

General Inquiry

Inq-ITS Virtual Lab	Disciplinary Core Ideas	Science & Engineering Practices	Crosscutting Concepts
Tutorials 1-3 (Flower)		1-8	1,2,7
Advanced Tutorials 1-3 (Ramp)	HS PS 2-1	1-8	1-5,7

Physics

Inq-ITS Virtual Lab	Disciplinary Core Ideas	Science & Engineering Practices	Crosscutting Concepts
Velocity: Free Fall	HS PS 2-1	1-8	1-5,7
Velocity: Free Fall	HS PS 3-1, 3-2	1-8	1-5,7
Velocity & Air Resistance	HS PS 2-1	1-8	1-7
Energy & Air Resistance	HS PS 3-1, 3-2	1-8	1-7
Waves on a String	HS PS 4-1	1-8	1-4,7
Waves in a Drum	HS PS 4-1	1-8	1-4,7
Thermal Energy & Waves	HS PS 4-1	1-8	1-4,7
Introduction to Gravity & Mass	HS PS 2-4, ESS 1-4	1-8	1-4
Gravity & Orbit Distance	HS PS 2-4, ESS 1-4	1-8	1-4
Introduction to Motion & Forces	HS PS 2-1	1-8	1-5,7
Forces & Motion on Different Planetary Bodies	HS PS 2-1	1-8	1-5,7
Introduction to Collisions	HS PS 2-3	1-8	1,2,3,4,5
Advanced Collisions	HS PS 2-3	1-8	1,2,3,4,5
Inelastic Collisions - Trains	HS PS 2-3	1-8	1,2,3,4,5

Chemistry

Inq-ITS Virtual Lab	Disciplinary Core Ideas	Science & Engineering Practices	Crosscutting Concepts
Density	HS PS 1-2	1-8	1,2,6
Phase Change	HS PS 1-3, 1-5	1-8	1-7

Biology

Inq-ITS Virtual Lab	Disciplinary Core Ideas	Science & Engineering Practices	Crosscutting Concepts
Animal Cell: Function	HS LS 1-7, 2-5	1-2,4,6-8	1,2,3,4,6,7
Plant Cell: Energy & Storage	HS LS 1-5, 2-5	1-2,4,6-8	1,2,3,4,5,7
Animal Cell: Energy & Storage	HS LS 1-7, 2-5	1-2,4,6-8	1,2,3,4,5,7
Plant Cell: Function	HS LS 1-5, 2-5	1-2,4,6-8	1,2,3,4,6,7
Genetics	HS LS 2-2, 3-1, 3-2	1-8	1,2,6,7
Diversity of Traits	HS LS 2-2, 3-2, 3-3, 4-2	1-2,4,6-8	1,2,4,6,7
Natural Selection	HS LS 2-2, 2-6, 3-3, 4-2, 4-3, 4-5 4-4	1-2,4,6-8	1,2,4,6,7
Advanced Predation	HS LS 2-1, 2-2, 2-6	1-2,4,6-8	1-7

Earth Science

Inq-ITS Virtual Lab	Disciplinary Core Ideas	Science & Engineering Practices	Crosscutting Concepts
Lunar Phases	ESS 1-4	1-8	1,2,3,4
Eclipses	ESS 1-4	1-8	1,2,3,4
Plate Tectonics: Convergent Plates	ESS 1-5, 2-1	1-8	1,2,4,6,7
Plate Tectonics: Divergent Plates	ESS 1-5, 2-1, 2-3	1-8	1,2,4,5,7
Introduction to Seasons	ESS1-1	1-8	1-4
Seasons – Earth has No Tilt!	ESS1-1	1-8	1-4
Human Activity	ESS3-4 & 5	1-8	1,2,4,7

Crosscutting Concepts:

1. Patterns
2. Cause & effect
3. Scale, proportion, & quantity
4. Systems & system models
5. Energy & matter
6. Structure & function
7. Stability & change