



Exploratory Tasks:

Where will your journey take you?

AGRICULTURE, FOOD & NATURAL RESOURCES

Have you ever considered where all the food you eat comes from? How does food get from the farm to your table? Careers in this cluster ensure an abundant supply of food. Maybe you enjoy spending time outdoors. Other professionals in this cluster work to protect forests and waterways.



AGRIBUSINESS SYSTEMS PATHWAY

These professionals support the production, processing, marketing, distribution, financing and development of agriculture products and services.

EXPLORATORY TASK: Develop a **business plan** to start a small business, e.g., lawn care, dog walking, selling firewood, etc. Consider these questions:

- Who would be potential customers?
- How would you determine pricing?
- What would materials cost to provide the service or product?

EXTENSION: How would you advertise your business? Create an advertisement for your product or service.

What Is a Career Cluster?

Career Clusters are a way to organize career options. There are **16 Career Clusters** in the National Career Cluster Framework. They are further divided into specific pathways that can lead you to a successful future.

ANIMAL SYSTEMS PATHWAY

People with careers in this pathway work to promote the health of food, and service and companion animals.

EXPLORATORY TASK: Create an **animal care guide** for a new caregiver.

- What is a healthy/safe environment?
- What type of food is recommended?
- What are the medical needs?

EXTENSION: How do you choose the right pet? Create a checklist for potential new pet owners of things to consider before getting a pet.

What Are Career Pathways?

Each of the 16 Career Clusters are divided into approximately 80 Career Pathways. The pathways are further divided into specific careers that share similar skills.

A Career Pathway offers a range of entry options, from entry-level positions that require a high school diploma or industry certificate to those that require a professional degree.

ENVIRONMENTAL SERVICE & SYSTEMS PATHWAY

Keeping the land, water and air safe is the job of environmental experts. monitor wastewater systems, conduct research and analyze data to evaluate effects on public health.

EXPLORATORY TASK: What can be recycled? Many schools and communities have recycling programs, but people often put things in recycling bins that don't belong there. Create an infographic describing what, where and how things can be recycled in your school or community

EXTENSION: How are recycled materials used? Research **products made from recycled materials**, e.g., plastic, aluminum. Create a visual map tracing a recyclable item from the trash to a transformed item.

FOOD PRODUCTS & PROCESS SYSTEMS PATHWAY

People who work in this pathway create, monitor and evaluate food sources and production to meet consumer need and ensure public safety.

EXPLORATORY TASK: Where does your food come from? Choose a common food item and create a map of its' journey from source(s) to your table. Be sure to consider all the ingredients.

EXTENSION: Choose a vegetable or meat product. Compare pros and cons of various methods of preservation or packaging. Create a visual to share your findings.

NATURAL RESOURCES SYSTEMS PATHWAY

Specialists in this pathway work to maintain forests and the natural environment.

EXPLORATION TASK: What plants can be found on your school campus? Create a *landscape map* to identify the trees and shrubs.

EXTENSION: Does the landscaping at your home or school need a makeover? Design a *landscape plan* detailing work plan, e.g., mulch, plants, etc. As you plan, remember to consider the plant needs, e.g., amount of sun, type of soil, etc.

PLANT SYSTEMS PATHWAY

Feeding a growing population is the goal of those who work in this pathway. To do this, they study the growth of plants and the effect on the environment.

EXPLORATION TASK: Start a plant from a seed. Monitor its growth each day and create a visual record, using either drawings or photographs.

EXTENSION: Start 2 or 3 of the same type of plant from seeds. Place each in a location with different amounts of light. Compare and record the growth of each.

POWER, STRUCTURAL & TECHNICAL SYSTEMS PATHWAY

People who work in this pathway use, repair and design agricultural machinery and equipment through knowledge of engineering, hydraulics, pneumatics, electronics, power, structures and controls.

EXPLORATION TASK: What do these specialists do and what type of equipment do they use? Create a presentation describing a piece(s) of equipment used in agriculture, food or natural resources. Consider:

- What the equipment is used for?
- What training or regulations are there for operating the equipment?
- What are the safety guidelines?

EXTENSION: Maintenance is important to ensure long life for the equipment. Create a maintenance plan by researching *maintenance recommendations* for a specific machine or piece of equipment.

How Can I Use Career Pathways?

Career Pathways are planning tools to help you prepare for your future career goal. They provide a map of required courses at both the high school and college level.

A pathway also lists opportunities to earn college credit, industry certificates or gain real-world experience while in high school.

What Is an Industry Certificate?

Industry certifications are credentials recognized by business and industry that demonstrate mastery of necessary knowledge and/or skills.

Discover More

Choose a career in one of the pathways to discover:

- Demand for this career
- Location of jobs
- Starting wage
- Education requirements
- High school pathway
 - Classes
 - Dual/articulated credit
 - Industry certificates
 - Work-based learning
- Related careers