

Essential Knowledge and Skills

Essential Knowledge and Skills

I Essential Knowledge and Skills

- a Apply data and measurements to solve a problem. [EKS.03.02](#)
 - 1 Apply data and measurements to solve a problem. [EKS.02.03](#)
 - 2 Construct charts/tables/graphs from functions and data. [EKS.02.04](#)
 - 3 Analyze data when interpreting operational documents. [EKS.02.05](#)
- b Demonstrate science knowledge and skills required to pursue the full range of post-secondary and career education opportunities. [EKS.04](#)
 - 1 Evaluate scientific constructs including: conclusions, conflicting data, controls, data, inferences, limitations, questions, sources of errors, and variables. [EKS.04.01](#)
 - 2 Apply scientific methods in qualitative and quantitative analysis, data gathering, direct and indirect observation, predictions, and problem identification. [EKS.04.02](#)

- c Employ critical thinking skills independently and in teams to solve problems and make decisions (e.g., analyze, synthesize and evaluate). EKS.05
- 2 Analyze elements of a problem to develop creative solutions. EKS.05.02
- 1 Identify common tasks that require employees to use problem-solving skills. EKS.05.01
- 3 Describe the value of using problem-solving and critical thinking skills to improve a situation or process. EKS.05.03
- 4 Create ideas, proposals, and solutions to problems. EKS.05.04
- 5 Evaluate ideas, proposals, and solutions to problems. EKS.05.05
- 6 Use structured problem-solving methods when developing proposals and solutions. EKS.05.06
- 7 Generate new and creative ideas to solve problems by brainstorming possible solutions. EKS.05.07
- 8 Critically analyze information to determine value to the problem-solving task. EKS.05.08
- 9 Guide individuals through the process of recognizing concerns and making informed decisions. EKS.05.09
- 10 Identify alternatives using a variety of problem-solving and critical thinking skills. EKS.05.10
- 11 Evaluate alternatives using a variety of problem-solving and critical thinking skills. EKS.05.11
- d Implement personal and jobsite safety rules and regulations to maintain safe and healthful working conditions and environments. EKS.06
- 1 Assess workplace conditions with regard to safety and health. EKS.06.01
- 2 Align safety issues with appropriate safety standards to ensure a safe workplace/jobsite. EKS.06.02
- 3 Identify safety hazards common to workplaces. EKS.06.03
- 4 Identify safety hazards common to workplaces. Identify safety precautions to maintain a safe worksite. EKS.06.04
- 5 Select appropriate personal protective equipment as needed for a safe workplace/jobsite. EKS.06.05
- 6 Inspect personal protective equipment commonly used for selected career choice. EKS.06.06
- 7 Use personal protective equipment according to manufacturer rules and regulations. EKS.06.07
- 8 Employ a safety hierarchy and communication system within the workplace/jobsite. EKS.06.08
- 9 Implement safety precautions to maintain a safe worksite. EKS.06.09

- e Employ leadership skills to accomplish organizational goals and objectives. [EKS.07](#)
 - 1 Exhibit traits such as empowerment, risk, communication, focusing on results, decision-making, problem solution, and investment in individuals when leading a group in solving a problem. [EKS.07.01](#)
 - 2 Exhibit traits such as compassion, service, listening, coaching, developing others, team development, and when acting as a manager of others in the workplace. Understanding and appreciating others [EKS.07.02](#)
 - 3 Exhibit traits such as enthusiasm, creativity, conviction, mission, courage, concept, focus, principle-centered living, and change when interacting with others in general. [EKS.07.03](#)
 - 4 Consider issues related to self, team, community, diversity, environment, and global awareness when leading others. [EKS.07.04](#)
 - 5 Exhibit traits such as innovation, intuition, adaptation, life-long learning and coachable to develop leadership potential over time. [EKS.07.05](#)
 - 6 Analyze leadership in relation to trust, positive attitude, integrity, and willingness to accept key responsibilities in a work situation. [EKS.07.06](#)
 - 7 Describe observations of outstanding leaders using effective management styles. [EKS.07.07](#)
 - 8 Participate in civic and community leadership and teamwork opportunities to enhance skills. [EKS.07.08](#)
- f Identify and demonstrate positive work behaviors and personal qualities needed to be employable. [EKS.08](#)
 - 1 Demonstrate self-discipline, self-worth, positive attitude, and integrity in a work situation. [EKS.08.01](#)
 - 2 Demonstrate flexibility and willingness to learn new knowledge and skills. [EKS.08.02](#)
 - 3 Exhibit commitment to the organization. [EKS.08.03](#)
 - 4 Identify how work varies with regard to site, from indoor confined spaces to outdoor areas, including aerial space and a variety of climatic and physical conditions. [EKS.08.04](#)
 - 5 Apply communication strategies when adapting to a culturally diverse environment. [EKS.08.05](#)
 - 6 Manage resources in relation to the position (i.e. budget, supplies, computer, etc.). [EKS.08.06](#)
 - 7 Identify positive work-qualities typically desired in each career. [EKS.08.07](#)
 - 8 Manage work roles and responsibilities to balance them with other life roles and responsibilities. [EKS.08.08](#)

- g** Demonstrate skills related to seeking and applying for employment to find and obtain a desired job. **EKS.09**
 - 1** Use multiple resources to locate job opportunities. **EKS.09.01**
 - 2** Prepare a résumé. **EKS.09.02**
 - 3** Prepare a letter of application. **EKS.09.03**
 - 4** Complete an employment application. **EKS.09.04**
 - 5** Interview for employment. **EKS.09.05**
 - 6** List the standards and qualifications that must be met in order to enter a given industry. **EKS.09.06**
 - 7** Employ critical thinking and decision-making skills to exhibit qualifications to a potential employer. **EKS.09.07**