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| **www.nextgenscience.org/**  ext Generation Science Standards logo | **www.k12.wa.us/CoreStandards/**   |  | | --- | | http://video-tutorials.acps.schoolfusion.us/modules/groups/homepagefiles/gwp/2361951/3110374/Image/CCSS_Logo.png | | | [**http://www.careertech.org/career-ready-practices**](http://www.careertech.org/career-ready-practices) **ational Association of State Directors of Career Technical Education Consortium**  **CCTC Common Career Technical Core** | [**http://www.p21.org/storage/documents/1.\_\_p21\_framework\_2-pager.pdf**](http://www.p21.org/storage/documents/1.__p21_framework_2-pager.pdf)  21st CENTURY SKILLS 21_framework |
| ***Science and Engineering Practices***  S1. Asking questions (for science) and defining problems (for engineering)  S2. Developing and using models  S3. Planning and carrying out investigations  S4. Analyzing and interpreting data  S5. Using mathematics and computational thinking  S6. Constructing explanations (for science) and designing solutions (for engineering)  S7. Engaging in argument from evidence  S8. Obtaining, evaluating, and communicating information | ***Mathematical***  ***Practices***  M1. Make sense of problems and persevere in solving them  M2. Reason abstractly and quantitatively  M3. Construct viable arguments and critique the reasoning of others  M4. Model with mathematics  M5. Use appropriate tools strategically  M6. Attend to precision  M7. Look for and make use of structure  M8. Look for and express regularity in repeated reasoning | ***English Language Arts Practices/Portraits***  E1. They demonstrate independence  E2. They build strong content knowledge  E3. They respond to the varying demands of audience, task, purpose, and discipline  E4. They comprehend as well as critique  E5. They value evidence  E6. They use technology and digital media strategically and capably  E7. They come to understanding other perspectives and cultures | ***Career Ready***  ***Practices***   1. Act as a responsible and contributing citizen and employee. 2. Apply appropriate academic and technical skills. 3. Attend to personal health and financial well being. 4. Communicate clearly, effectively and with reason. 5. Consider the environmental, social and economic impacts of decisions. 6. Demonstrate creativity and innovation. 7. Employ valid and reliable research strategies. 8. Utilize critical thinking to make sense of problems and persevere in solving them. 9. Model integrity, ethical leadership and effective management. 10. Plan education and career path aligned to personal goals. 11. Use technology to enhance productivity. 12. Work productively in teams while using cultural/global competence. | ***Skills***  **1. Learning & Innovation**  Creativity and innovation  Critical thinking and problem solving  Communication and collaboration  **2. Information, Media and Technology**  Information literacy  Media literacy  Information, communications and technology literacy  **3. Life and Career**  Flexibility and adaptability  Initiative and self-direction  Social and cross-cultural skills  Productivity and accountability  Leadership and responsibility    ***Core Subjects and 21st Century Themes***  Global awareness  Financial, economic, business and entrepreneurial literacy  Civic literacy  Health literacy  Environmental literacy |



***Science and Engineering Practices***1. Asking Questions (for science) and Defining Problems (for engineering)  
2. Developing and Using Models  
3. Planning and Carrying Out Investigations  
4. Analyzing and Interpreting Data  
5. Using Mathematics and Computational Thinking  
6. Constructing Explanations (for science) and Designing Solutions (for engineering)  
7. Engaging in Argument from Evidence  
8. Obtaining, Evaluating, and Communicating Information

***Disciplinary Core Ideas***PHYSICAL SCIENCES

PS1: Matter and Its Interactions

PS2: Motion and Stability: Forces and Interactions

PS3: Energy

PS4: Waves and Their Applications in Technologies for Information Transfer

LIFE SCIENCES

LS1: From Molecules to Organisms: Structures and Processes

LS2: Ecosystems: Interactions, Energy, and Dynamics

LS3: Heredity: Inheritance and Variation of Traits

LS4: Biological Evolution: Unity and Diversity

EARTH AND SPACE SCIENCES

ESS1: Earth’s Place in the Universe

ESS2: Earth’s Systems

ESS3: Earth and Human Activity

ENGINEERING, TECHNOLOGY, AND APPLICATIONS OF SCIENCE

ETS1: Engineering Design

ETS2: Links Among Engineering, Technology, Science, and Society

***Crosscutting Concepts***1. Patterns

2. Cause and Effect: Mechanisms and Explanation

3. Scale, Proportion, and Quantity

4. Systems and System Models

5. Energy and Matter: Flows, Cycles, and Conservation

6. Structure and Function

7. Stability and Change

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