4-H Science Core Competencies

The 4-H Science core competencies identify how 4-H youth development workers can be competent and caring resources to youth, organizations, and communities. 4-H youth development professionals and volunteers implement 4-H Science programs that offer the following eight essential elements.

CARING ADULT

UNDERSTANDS THAT EACH YOUNG PERSON BENEFITS FROM A POSITIVE RELATIONSHIP WITH A CARING ADULT BY:

1 Communicating the capacity of all youth to learn and experience success.

2 Willing to learn alongside youth.

3 Being comfortable not having all the answers.

4 Demonstrating support for all youth, regardless of their challenges.

5 Understanding and caring about youth and their families.

6 Appreciating the context in which youth and families live.

SAFE ENVIRONMENT

CREATES AN EMOTIONALLY AND PHYSICALLY SAFE LEARNING ENVIRONMENT BY:

1 Modeling strategies for conflict resolution.

2 Encouraging youth to share new ideas and different perspectives.

3 Modeling and facilitating how to give and receive constructive criticism.

4-H Science Core Competencies

INCLUSIVE ENVIRONMENT (BELONGING)

DESIGNS INCLUSIVE LEARNING ENVIRONMENTS BY:

1 Promoting teamwork and cooperation.
2 Providing opportunities for youth to teach and learn from each other.
3 Demonstrating respect for others.
4 Fostering an environment of mutual respect for others.

SEE ONESELF IN THE FUTURE (SENSE OF HOPE)

NURTURES AN ATMOSPHERE OF OPTIMISM AND A POSITIVE BELIEF IN THE FUTURE BY:

1 Encouraging the belief that all youth can learn science or pursue science careers.
2 Creating a science-friendly learning environment.
3 Promoting science careers for all youth, regardless of their gender, race, or ethnicity.
4 Demonstrating how science can improve the world.

VALUES AND PRACTICES SERVICE TO OTHERS

ENCOURAGES AN ETHIC OF CARING AND CIVIC RESPONSIBILITY BY:

1 Helping youth connect to the community through service projects.
2 Encouraging empathy for others and responsibility to the community.
3 Engaging youth in real world science activities that consider the needs of others.
4 Understanding the positive and negative effects that science has on humans.

4-H Science Core Competencies

OPPORTUNITIES FOR SELF-DETERMINATION

ENCOURAGES AND SUPPORTS INDEPENDENCE IN YOUTH BY:

1 Helping youth set their own goals.

2 Encouraging youth to make their own decisions.

3 Describing pathways to engage in science careers.

4 Communicating the value of science for all.

OPPORTUNITIES FOR MASTERY

PROVIDES OPPORTUNITIES FOR YOUTH TO DEVELOP SKILLS, COMPETENCE, AND EXPERTISE BY:

1 Designing experiential, inquiry-based, opportunities for youth to learn 4-H Science skills.

2 Challenging youth to explore new or different 4-H Science projects and areas of learning.

3 Supporting youth in achieving their goals in the face of setbacks.

4 Knowing how to foster an increasing development of skills in youth.

ENGAGEMENT IN LEARNING

ENCOURAGES YOUTH TO DIRECT AND MANAGE THEIR OWN LEARNING BY:

1 Assisting youth in setting realistic goals of their own choice.

2 Encouraging an inquiry approach to learning and exploration.

3 Providing sufficient time and an appropriate environment for thorough learning.