Activity at a glance

Time to complete	Approximately 2-2.5 hours
Age level	Advanced high school, College, or Professional school
Bloom's level(s)	• BL3 - Analyze • BL4 - Analyze • BL5 - Evaluate
Learning objective	After completing this activity, students will be able to conduct an **experiment** (BL3 - Apply) simulating different patterns of muscle co-contraction and **analyze** (BL4 - Analyze) the results of their experiment to **explain** (BL5 - Evaluate) how muscle co-contraction and coordination relate to forces, motions, injury, and injury prevention at the knee joint.
Assessment	• **Students:** Hints are provided throughout the activity to help students answer the questions on the worksheet, however no answers are provided. • **Educators:** Educators can assess students' answers to the questions on the worksheet using the answer key (only visible to educators).
Materials needed	See Materials needed
Systems/Tissue types	• Muscular • Skeletal
Core concepts	• Motor control • ??Structure & function • System integration

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Competencies	• Motion analysis • Observation • Scientific reasoning • Scientific communication
Activity ID	HSKN4

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