

Lesson plans May 6 to May 10, 2019

## Mr. Woolslayer Room 200

Monday B day

8:05 to 8:49 Physics II (coverage)

*Objective: Students will draw and label ray diagrams to scale for concave and convex lens and mirrors.*

*PA standard: 3.2.P.B1*

*Activity Handout on ray diagrams and sample problems.*

*Evaluation: Completed ray diagrams of convex and concave lens and mirrors and well as flat mirrors*

*Enrichment/Remediation: Tutoring is available by appointment before school, 9<sup>th</sup> period or after school. Extra credit: Engineering project: Marsh mellow catapult.*

8:53-9:34 Prep

9:38- 10:19 General Physical Science:

Students will describe how energy and work are related. Students will understand the symbols, unit and formula related to work and kinetic energy and potential energy,

PA standard: 3.2.P.B1

Activity Directed reading and study guide Chapter 13.3

Evaluation Completed SG 13.3

*Enrichment/Remediation: Tutoring is available by appointment before school, 9<sup>th</sup> period or after school. Extra credit: Engineering project: Marsh mellow catapult.*

10:23 to 11:04 General Physical Science:

Students will describe how energy and work are related. Students will understand the symbols, unit and formula related to work and kinetic energy and potential energy,

PA standard: 3.2.P.B1

Activity Finish Viewing and discussion MU the conservation of Energy; Directed reading and study guide Chapter 13.3

Evaluation Completed SG 13.3 turn in video study guide MU the conservation of energy.

Enrichment/Remediation: Tutoring is available by appointment before school, 9<sup>th</sup> period or after school. Extra credit: Engineering project: Marsh mellow catapult

11:08 to 11:49 Study hall in the Room 200

11:49 to 12:19 Eat B Lunch

12:23 to 1:04 C lunch Duty

1:08 to 1:49 Physics

Objective: Students identify and apply fluid principles and laws.

PA standard: 3.2.P.B1

Activity: Fluid laws and principles, demonstrations, notes and video clips

Evaluation: Notebook check

Enrichment/Remediation: Tutoring is available by appointment before school, 9<sup>th</sup> period or after school. Extra credit: Engineering project: Marsh mellow catapult.

1:53 to 2:34 Physics lab

Objective: Students will understand the concept of resonance and frequency verses pitch

PA standard: 3.2.P.B1

Activity: Demos of non-Newtonian fluids, Sound and music properties.

Evaluation: Student feedback

Enrichment/Remediation: Tutoring is available by appointment before school, 9<sup>th</sup> period or after school. Extra credit: Engineering project: Marsh mellow Catapult

2:38 to 3:08 Science fiction club

3:08 to 3:30 Gym Lobby Duty.  
Tuesday A

8:05 to 8:49 Physics II

*Objective: Students will measure the distances of the images and objects and focal points of optical systems of lens and mirrors.*

*PA standard: 3.2.P.B1*

*Activity hands on images of thin lens and mirror.*

*Evaluation: Completed Lab measurements and ray diagrams.*

*Enrichment/Remediation: Tutoring is available by appointment before school, 9<sup>th</sup> period or after school. Extra credit: Engineering project: marsh mellow catapult*

8:53-9:34 Prep

9:38- 10:19 General Physical Science:

Students will understand the conservation of energy and the concept of entropy.

PA standard: 3.2.P.B1

Activity: Directed reading and study guide Ch 13.4 The conservation of energy

Evaluation Notebook check

Enrichment/Remediation: Tutoring is available by appointment before school, 9<sup>th</sup> period or after school. Extra credit: Engineering project: Marsh mellow catapult.

10:23 to 11:04 General Physical Science:

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PA standard: 3.2.P.B1

Activity: Directed reading and study guide Ch 13.4 The conservation of energy

Evaluation Notebook check

Enrichment/Remediation: Tutoring is available by appointment before school, 9<sup>th</sup> period or after school. Extra credit: Engineering project: Marsh mellow catapult.

11:08 to 11:49 Study hall in the Room 200

11:49 to 12:19 Eat B Lunch

12:23 to 1:04 C lunch Duty

1:08 to 1:49 Physics

Objective: Students label and identify various fluid principles

PA standard: 3.2.P.B1

Activity: Fluids test

Evaluation: Completed Fluid Test

Enrichment/Remediation: Tutoring is available by appointment before school, 9<sup>th</sup> period or after school. Extra credit: Engineering project: Marsh mellow catapult.

1:53 to 2:34 Physics lab

Objective: Students will set up and measure the speed of sound with a column of water and a tuning fork

PA standard: 3.2.P.B1

Activity: Speed of sound lab.

Evaluation: Completed lab report on measuring the speed of sound.

Enrichment/Remediation: Tutoring is available by appointment before school, 9<sup>th</sup> period or after school. Extra credit

2:38 to 3:08 7<sup>th</sup> grade HR

3:08 to 3:30 Gym Lobby Duty

Wednesday

8:05 to 8:49 Physics II

*Objective: Students will measure the index of refraction using Snell's law*

*PA standard: 3.2.P.B1*

*Activity*      *Index of refraction lab*

*Evaluation:*      *Completed Lab measurements and calculation of refraction of various fluids..*

*Enrichment/Remediation:*      *Tutoring is available by appointment before school, 9<sup>th</sup> period or after school. Extra credit: Engineering project: marsh mellow catapult*

8:53-9:34 Prep

9:38- 10:19 General Physical Science:

Students will understand the difference between Potential energy and Kinetic energy.

Students will describe various transformations into other forms of energy.

PA standard: 3.2.P.B1

*Activity:*      Notes, demonstrations, video clips and discussion of various forms of energy.

*Evaluation*      Notebook check

*Enrichment/Remediation:*      Tutoring is available by appointment before school, 9<sup>th</sup> period or after school. Extra credit: Engineering project: Marsh mellow catapult.

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*Evaluation*      Notebook check

*Enrichment/Remediation:*      Tutoring is available by appointment before school, 9<sup>th</sup> period or after school. Extra credit: Engineering project: Marsh mellow catapult.

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11:49 to 12:19 Eat B Lunch

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Objective: Students label and identify various fluid principles

PA standard: 3.2.P.B1

Activity: Fluids test

Evaluation: Completed Fluid Test

Enrichment/Remediation: Tutoring is available by appointment before school, 9<sup>th</sup> period or after school. Extra credit: Engineering project: Marsh mellow catapult.

1:53 to 2:34 Physics lab

Objective: Students will set up and measure the speed of sound with a column of water and a tuning fork

PA standard: 3.2.P.B1

Activity: Speed of sound lab.

Evaluation: Completed lab report on measuring the speed of sound.

Enrichment/Remediation: Tutoring is available by appointment before school, 9<sup>th</sup> period or after school. Extra credit

2:38 to 3:08 Science fiction club

3:08 to 3:30 Gym Lobby Duty

Thursday

8:05 to 8:49 Physics II

*Objective: Students will solve and draw various optical systems.*

*PA standard: 3.2.P.B1*

*Activity Mixed problem set for Ch 23 geometry of light.*

*Evaluation: Completed Ray diagram and calculations*

*Enrichment/Remediation: Tutoring is available by appointment before school, 9<sup>th</sup> period or after school. Extra credit: Engineering project: Marsh mellow catapult.*

8:53-9:34 Prep

9:38- 10:19 General Physical Science:

**Objective:** Students will apply work, simple machine, energy conservation of energy to problems

**PA standard:** 3.2.P.B1

**Activity** Guided review on concepts, formulas, units and problems related to chapter 13.

**Evaluation:** completed concept review and chapter 13 problems

**Enrichment/Remediation:** Tutoring is available by appointment before school, 9<sup>th</sup> period or after school. **Extra credit: Engineering project:** Marsh mellow Catapult

10:23 to 11:04 General Physical Science:

**Objective:** Students will apply work, simple machine, energy conservation of energy to problems

**PA standard:** 3.2.P.B1

**Activity** Guided review on concepts, formulas, units and problems related to chapter 13.

**Evaluation:** completed concept review and chapter 13 problems

**Enrichment/Remediation:** Tutoring is available by appointment before school, 9<sup>th</sup> period or after school. **Extra credit: Engineering project:** Marsh mellow Catapult

11:08 to 11:49 Study hall in the Room 200

11:49 to 12:19 Eat B Lunch

12:23 to 1:04 C lunch Duty

1:08 to 1:49 Physics

Objective: student will define terms related to temperature and heat. Students will understand the difference between temperature and heat.. Students will recognize the symbols, units, scale and conversions of temperature and heat.

PA standard: 3.2.P.B1

Activity: Directed Reading ch 9 and Study guide Ch 9

Evaluation: Completed SG 9

Enrichment/Remediation: Tutoring is available by appointment before school, 9<sup>th</sup> period or after school. Extra credit: Engineering project: Marsh mellow catapult.

1:53 to 2:34 Physics lab

Objective: Students will set up and measure the speed of sound with a column of water and a tuning fork

PA standard: 3.2.P.B1

Activity: Speed of sound lab.

Evaluation: Completed lab report on measuring the speed of sound.

Enrichment/Remediation: Tutoring is available by appointment before school, 9<sup>th</sup> period or after school. Extra credit

2:38 to 3:08 7<sup>th</sup> Grade HR

3:08 to 3:30 Gym Lobby Duty.

Friday



8:05 to 8:49 Physics II

*Objective: Students will apply concepts of geometry to the behavior of light as it is reflected, transmitted, absorbed or refracted by various optical devices and mediums,*

*PA standard: 3.2.P.B1*

*Activity Notes, demonstrations and discussion on wave like properties of light*

*Evaluation: Notebook check*

*Enrichment/Remediation: Tutoring is available by appointment before school, 9<sup>th</sup> period or after school. Extra credit: Engineering project: Marsh mellow catapult.*

8:53-9:34 Prep

9:38- 10:19 General Physical Science:

Students will design and test a 20. Second timer/

PA standard: 3.2.P.B1

Activity Pendulum lab

Evaluation Completed Pendulum lab and data sheet with calculations

Enrichment/Remediation: Tutoring is available by appointment before school, 9<sup>th</sup> period or after school. Extra credit: Engineering project: Marsh mellow catapult.

10:23 to 11:04 General Physical Science:

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11:08 to 11:49 Study hall in the Room 200

11:49 to 12:19 Eat B Lunch

12:23 to 1:04 C lunch Duty

1:08 to 1:49 Physics

Objective: Students understand various ways of mapping and imaging heat and light

PA standard: 3.2.P.B1

Activity: Temperature maps of the hand

Evaluation: Completed temperature map

Enrichment/Remediation: Tutoring is available by appointment before school, 9<sup>th</sup> period or after school. Extra credit: Engineering project: Marsh mellow catapult.

1:53 to 2:34 Physics lab

Objective: Students will measure the heat of fusion of ice

PA standard: 3.2.P.B1

Activity: Heat of fusion lab

Evaluation: Completed lab report and calculations on the heat of fusion of Ice.

Enrichment/Remediation: Tutoring is available by appointment before school, 9<sup>th</sup> period or after school. Extra credit: Engineering project: Marsh mellow Catapult

2:38 to 3:08 Science fiction club

3:08 to 3:30 Gym Lobby Duty.