

Transportation Technology (Grades 9-12)

Transportation Technology

A Transportation Technology TRAN

- 1 Identify historical, social, economic, environmental, and government regulations impact transportation technology. TRAN.01
 - a Demonstrate historical innovations in the evolution of transportation systems. TRAN.01.01
 - b Demonstrate how technological developments have changed how goods and people are transported. TRAN.01.02
 - c Predict the social, economic and environmental impacts of existing and evolving transportation technologies. TRAN.01.03
 - d Describe the importance of transportation systems to maintaining our quality of life. TRAN.01.04
 - e Explain how governmental regulations impact transportation. TRAN.01.05

2 Define transportation technology systems. [TRAN.02](#)

- a Define and properly use common transportation technology terminology (e.g. combustion. pathways. velocity. vehicle. mode. payload. and terminal). [TRAN.02.01](#)
- b Demonstrate and apply how propulsion, control, guidance, payload, and support systems for various land, water, space, air, and materials handling systems are used in transportation technologies. [TRAN.02.02](#)
- c Demonstrate and apply basic applications for transportation technology (e.g. moving people. transporting goods. and recreation) and generate examples of each. [TRAN.02.03](#)
- d Design, build and evaluate a simple fixed path or variable path transportation system. [TRAN.02.04](#)
- e Solve a simple transportation problem by designing, building, and testing a vehicle that will carry a payload a specified distance. [TRAN.02.05](#)
- f Describe and give examples on how transportation plays a vital role of other technologies including but not limited to manufacturing, construction, communications, health and safety and agriculture. [TRAN.02.06](#)
- g Identify, design and apply and the uses of different energy and power technologies. [TRAN.02.07](#)
- h Use design-based learning approaches that intentionally integrate the content and process of science and/or mathematics education with the content and process of technology and/or engineering education. [TRAN.02.08](#)