

# Exploring Agriculture Education (Seventh Grade) (2019)

**Demonstrate employability skills required by business and industry. 1**

- 1.1** Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities **1.1**

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- 1.2** Demonstrate creativity by asking challenging questions and applying innovative procedures and methods. **1.2**

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- 1.3** Exhibit critical thinking and problem-solving skills to locate, analyze and apply information in career planning and employment situations. **1.3**

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- 1.4** Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity. **1.4**

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- 1.5** Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply team work skills. **1.5**

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- 1.6** Present a professional image through appearance, behavior and language. **1.6**

**Analyze constructs in agri-science. 2**

- 2.1** Connect and apply scientific concepts in practical agricultural applications. **2.1**

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- 2.2** Analyze technological trends and research in agricultural and natural resources. **2.2**

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- 2.3** Explain the global economic impact of agriculture in meeting human needs for food, fiber, and natural resources **2.3**

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- 2.4** Investigate and draw conclusions about how agriculture impacts the local and state economy. **2.4**

**Apply principles of leadership, personal growth and career success through activities of the National FFA Organization. 3**

- 3.1** Explain the benefits of the National FFA Organization. **3.1**

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- 3.2** Expand leadership goals, personal growth and career success through Agriculture Education. **3.2**

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**3.3** Describe the knowledge and skills needed for Career Development Event (CDE) activities in FFA. 3.3

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**3.4** Design and carry out a Supervised Agricultural Experience (SAE) program based on career goals and industry needs for each individual. 3.4

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**Compare and contrast essential processes in the growth and development of plants.** 4

**4.1** Explain the interrelationship between the vegetative components of a plant through analysis of their functions. 4.1

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**4.2** Explain the structure and function of the reproductive parts of plants. 4.2

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**4.3** Explain photosynthesis and the environmental conditions needed for plant growth. 4.3

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**Investigate the production of livestock, poultry and dairy animals.** 5

**5.1** Apply concepts in selecting major breeds of species for agricultural production. 5.1

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**5.2** Distinguish between the functions of the components of the digestive, reproductive, and other major systems of animals. 5.2

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**5.3** Analyze the role, importance, and scope of the dairy, beef, pork, equine, and small ruminant animal industries. 5.3

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**Explain sustainable approaches in wildlife and natural resources management.** 6

**6.1** Investigate potential careers in wildlife and natural resources. 6.1

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**6.2** Communicate information about wildlife to heighten awareness regarding conservation and resource preservation. 6.2

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**6.3** Assess ecosystems in terms of sustainable habitat management 6.3

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**6.4** Analyze local resource concerns based on the SWAPA+H criteria (soil, water, air, plants, animals, and human considerations). 6.4

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**Use principles of engineering to solve problems in agricultural settings.** 7

**7.1** Differentiate between the common types of tools and equipment used in agricultural applications. 7.1

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**7.2** Calculate linear measurements and simple angles using approved methods of measurement. 7.2

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**7.3** Investigate concepts in agricultural power, structural, and technical systems. 7.3

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**7.4** Select and use appropriate safety equipment in agricultural settings. 7.4

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