SUPERHUMAN BODY Educator Guide – STEELS Standards Connections

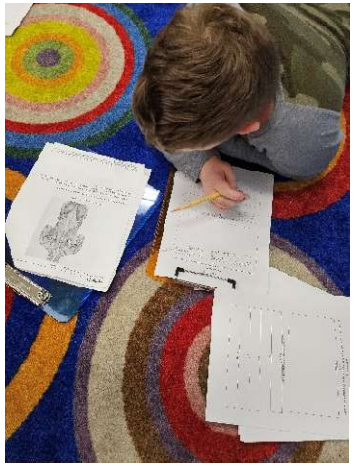
Bring the science and engineering in *Superhuman Body* to life in your classroom with STEELS Standards aligned lesson plans. The educator guide includes interdisciplinary connections, differentiation opportunities, and hands-on learning for students K-12.

Educator Guide STEELS Standards Connections				
	Activity	3.1 Life Science	3.2 Physical Science	3.5 Technology and Engineering
3rd-5th	T-Cell Receptor Puzzle	3.1.4.A		
	Heart Stations	3.1.4.A		
	Prosthetic Possibilities			3.5.3-5.U, 3.53-5M
6th-8th	Building Immunity	3.1.6-8.C		
	Pump It Up	3.1.6-8.C		
	Universal Design Challenge			3.5.6-8.W (ETS)
9th-12th	Optimal Optics		3.2.9-12.X	
	Clear It Out: Stent Design			3.5.9-12.DD
	Accessible Engineering			3.5.9-12.I (ETS)

(continued)

ACTIVITY DESCRIPTIONS

3rd-5th Grades



T-Cell Receptor Puzzle
Students explore immune cells and how to stay healthy by playing a Germ Invaders game and creating a puzzle that shows how T-Cells lock on to infections.

Heart Stations
Students rotate through stations integrating English Language Arts, math, and physical education to as they learn about the human heart.

Possibilities
Using the Engineering Design Process, students explore how engineers design technology to meet specific accessibility needs.

6th-8th Grades

Building Immunity
Students explore how the body responds to infected cells, invading bacteria and cancer cells. Using communication, teamwork and engineering design principles they'll craft a killer immune cell that fits to a specific antigen on an invader cell.

Pump It Up
Using a simple model of the heart that they create, students experiment with the function of the heart chambers and valves to circulate blood.

Universal Design Challenge
Students are encouraged to see their community with new eyes as they design assistive technology or new products to help a chef with a limb difference.

(continued)

9th-12th Grades

Optimal Optics
Using a pinhole camera they construct, students learn about focal length, its impact on the image created, and the brain's role in vision.

Clear It Out: Stent Design
Using design and engineering principles, students build a stent prototype to clear plaque from clogged arteries.

Accessible Engineering
Students re-design a product or design an assistive device to help an athlete with a limb difference.