Modeling Curriculum Activities in unit two, in order of the NYSS

Activity number and title	New York State Standards	Description
	Standard 1	
12) E & M Unit 2 Review	M1.1	Abstract representation
6) Quiz 1	M1.1	to communicate mathematically
12) E & M Unit 2 Review	M2.1	Deductive and inductive reasoning
12) E & M Unit 2 Review	M2.1	to reach mathematical conclusion
13) Unit Test	M2.1	
7a) Worksheet 3a: With EM Field Software	M2.1	
9) Lab/Demo: Bridge to Circuits	M2.1	
4) Lab: Mapping Electric Potential	M3.1	Explain physical relevance of a graph
9) Lab/Demo: Bridge to Circuits	M3.1	of real world data
9) Lab/Demo: Bridge to Circuits	M3.1	
1) Activity: Defining Potential	S1.1	Develop explanation of natural
4) Lab: Mapping Electric Potential 5) Worksheet 2: Potential in Non Uniform Fields	S1.1 S1.1	Phenomena
7a) Worksheet 3a: With EM Field Software	S1.1	
8) Worksheet 4: Applications of Electric Potential in Uniform Fields	S1.1	
9) Lab/Demo: Bridge to Circuits	S1.1	
3) Lab/Demo/Discussion: Topographic Maps	S2.1	Design experiment to investigate
4) Lab: Mapping Electric Potential	S2.1	relationship between physical
9) Lab/Demo: Bridge to Circuits	S2.1	FILENUTIETIA
9) Lab/Demo: Bridge to Circuits	S2.1	
3) Lab/Demo/Discussion: Topographic Maps	S2.3	Develop, predict, and explain
4) Lab: Mapping Electric Potential	S2.3	proposed relationships for physical
7a) Worksheet 3a: With EM Field Software	S2.3	Phenomena
9) Lab/Demo: Bridge to Circuits	S2.3	
3) Lab/Demo/Discussion: Topographic Maps (4) Lab: Manning Electric Potential	S2.4 S2.4	Carry out research to test theories
9) Lab/Demo: Bridge to Circuits	S2.4	
3) Lab/Demo/Discussion: Topographic Maps	\$3.1	Scientific data-graphs, diagrams
4) Lab: Mapping Electric Potential	S3.1	charts, equations
9) Lab/Demo: Bridge to Circuits	S3.1	
9) Lab/Demo: Bridge to Circuits	\$3.2	Explain data to validate results
4) Lab: Mapping Electric Potential	\$3.3	Reach a conclusion on whether
(a) Worksheet 3a: With EM Field Software	53.3	your data supports your explanation
3) Lab/Demo/Discussion: Topographic Maps	\$3.4	Discuss relationships with class
4) Lab: Mapping Electric Potential	\$3.4	revise if necessary
7a) Worksheet 3a: With EM Field Software	S3.4	· · · · · · · · · · · · · · · · · · ·
9) Lab/Demo: Bridge to Circuits	S3.4	
9) Lab/Demo: Bridge to Circuits	S3.4	
(1) Lab: Manning Electric Potential	Standard 2	Linderstand features of word processors
4) Lab. Mapping Electric Potential 9) Lab/Demo: Bridge to Circuits	1.1	spreadsheets and database software
4) Lab: Mapping Electric Potential	1.2	Prepare multimedia presentation
4) Lab: Mapping Electric Potential	1.5	Use software to model and extend lab experiences
	Standard 4	
12) E & M Unit 2 Review	4.1i	Describe and explain conservation of energy
3) Lab/Demo/Discussion: Topographic Maps	4.1i	from potential energy to kinetic energy
9) Lab/Demo: Bridge to Circuits	4.11	Observe/eveloin energy senservation
1) Activity. Denning Potential 12) E & M Linit 2 Review	4.1v	Observe/explain energy conservation
13) Unit Test	4.1v	
3) Lab/Demo/Discussion: Topographic Maps	4.1v	
7) Worksheet 3: Fields, Potential, and Energy	4.1v	
9) Lab/Demo: Bridge to Circuits	4.1v	
9) Lab/Demo: Bridge to Circuits	4.1v	Booggize conversions among different forms of an anti-
8) Worksheet 4: Applications of Electric Potential in Uniform Fields	4.1VI 4.1vii	Compare power developed with work done to different objects
3) Lab/Demo/Discussion: Topographic Maps	5.1iii	determine acceleration due to gravity near the Earths surface
8) Worksheet 4: Applications of Electric Potential in Uniform Fields	5.1v	Draw force diagrams to scale
8) Worksheet 4: Applications of Electric Potential in Uniform Fields	5.1vii	Sketch the path of projectiles
8) Worksheet 4: Applications of Electric Potential in Uniform Fields	5.1viii	Use vector diagrams to analyze systems
	Standard 6	
1) Activity: Defining Potential	1.1	Define boundary conditions when doing
2) vvorksneet 1: Potential and Uniform Fields	1.1	system analysis
1) Activity: Defining Potential	21	Revise a model to make an improved
12) E & M Unit 2 Review	2.1	representation of a system
3) Lab/Demo/Discussion: Topographic Maps	2.1	
1) Activity: Defining Potential	2.2	Use observations of behavior of a
3) Lab/Demo/Discussion: Topographic Maps	2.2	system to develop a model
9) Lab/Demo: Bridge to Circuits	2.2	
4) Lab: Mapping Electric Potential	2.2	
J Lab/Derno: Bridge to Circuits Activity: Defining Potential	2.2	Lise mathematical and physical models
	2.3	Use mamemancar and physical models

12) E & M Unit 2 Review	2.3
9) Lab/Demo: Bridge to Circuits	2.3
2) Worksheet 1: Potential and Uniform Fields	2.3
5) Worksheet 2: Potential in Non Uniform Fields	2.3
9) Lab/Demo: Bridge to Circuits	2.3
1) Activity: Defining Potential	2.4
3) Lab/Demo/Discussion: Topographic Maps	2.4
9) Lab/Demo: Bridge to Circuits	2.4
4) Lab: Mapping Electric Potential	2.4
7a) Worksheet 3a: With EM Field Software	2.4
9) Lab/Demo: Bridge to Circuits	2.4
6) Quiz 1	3.2
1) Activity: Defining Potential	4.1
2) Worksheet 1: Potential and Uniform Fields	4.1
9) Lab/Demo: Bridge to Circuits	4.1
Worksheet 3: Fields, Potential, and Energy	4.1
1) Activity: Defining Potential	4.2
Worksheet 3: Fields, Potential, and Energy	4.2
1) Activity: Defining Potential	5.1
12) E & M Unit 2 Review	5.1
9) Lab/Demo: Bridge to Circuits	5.1
9) Lab/Demo: Bridge to Circuits	5.2

to represent real world systems

Compare predictions with observations to validate or reject predictions

Estimate solutions using orders of magnitude and scientific notation Describe how disturbances may effect a systems equilibrium

Give examples of dynamic equilibrium

Predict systems behavior based on mathematical models and graphs

Search for trends in data