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

https://www.nextgenscience.org/

Mathematical Practices

1. Make sense of problems and persevere in solving them
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of structure
8. Look for and express regularity in repeated reasoning

English Language Arts Practices

1. Demonstrate independence
2. Build strong content knowledge
3. Respond to the varying demands of audience, task, purpose, and discipline
4. Comprehend as well as critique
5. Value evidence
6. Use technology and digital media strategically and capably
7. Understand other perspectives and cultures

www.k12.wa.us/CoreStandards/

Computer Science Practices

1. Fostering an inclusive computing culture
2. Collaborating around computing
3. Recognizing and defining computational problems
4. Developing and using abstractions
5. Creating computational artifacts
6. Testing and refining computational artifacts
7. Communicating about computing

https://k12cs.org/

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.

https://www.careertech.org/cctc

21st Century Learning and Innovation Skills

1. Think creatively
2. Work creatively with others
3. Implement innovations
4. Reason effectively
5. Solve problems
6. Communicate clearly
7. Access and evaluate information
8. Use and manage Information
9. Analyze media
10. Create media products
11. Apply technology effectively
12. Adapt to change
13. Be flexible
14. Manage goals and time
15. Work Independently
16. Interact effectively with others
17. Work effectively in diverse teams
18. Manage projects
19. Produce results
20. Guide and lead others
21. Be responsible to others

www.p21.org/

Habits of a Systems Thinker

1. Seeks to understand the big picture
2. Identifies the circular nature of complex cause and effect relationships
3. Surfaces and tests assumptions
4. Considers how mental models affect current reality and the future
5. Finds where unintended consequences emerge
6. Observes how elements within systems change over time, generating patterns and trends
7. Uses understanding of systems structure to identify possible leverage actions
8. Recognizes the impact of time delays when exploring cause and effect relationships
9. Recognizes that a system's structure generates its behavior
10. Changes perspectives to increase understanding
11. Considers an issue fully and resists the urge to come to a quick conclusion
12. Considers both short and long-term consequences of actions
13. Checks results and changes actions if needed

https://waterscenterst.org/