Museum of Science®

EiE®

Suggested Units by Grade for
Pennsylvania STEELS 2022 and CSTA Computer Science Standards

Grade Level	*Curriculum Product* **Suggested Unit**		
Pre K	*Wee Engineer®* Designing Fans, Designing Wrecking Balls, Designing Rafts, Designing Noisemakers most T&E 3.5 K-2		
Kindergarten	*EIE® for Kindergarten* Raise the Roof: Designing Shelters 3.3.K.B, 3.2.K.C, 3.2.K.D, most T&E 3.5 K-2	*EIE® for Kindergarten* Here's the Scoop: Designing Trash Collectors **3.3.K.E, 3.4.K-2.D, most T&E 3.5 K-2**	*EIE® for Kindergarten* Sort It Out:: Programming Robots to Recycle CSTA: 1A-DA-06, 1A-AP-08 to 12, 1A-AP-14, 15, 3.3.K.E, 3.4.K-2.D
1st Grade	*Engineering Essentials®* Designing Lighting Systems 3.2.1.B, 3.2.1.C, most T&E 3.5 K-2	*Computer Science Essentials®* Programming Robots 1A-CS-02, 1A-CS-03, 1A-AP-08 to 12, 1A-DA-05, 1A-IC-18	*Engineering is Elementary®* Sounds Like Fun: Seeing Animal Sounds 3.2.1.A, 3.2.1.D, most T&E 3.5 K-2
2nd Grade	*Engineering Essentials®* Designing Hand Pollinators 3.1.2.B, 3.1.2.B, 3.2.2.A, 3.2.2.B, 3.4.K-2.A, 3.4.K-2.B, most T&E 3.5 K-2	*Computer Science Essentials®* Creating Animations 1A-DA-05, 1A-CS-01 to 03, 1A-AP-08 to 15, 1A-IC-16 to 18	*Engineering is Elementary®* A Stick in the Mud: Evaluating a Landscape 3.3.2.A, 3.4.K-2.C, most T&E 3.5 K-2
	Engineering is Elementary® A Sticky Situation: Designing Walls 3.2.2.A, 3.2.2.B, 3.2.2.C, 3.4.K-2.A, most T&E 3.5 K-2	*Engineering is Elementary®* A Work in Process: Improving a Play Dough Process 3.2.2.A, 3.2.2.B, most T&E 3.5	
3rd Grade	*Engineering Essentials®* Designing Maglev Systems 3.2.3.C, 3.2.3.D, most T&E 3.5 3-5	*Computer Science Essentials®* Building Automated Systems 1B-CS-01 to 03, 1B-DA-07, 1B-AP-10 to 13, 1B-AP-15 to 20	*Engineering is Elementary®* To Get to the Other Side: Designing Bridges 3.2.3.B, 3.4.3-5.G, most T&E 3.5 3-5
	Engineering is Elementary® Marvelous Machines: Making Work Easier 3.2.3.B, most T&E 3.5 3-5	*Engineering is Elementary®* Just Passing Through: Designing Model Membranes 3.1.3.G, 3.4.3-5.A, most T&E 3.5 3-5	*Engineering is Elementary®* Catching the Wind: Designing Windmills 3.2.3.A, 3.2.3.B, 3.3.3.B, most T&E 3.5 3-5
	Engineering Adventures® Hop to It: Removal of Invasive Species 3.1.3.F, 3.1.3.G, 3.1.3.H, 3.2.3.B, 3.4.3-5.A, 3.4.3-5.B, 3.4.3-5.F, most T&E 3.5 3-5	*Engineering Adventures®* Go Green: Engineering Recycled Racers 3.2.3.B, most T&E 3.5 3-5	*Engineering Adventures®* The Sky's the Limit: Engineering Flying Technologies 3.2.3.A. 3.2.3.B, 3.3.3.B, most T&E 3.5 3-5
4th Grade	*Engineering Essentials®* Designing Solar Ovens 3.2.4.B, 3.2.4.D, 3.3.4.D, 3.4.3-5.B, 3.4.3-5.C, 3.4.3-5.F, most T&E 3.5 3-5	*Computer Science Essentials®* Designing Computer Games 1B-CS-01, 1B-CS-02, 1B-AP-08 to 17, 1B-IC-18 to 20	*Engineering is Elementary®* No Bones About it: Designing Knee Braces 3.1.4.A, most T&E 3.5 3-5
	Engineering is Elementary® Solid as a Rock: Replicating an Artifact 3.3.4.A, most T&E 3.5 3-5	*Engineering Adventures®* Shake Things Up: Engineering Earthquake-Resistant Buildings 3.3.4.E, 3.4.3-5.A, most T&E 3.5 3	*Engineering is Elementary®* Thinking Inside the Box: Designing Plant Packages 3.1.4.A, 3.4.3-5.A, most T&E 3.5 3-5
	Engineering Adventures® Light Up the Night: An Electrical Engineering Challenge 3.2.4.B, 3.2.4.D, most T&E 3.5 3-5	*Engineering Adventures®* Music to My Ears: An Acoustical Engineering Challenge 3.2.4.B, 3.2.4.E, most T&E 3.5 3-5	*Engineering Adventures®* A Slippery Slope: Engineering an Avalanche Protection System 3.2.4.B, 3.2.4.E, 3.3.4.E, 3.4.3-5.A, most T&E 3.5 3-5
	Engineering Adventures® To the Rescue: Engineering Aid Drop Packages 3.2.4.C, most T&E 3.5 3-5		
5th Grade	*Engineering Essentials®* Cleaning an Oil Spill 3.1.5.A, 3.1.5.B, 3.3.5.F, 3.4.3-5.A, B, D, E, F, most T&E 3.5 3-5	*Computer Science Essentials®* Analyzing Digital Images 1B-CS-01, 1B-CS-02, 1B-DA-07, 1B-AP-09 to 20	*Engineering is Elementary®* Taking the Plunge: Designing Submersibles 3.3.5.B, 3.3.5.C, 3.3.5.D, most T&E 3.5 3-5
	Engineering Adventures® In Good Hands: Designing Space Gloves 3.2.5.B, 3.2.5.E, most T&E 3.5 3-5	*Engineering Adventures®* Liftoff: Engineering Rockets and Rovers **3.2.5.F most T&E 3.5 3-5**	*Engineering Adventures®* Bubble Bonanza: Engineering Bubble Wands 3.2.5.B, 3.2.5.E, most T&E 3.5 3-5
	Engineering is Elementary® A Long Way Down: Designing Parachutes 3.2.5.C, 3.2.5.F, most T&E 3.5 3-5	*Engineering is Elementary®* Water, Water Everywhere: Designing Water Filters 3.2.5.C, 3.3.5.C, 3.3.5.E, 3.3.5.F, most T&E 3.5 3-5	*Engineering is Elementary®* An Alarming Idea: Designing Alarm Circuits 3.2.5.B, most T&E 3.5 3-5

KEY | PHYSICAL SCIENCE | EARTH SCIENCE | LIFE SCIENCE | COMPUTER SCIENCE

Contact sales@mos.org or visit eie.org for more information.

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6th Grade	*Engineering Everywhere®* Here Comes the Sun: Engineering Insulated Homes 3.2.6-8.B, 3.2.6-8.M 3.2.6-8.N, 3.2.6-8.R 3.3.6-8.M, 3.3.6-8.N 3.4.6-8.G, 3.4.6-8.H most T&E 3.5.6-8	*Engineering Everywhere®* Worlds Apart: Remote Sensing Devices 3.2.6-8.R 3.3.6-8.C 3.3.6-8.G most T&E 3.5.6-8	*Engineering Everywhere®* Go Fish: Engineering Prosthetic Tails 3.1.6-8.D most T&E 3.5.6-8
	Engineering Everywhere® Don't Runoff: Engineering an Urban Landscape 3.1.6-8.I, 3.1.6-8.L 3.1.6-8.U, 3.3.6-8.M 3.3.6-8.N 3.4.6-8.C, 3.4.6-8.G 3.4.6-8.H most T&E 3.5.6-8	*Engineering Everywhere®* Food for Thought: Engineering Ice Cream 3.2.6-8.D 3.2.6-8.F 3.2.6-8.R most T&E 3.5.6-8	
7th Grade	*Engineering Everywhere®* Growing Up: Engineering Vertical Farms 3.1.6-8.D, 3.1.6-8.F 3.1.6-8.U, 3.2.6-8.R 3.4.6-8.A, 3.4.6-8.H most T&E 3.5.6-8	*Engineering Everywhere®* Put a Lid on It: Engineering Safety Helmets 3.1.6-8.H 3.2.6-8.G most T&E 3.5.6-8	*Engineering Everywhere®* Testing the Waters: Engineering a Water Reuse Process 3.1.6-8.U 3.3.6-8.M 3.3.6-8.N 3.4.6-8.G 3.4.6-8.H most T&E 3.5.6-8
	Engineering Everywhere® It's in the Bag: Engineering Bioinspired Gear 3.1.6-8.D most T&E 3.5.6-8		
8th Grade	*Engineering Everywhere®* Outbreak Alert: Engineering a Pandemic Response 3.1.6-8.A 3.1.6-8.M 3.1.6-8.S most T&E 3.5.6-8	*Engineering Everywhere®* Worlds Apart: Remote Sensing Devices 3.2.6-8.R 3.3.6-8.C 3.3.6-8.G most T&E 3.5.6-8	*Engineering Everywhere®* Plants to Plastics: Engineering Bioplastics 3.2.6-8.C 3.2.6-8.D 3.3.6-8.M 3.4.6-8.G 3.4.6-8.H most T&E 3.5.6-8
	Engineering Everywhere® It's About Time: Engineering Timers most T&E 3.5.6-8		

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