participation, teen/peer mentors, and conflict resolution and mediation.	
Leisure	Learning to transform free time into self-discovery and personal fulfillment through knowledge	No
Education	of self through available alternative activities including social recreation skills and leisure sports	
	such as bicycling, golf, bowling, etc.	
Life Skill and	Expanding knowledge of self and expanding capabilities, personal growth, increased self-	No
Character	awareness, expanding personal capacity, includes Character Education, and general life skills	
Education	development.	

**Communications and Expressive Arts** 

Communication	Interchange of thought or information as a verbal or written message, including public speaking, demonstrations, creative writing, displays and exhibits, journalism, radio or TV presentation, poetry, non-fiction.	No
Expressive Arts	Skills of expressing, imparting and conveying information to others. Includes arts, crafts, clowning, mime, dance, drama, theater, drawing, painting, sculpting, music, performing arts, photography/video, visual arts, and woodworking.	No

### **HEALTHY LIFESTYLES**

### **Food and Nutrition**

Food and	Food stuffs, their preparation and the act of being nourished by wholesome, sustaining food	No
Nutrition	substances. Includes food preservation, food safety, EFNEP, SNAP-Ed, Jump Into Foods &	
	Fitness (JIFF), Team Nutrition, cake decorating, baking, cooking, etc.	
	Health	
Health and	Relates to the body's well-being, maintenance of well-being, and learning about and	No
Fitness	participating in exercise of any kind. Includes sports, physical health, first aid/CPR, mental and	
	emotional health, smoking cessation, etc.	
	Personal Safety	
Safety	Programs, activities, or projects that affect being secure or protected from hurt, injury, harm or	No
	loss. Includes ATV, automotive and bicycle safety, emergency preparedness, tractor safety	
	education, etc.	