

Connecticut CTE

Nature of Technology (6-8)

Nature of Technology

I Nature of Technology NT

- a Recognize the nature, characteristics and scope of technology. NT.01
- 1 Explain that new products and systems can be developed to solve problems or to help do things that could not be done without the help of technology. NT.01.01
- 2 Explain that technology is closely aligned to creativity, which has resulted in innovation. NT.01.02
- 3 Describe how new technologies (products and systems) are developed to solve problems. NT.01.03
- 4 Recognize and explain that creativity is the basis for the development of products and systems. NT.01.04
- 5 Explain that technology is a powerful force that improves human productivity. NT.01.05
- 6 Recognize and explain that technology is a process for transforming raw materials into useful goods and services. NT.01.06
- 7 Explain that technology is evident in every culture, regardless of its level of sophistication or stage of development. NT.01.07
- 8 Recognize and explain that technology involves inventing new things and modifying the old ones to make them more efficient. NT.01.08
- 9 Describe technology as a process for transforming raw materials into useful goods and services. NT.01.09
- 10 Explain that new products and systems can be developed to solve problems or to help do things that could not be done without the help of technology. NT.01.10
- 11 Explain that technology is closely linked to creativity, which has resulted in innovation. NT.01.11
- 12 Explain that technological innovation is driven by the profit motive. NT.01.12
- 13 Explain that technology creates new economic opportunities and social benefits and, at the same time, produces new social problems. NT.01.13
- 14 Describe how and why people use technology to modify their natural environment and the impact of those modifications. NT.01.14
- 15 Explain that technology incorporates human knowledge into physical hardware that will eventually respond to some human need or desire. NT.01.15
- 16 Explain that new products and systems can be developed to solve problems or to help do things that could not be done without the help of technology. NT.01.16
- 17 Explain that corporations can often create demand for a product by bringing it onto the market and advertising it. NT.01.17
- b Demonstrate an understanding of the core concepts of technology. NT.02
- 1 Explain a technological system by identifying its parts (inputs, processes, output and feedback) NT.02.01

- 2 Differentiate between the systems found in nature vs. human made technological systems. [NT.02.02](#)
 - 3 Show evidence of how parts relate to each other through systems thinking. [NT.02.03](#)
 - 4 Differentiate between an open and closed system. [NT.02.04](#)
 - 5 Explain the benefits and consequences of and technological innovation. [NT.02.05](#)
 - 6 Explain that a trade-off is a decision process recognizing the need for careful compromises among competing factors. [NT.02.06](#)
 - 7 Define the parameters of a product. [NT.02.07](#)
 - 8 Define the processes used to complete a system. [NT.02.08](#)
 - 9 Evaluate the importance of maintenance on a system ensure proper functioning, extending life and upgrading capability. [NT.02.09](#)
- c Define and explain the relationships among technologies and the connections between technology and other fields of study. [NT.03](#)
- 1 Illustrate how technology systems often interact with each other. [NT.03.01](#)
 - 2 Demonstrate how technological systems are combined to create more complex systems. [NT.03.02](#)
 - 3 Implement knowledge from other fields of study and show effect on the development of technological products and systems. [NT.03.03](#)
 - 4 Describe how technological ideas are sometimes protected through the process of patenting. [NT.03.04](#)