

DAY 1 – Agenda

9:30 – 10:00	Welcome, Introductions, Goals for Summer Institute
10:00 – 10:30	Overview of Scale Up STEM Learning Website Windlift Video Example
10:30 – 11:15	Introduction to Fathom Linear Functions – Men’s 100/200 meter dash
11:15 – 11:30	Break
11:30 – 12:00	Linear Functions - Olympics
12:00– 12:45	Lunch
12:45 – 1:30	Quadratic Functions – Escape Ramp/ Stopping Distance
1:30 – 2:15	Binomial Products
2:15 – 2:30	Break
2:30 – 3:15	Exponential Functions – Population Growth
3:15 – 3:30	Fitting Functions to Images
3:30 – 4:00	Logistics/Paperwork
Homework	Review/Read Chapters 1-5 in 5 Practices Book

DAY 2 – Agenda

9:30 – 10:00	Motion Detector - How Fast Do You Walk?
10:00 – 10:30	Motion Detector - Create Graphs Given Conditions
10:30 – 11:00	Match Graphs Using Motion Detectors
11:00 – 11:15	Break
11:15 – 12:00	Falling Objects
12:00– 12:45	Lunch
12:45 – 1:30	A Motion Detector – Distance Traveled on Incline
1:30 – 2:15	Motion Detector – Bouncing Ball
2:15 – 2:30	Break
2:30 – 3:15	Motion Detector – Rebound Heights
3:15 – 4:00	Sharing of Activities using GSP Work in Groups – Identify a Topic/Video/Tool
Homework	Read Chapter 6

DAY 3 – Agenda

9:30 – 10:15	VCL Training and Access Fathom via VCL Video example from classroom implementation
10:15 – 11:00	Collecting Data with VCL – Falling Objects with Logger Lite
11:00 – 11:15	Break
11:15 – 12:00	Motion Detector – Bungee Barbie
12:00– 12:45	Lunch
12:45 – 1:30	Accelerometer – Whirling Around, Angles
1:30 – 2:15	Light – Distance from Light Source
2:15 – 2:30	Break
2:30 – 3:15	Light – Distance from Different Light Sources
3:15 – 3:45	Sharing Activities
3:45 – 5:00	Work with Role Model Videos
Homework	Work on Task

DAY 4 – Agenda

9:30 – 10:30	Light Sources – Temperature Probe
10:30 – 11:00	Cooling Temperature – Temperature Probe http://www.keycurriculum.com/resources/fathom-resources/tutorials/cooling-water-measure-temperature-over-time
11:00 – 11:15	Break
11:15 – 12:00	Force Plate – Matching Graphs
12:00– 12:45	Lunch
12:45 – 1:30	Force Plate – Adding Books at a Constant Rate Adding Rice at a Constant Rate
1:30 – 2:15	Planning
2:15 – 2:30	Break
2:30 – 4:00	Planning
Homework	Finalize Lesson Plans

DAY 5 – Agenda

9:30 – 10:30	Post-Assessment
10:30 – 10:45	Break
10:45 – 12:00	Lesson Presentations (5 presentations)
12:00– 12:45	Lunch
12:45 – 1:30	Lesson Presentations (3 presentations)
1:30 – 2:15	Lesson Presentations (3 presentations)
2:15 – 2:30	Wrap Up and Next Steps