THE STANDARD

Interacting Body Systems

Use argument supported by evidence for how the body is a system of interacting subsystems composed of groups of cells.

DCI
DISCIPLINARY CORE IDEA

LS1.A · Structure and Function

> *In multicellular organisms, the body is a system of multiple interacting subsystems. These subsystems are groups of cells that work together to form tissues and organs that are specialized for particular body functions.*

Your body is not one machine. It is a stack of subsystems, each built from groups of cells that took on a specific job. Cells of one type form tissues. Tissues form organs. Organs group into systems. Every system depends on the others to do its work. **Nothing in the body runs alone.**

SEP
SCIENCE & ENGINEERING PRACTICE

Engaging in Argument from Evidence

> *Use an oral and written argument supported by evidence to support or refute an explanation or a model for a phenomenon.*

This standard is built on argument, not labeling. Students aren't naming the parts of the heart. They're making a case. They use evidence, like heart rate data or a flow chart, to argue that two or more systems are interacting. **The claim has to be supported, not just stated.**

CCC
CROSSCUTTING CONCEPT

Systems and System Models

> *Systems may interact with other systems; they may have sub-systems and be a part of larger complex systems.*

A system has subsystems. Subsystems are part of a larger system. The body is the clearest example a student will ever meet. Zoom in: an organ is a system. Zoom out: the whole body is a system. Both views are true at the same time. **That's the lens the standard wants students using.**