

## Unit 9: Electric Field and Potential Energy

- You should be spending at least **60 minutes** a day on Physics Curriculum.
- **Completing** the note taking guide is required and **printing** the guide is highly recommended.
- Seeking help if you are not passing your post assessments and/or practices is essential.
- If you are behind you **MUST** spend additional time on Physics to catch up and meet due dates!
- If you cannot meet a due date, extensions must be requested and approval received **in advance**.
- To keep on track Unit 8 should be completed by February 6.

### Goals:

1. I can use vectors to represent electric fields and electrical field lines.
2. I can use simulations to model electrical fields and electrical potential energy.
3. I can use mathematics and computational thinking to determine the electrical force or electric field strength when one or more of the variables is changed.
4. I can use mathematical representation to determine the electrical potential when electrical potential energy and charge is known.

### Complete Unit 9 Pretest

#### Unit 9 Vocabulary

- Unit 9 Vocabulary is optional

#### Electric Field Notes

- Complete note taking guide

#### Electric Field Notes - Post Assessment

- take assessment after watching video notes and completing note taking guide
- must score a 80% or redo
- seek remediation if PA is not passed on 3<sup>rd</sup> attempt
- Pass by 1/29, end of class period

#### Electric Field Practice

- will open up after scoring 80% on Electric Field Notes post assessment
- must score a 65% or redo
- Pass both by 1/30, end of day

#### Electric Field Simulation Lab

- Use the PhET simulation *Charges and Fields* to place positive and negative point-charges in different configurations and look at the resulting electric field.
- will open up after scoring 65% on Electric Field practice
- Answer the 10 follow up questions after completing the Simulation. Submit answers to the questions through Blackboard for all by 1/31, end of class period
- Lab report is NOT required for this lab.
- There are NO corrections accepted on this lab.
- There will be follow up questions regarding the Simulation included on the Unit 9 Test.

#### Electric Potential Notes

- Complete note taking guide

#### Electric Potential Notes - Post Assessment

- take assessment after watching video notes and completing note taking guide
- must score a 80% or redo
- seek remediation if PA is not passed on 3<sup>rd</sup> attempt
- Pass by 2/1, end of class period

#### Electric Potential Practice

- will open up after scoring 80% on Electrical Potential Notes post assessment
- must score a 65% or redo
- Pass by 2/2, end of day

#### Electric Potential Simulation Lab

- Use the PhET simulation *Charges and Fields* to place positive and negative point-charges in different configurations and look at the resulting equipotential lines.
- will open up after scoring 65% on Electric Potential practice
- Answer the 12 follow up questions after completing the Simulation. Submit answers to the questions through Blackboard for all by 2/5, end of class period
- Lab report is NOT required for this lab.
- There are NO corrections accepted on this lab.
- There will be follow up questions regarding the Simulation included on the Unit 9 Test.

#### Optional Crib Sheet for Unit 9 Test

- When all practices are completed until a 65% or better is earned, you may use a "teacher guided" crib sheet.
- Pick up the crib sheet on 2/5 (or at least one day before the test).
- Completed crib sheet must be given to teacher 1 day prior to the test and returned after the test.

#### Redo Practices for Review

#### Submit Unit 9 Warm Ups on February 6

#### Unit 9 Test

- Test will open up after passing all Post Assessments and Practices and completing all Labs for this unit.
- Test should be taken by 2/6

#### Retake Unit 9 Test

- If you score below a 65% you must watch the video notes:
  - Complete note-taking guides for the unit
  - Complete all practices in the unit again
  - Seek remediation as needed
  - Retake the Unit 9 Test and pass with a 65% or higher
  - **COMPLETE the RETAKE as soon as possible to avoid falling behind in the next unit**