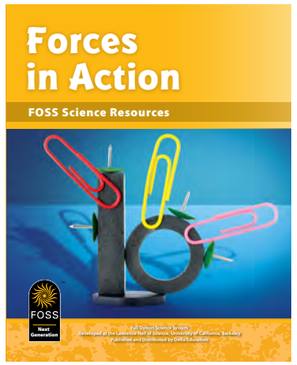
FOSS Forces in Action Module, Grades 1–2

Firsthand experience is the most powerful force of all.

We live in a world of motion. Some things move from one place to another. Some rotate. Others push and pull from a distance. In the new STEM Enrichment module Forces in Action, students in grades 1–2 discover the varied concepts of force, motion, and magnetism the FOSS way: by working as scientists and engineers to actively investigate phenomena.

FOSS Forces in Action Module:

Phenomena and students in action.



Investigation 1:
Spinners

The phenomenon is rotation. Students explore the forces (pushes and pulls) that make tops and zoomers spin, engineer systems to meet challenges, and observe the force of gravity causing objects to fall.
6–7 sessions

Investigation 2:
Rollers

The phenomenon is rolling. Students investigate wheels and spheres and describe change in position over time. They observe gravity causing objects to fall to the ground, use flexible marble runways to observe movement, and engineer systems to meet challenges.
7 sessions

Investigation 3:
Force at a Distance

The phenomenon is magnetic interaction. Students observe that two magnets attract or repel one another, depending on their orientation, predict and test what materials stick to a magnet, read how magnets are used to solve problems, and then define and solve a problem of their own.
6 sessions

Investigation 4:
Force at a Balance

The phenomenon is balance. Students observe how forces on toys and other systems cause a stable position. They balance various objects by positioning counterweights (clothespins) in strategic locations, and then define problems and design solutions to the balancing problems.
5 sessions

Let your students take nature's forces into their own hands.

In the FOSS® Forces in Action Module, students explore the contact forces that make objects start to move or change their motion, as well as forces at a distance such as gravity and magnetism. Then students design ways to control or change the motion of those objects, putting their newfound understanding to work.

23 sessions. Countless uses.

The new FOSS® Forces in Action STEM Enrichment module for grades 1–2 can be taught as a unit in a science class, a STEM class, an engineering class, as support for a summer learning program, or as a before/after-school enrichment activity. The Forces in Action module comes with an *Investigations Guide*, Online *Teacher Resources*, *Science Resources* student book, equipment kit for students, and digital access through FOSSweb on ThinkLink™.

FOSS® Middle School Scope & Sequence

Grade	Integrated Middle Grades						STEM Enrichment
8	Heredity & Adaptation* ES, LS	Electromagnetic Force* PS, ES, E	Gravity & Kinetic Energy* PS, E	Waves* PS, E	Planetary Science PS, ES		Variables & Design† Grades 5-8 E
7	Chemical Interactions PS, ES, E		Earth History PS, ES, LS		Populations and Ecosystems ES, LS, E		
6	Weather and Water PS, ES, E		Diversity of Life LS		Human Systems Interactions* LS		

PS: Physical Science content, ES: Earth Science content, LS: Life Science content, E: Engineering content *Half-length courses
†STEM Enrichment courses and modules can supplement the FOSS core curriculum or be purchased separately for STEM electives or extracurricular activities.

FOSS® Pre-K–5 Scope & Sequence

Grade	Physical Science	Earth Science	Life Science	STEM Enrichment
5	Mixtures & Solutions	Earth & Sun	Living Systems	Sound Design†
4	Energy	Soils, Rocks & Landforms	Environments	
3	Motion & Matter	Water & Climate	Structures of Life	
2	Solids & Liquids	Pebbles, Sand & Silt	Insects & Plants	Forces in Action†
1	Sound & Light	Air & Weather	Plants & Animals	
K	Materials & Motion	Trees & Weather	Animals Two by Two	
Pre-K	Full-year Observing Nature			

†STEM Enrichment courses and modules can supplement the FOSS core curriculum or be purchased separately for STEM electives or extracurricular activities.

Learn more. Find your local FOSS/Delta Education representative at **FOSSNextGeneration.com/sales**

FOSS™

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