

## Unit 12: Magnets

- 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 12 should be completed by March 28.

### Goals:

1. I can use vectors to represent magnetic fields and magnetic field lines.
2. I can use simulations to model magnetic fields and magnetic forces.
3. I can use mathematics and computational thinking to determine the magnetic force, current, length of the wire or magnetic field strength when one or more of the variables is changed.
4. I can use the Right Hand Rules to determine the direction of current, direction of magnetic field or direction of magnetic force.
5. I can build an electromagnet and determine the direction of current flow.

### Complete Unit 12 Pretest

#### Unit 12 Vocabulary

- Unit 12 Vocabulary is optional

### Magnetic Force & Magnetic Fields Notes

- Complete note taking guide

#### Magnetic Force & Fields Notes - Post Assessment

- must score a 80% or redo
- seek remediation if PA is not passed on 3<sup>rd</sup> attempt
- Pass by 3/13, end of class period

#### Magnetic Force & Fields Practice

- will open up after scoring 80% on Magnetic Force & Fields Notes post assessment
- must score a 74% or redo
- Pass by 3/14, end of day

### Investigating Magnets Lab

- Submit drawings to your teacher and answer the 5 follow up questions via Blackboard by 3/18, end of class period
- Lab report is NOT required for this lab.
- There are NO corrections accepted on this lab.

### Magnets & Electric Current (Electromagnets) Notes

- Complete note taking guide

#### Magnets & Electric Current 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 3/18, end of day

#### Magnets & Electric Current (Electromagnets) Practice

- will open up after scoring 80% on Magnets & Electric Current Notes post assessment
- must score a 74% or redo
- Pass by 3/19, end of day

### PHET Electromagnet Simulation Lab

- Use the PHET simulation *Magnets and Electromagnets* to build the electromagnet models
- Answer the follow up questions after completing the Simulation. Submit answers to the questions through Blackboard by 3/20, end of day
- Lab report is NOT required for this lab.
- There are NO corrections accepted on this lab.

### Magnetic Field Right Hand Rules Notes

- Complete note taking guide

#### Right Hand Rules Notes - Post Assessment

- must score a 80% or redo
- seek remediation if PA is not passed on 3<sup>rd</sup> attempt
- Pass by 3/21, end of class period

#### Right Hand Rules Practice

- will open up after scoring 80% on Magnetic Field Right Hand Notes post assessment
- must score a 74% or redo
- Pass both by 3/22, end of day

### Electromagnet Lab

- You may work with a partner or small group to collect your data; however, each student is responsible for analyzing the data and answering questions. Do NOT submit someone else's answers as your own work.
- Submit Lab Report by 3/25, 11:59 PM
- Refer to Scoring Rubric prior to submitting
- Very limited Lab corrections will be accepted.

### Magnetics in Technology

- Read this information to discover the importance of magnets in technological advances in industry, transportation, safety, health and medicine.
- After reading, complete the questions via Blackboard.

### Optional Crib Sheet for Unit 12 Test

- When all practices are completed until a 74% or better is earned, you may use a "teacher guided" crib sheet.
- Complete crib sheet on 3/26 (or at least 1 day before 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 12 Warm Ups on March 27

### Unit 12 Test

- Test will open up after passing all Post Assessments and Practices and completing all Labs for this unit.
- Test should be taken by 3/27

### Retake Unit 12 Test

- If you score below a 65% you must watch the video notes:
  - Complete note-taking guides for the unit and all practices in the unit again
  - Seek remediation as needed
  - Retake the Unit 12 Test and pass with a 65% or higher
  - **COMPLETE the RETAKE as soon as possible to avoid falling behind in the next unit**