



## APPENDIX A

### 4-H PROJECT AREAS & DEFINITIONS

Project Title	Definition	Science Ready
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#### SCIENCE, ENGINEERING & TECHNOLOGY

##### Consumer & Family Science

Child Development, Child Care	Programs, activities and projects related to family-related skills including babysitting, parenting, family life education, etc.	No
Clothing & Textiles	Programs, activities and projects related to clothing construction, fabric selection and design. Includes programs such as buymanship, sewing, etc.	No

##### Biological Sciences

Aquatic Science	The discipline and knowledge base applied to life and living processes in lakes, rivers and streams. Also includes marine science programs and 4-H aquarium projects.	No
Biological Science	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 study of nutrients 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 & Engineering

Aerospace	The physical science that deals with flight, the earth's and space.	No
Computer & Digital Technology	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
Engines & Transportation	Programs, activities and projects related to apparatus used for transportation, agricultural production, lawn or garden applications, including automotive engines tractors and field equipment.	No
GPS/GIS	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 problems.	Yes
Mechanical Sciences	Associated with mechanical arts made, performed or operated by machinery including wood science and industrial arts, designing and using technical plans, developing dexterity and familiarity with tools, machines and process for construction and repair engineering.	No
Robotics	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 activities.	Yes



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## SCIENCE, ENGINEERING & TECHNOLOGY

### 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
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### Environmental Education & Earth Sciences

Environmental Resource Management	Programs, activities and projects related to energy, electricity, green and bio energy and soil conservation.	No
Environmental Science & Natural Resources	The general study of human life and its relationship to other life forms on earth and the physical, biological and chemical environments and cultivation of a personal commitment to responsible resource management. Includes programs, activities and projects related to 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.	No
Outdoor Education & Recreation	Programs, activities and projects that involve being in, using, enjoying or interpreting the natural environment, including Outdoor Adventure Challenge, Project FISH, hiking, backpacking, canoeing, kayaking, orienteering and ropes courses.	No
Shooting Sports	Programs, activities and projects related to the use of firearms and archery equipment to facilitate personal goal setting, sportsmanship, confidence and safety.	No
Soil & Soil Conservation	Studies of soils as plant growth media, construction materials and naturally occurring bodies. Soils represent the place where earth's crust, the atmosphere, living things and water are most intimately mixed.	No
Wildlife & Fisheries	Programs, activities and projects related to studies of wildlife and fish species in terms of ecosystems, geographic distribution, biodiversity, habitat, human utility, management, native and invasive species, including sports, fishing and hunting.	No

### Ag in the Classroom

Ag in the Classroom	In-school exploration of agriculture	No
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### Animals

Alpacas & Llamas	Domesticated South American mammals having fine, long wool	No
Animal Evaluation	Learning about horse judging, livestock evaluation and dairy judging	No
Beef	Domesticated bovine developed primarily for the efficient production of red meat.	No
Birds & Poultry	Domesticated birds, chickens, pigeons, waterfowl and other warm-blooded feathered animals.	No
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 foxes and wolves. They are raised in a wide variety of breeds.	Yes
Emus & Ostriches	Large, flightless, ratite birds, having a feathered head and neck and rudimentary wings.	No
Goats	Includes dairy, meat, hair and pygmy goats.	Yes
Horse & Pony	Breeding, care, training for riding, pleasure or draft purposes.	No



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## SCIENCE, ENGINEERING & TECHNOLOGY

### Animals (continued)

Horseless Projects	Programs, activities and projects related to equine science that does not require ownership of an animal. Includes horse judging, Hippology and horse bowl activities.	No
Rabbits & Cavies	Any of several small, domesticated mammals related to ordinary hares or to rough-haired South American rodents in the Caviidae family, such as guinea pigs.	No
Sheep	Ruminant mammals of the genus Ovis, of the family Bovidae, bred in a number of domesticated varieties for the production of meat or wool.	No
Small Animals, Pocket Pets, and 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, ornamentals and herbs, including programs such as Jr. Master Gardener and those connected to the 4-H Children's Gardens through science, theme gardens, plant experiments and/or technology integration.	Yes

## CITIZENSHIP

### Civic Engagement

Citizenship & Civic Engagement	Preparation for roles as a member of society, public policy and interrelationships. Includes programming such as Capitol Experience, Citizenship Washington Focus, Wonders of Washington and local citizenship academies.	No
Global & Cultural Education	Programs, activities, and projects designed to build knowledge and skills related to global and cultural competency. Includes programming around global and cultural awareness, 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.	No

### Community/Volunteer Service

Community Service	Acquiring personal skills and knowledge in the process of performing service for others through an organized experience. Includes club or individually designed community service projects and Youth Experiencing Action (YEA) activities.	No
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 followed by personal reflection.	No

### Leadership & Personal Development

Business & Entrepreneurship	The study of the principles underlying commerce, merchandising and entrepreneurship. Examples of this project area include: business plan development, fundraising, pricing, marketing service or product (such as livestock), economics and distribution and sales.	No
Career Exploration and Workforce Preparation	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 followed by personal reflection.	No



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## CITIZENSHIP

### Leadership & Personal Development (continued)

College & Independent Living Readiness	Preparing for life post-high school – educationally, financially, physically, socially and emotionally. Includes participation in pre-college programs, post-secondary education opportunities, access/readiness trainings.	No
Financial Literacy	Examples of this project include: budgeting-spending, saving, investing, credit, club treasury, comparison shopping and consumer education, National Endowment for Financial Education (NEFE) High School Financial Planning programs, Money Smart Week sessions, etc.	No
Introductory 4-H Projects	General exploration of 4-H programs and projects for newer and/or younger members, including Cloverbuds, mentees in mentoring programs, and other area designed to give youth exposure to 4-H opportunities.	No
Leadership Skills Development	Communication, conflict management, decision-making, facilitation, planning, goal-setting, 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.	No
Leisure Education	Learning to transform free time into self-discovery and personal fulfillment through knowledge of self by utilizing available alternative activities including social recreation skills and leisure sports such as bicycling, golf, bowling, etc.	No
Life Skill & Character Education	Expanding knowledge of self, capabilities, personal growth, expanding personal capacity, includes Character Education and general life skills development.	No

### Communications & 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 and non-fiction.	No
Expressive Arts	Skills of creating, imparting and conveying artistic expression to others. Includes arts, crafts, clowning, mime, dance, drama, theater, drawing, painting, sculpting, music, photography/video, visual arts and woodworking.	No

## HEALTHY LIFESTYLES

### Food & Nutrition

Food & Nutrition	Food stuffs, their preparation and the act of being nourished by wholesome, sustaining food substances. Includes food preservation, food safety, EFNEP, SNAP-Ed, Jump Into Foods & Fitness (JIFF), Team Nutrition, cake decorating, baking, cooking, etc.	No
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### Health

Health & Fitness	Relates to the body's well-being, maintenance of well-being and learning about and participating in exercise of any kind. Includes sports, physical health, First Aid/CPR, mental and emotional health, smoking cessation, etc.	No
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### Personal Safety

Safety	Programs, activities, and projects that affect being secure or protected from hurt, injury, harm or loss. Includes ATV, automotive, bicycle and tractor safety and education, emergency preparedness, etc.	No
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