Course Title:	Physics A				
Michigan High School	Michigan High School Content Expectations for Chemistry				
Unit 1 Big Idea:	Introduction to Ph	ysics			
<b>Essential Questions</b>	1. How does the field of physics relate to the study of science in				
	general?				
Standards	Assignment	Description			
D1 1A D1 1D	Lesson 1.2:	1.2 Future Careers			
P1.1A, P1.1D,		1.2 Future Careers 1.3 Scientific Measurements			
P1.1i, P1.2A, P1.2E, P1.2h, P1.2i.	What is Physics?	1.4 Units quiz			
11.211, 11.21.	Lesson 1.3:	1.5 Diameter and Circumference			
	Measurement	1.5 Diameter and Circumerence			
	ivieasurement				
	Lesson 1.4:				
	Units				
	Offics				
	Lesson 1.5:				
	Language of				
	Physics				
	,				
Unit 2 Big Idea	Motion				
<b>Essential Questions</b>	1. What is motion?				
Standards	Assignment	Description			
P1.1B, P1.1C, P1,	Lesson 2.1:	2.1 Quiz on Scalar, Vector, Distance,			
P2.1A, P2.1B, P2.1C,	Describing	Displacement, Speed, Velocity,			
P2.1D, P2.1E, P2.1g,	Motion With	Acceleration			
P2.2A, P2.2B, P2.B,	Words				
P2.2e, P2.2g, P2.3a,		2.2 Motion Diagram			
P3.4e	Lesson 2.2:				
	Describing	2.3 Acceleration Argument			
	Motion With				
	Graphs	2.4 How Fast Can You Throw Up?			
	2.2	250: 0			
	Lesson 2.3:	2.5 Quiz on Slope			
	Describing	2.C.Macaurina Coasad with a Bulan			
	Motion With	2.6 Measuring Speed with a Ruler			
	Equations				
	Lesson 2.4:				
	Kinematic				
	Equations				
	Lquations				
	Lesson 2.5:				

	Interpreting	
	Graphs	
	Lesson 2.6:	
	Two-Dimensional	
	Motion	
Unit 3 Big Idea	Forces	
Essential Questions		object move the way they do?
Standards	Assignment	Description
P1.1h, P1.2D, P3.1A,	Lesson 3.1:	3.1 Friction
P3.1c, P3.1d, P3.2A,	Forces in Nature	3.1 i iiction
	Torces in Nature	3.2 Free Body Diagrams
P3.2C, P3.2d, P3.3A,	Lesson 3.2:	3.2 HEE BOUY DIAGRAINS
P3.3c, P3.4A, P3.4B, P3.4C	Net Force	2.2 Lab Activity Fan Cart Physics
P3.4C	Net Force	3.3 Lab Activity - Fan Cart Physics
	Lesson 3.3:	2.4 Pool Life Free Fell Franciscost
		3.4 Real-Life Free Fall Experiment
	Force and	
	Acceleration	
	Lesson 3.4:	
	Friction	
Unit 4 Big Idea	Mechanics	
<b>Essential Questions</b>		gy and motion related?
Essential Questions Standards		Description
Essential Questions Standards P1.2B, P3.2B, P3.3b,	1. Here are ener	 T
Essential Questions Standards P1.2B, P3.2B, P3.3b, P3.3d, P3.4f, P3.4g,	Here are ener     Assignment	Description 4.1 Energy Transfer Diagrams
Essential Questions Standards P1.2B, P3.2B, P3.3b,	1. Here are ener Assignment Lesson 4.1:	Description
Essential Questions Standards P1.2B, P3.2B, P3.3b, P3.3d, P3.4f, P3.4g,	1. Here are ener Assignment Lesson 4.1:	Description 4.1 Energy Transfer Diagrams
Essential Questions Standards P1.2B, P3.2B, P3.3b, P3.3d, P3.4f, P3.4g, P3.5a, P4.1A, P4.1B,	1. Here are ener Assignment Lesson 4.1: Energy	Description 4.1 Energy Transfer Diagrams
Essential Questions Standards P1.2B, P3.2B, P3.3b, P3.3d, P3.4f, P3.4g, P3.5a, P4.1A, P4.1B, P4.1c, P4.1d, P4.1e,	1. Here are ener Assignment Lesson 4.1: Energy Lesson 4.2:	Description  4.1 Energy Transfer Diagrams  4.2 Lab Activity - Pulley Lab
Essential Questions Standards P1.2B, P3.2B, P3.3b, P3.3d, P3.4f, P3.4g, P3.5a, P4.1A, P4.1B, P4.1c, P4.1d, P4.1e, P4.2A, P4.2B, P4.2C,	1. Here are ener Assignment Lesson 4.1: Energy Lesson 4.2: Work and	Description  4.1 Energy Transfer Diagrams  4.2 Lab Activity - Pulley Lab
Essential Questions Standards P1.2B, P3.2B, P3.3b, P3.3d, P3.4f, P3.4g, P3.5a, P4.1A, P4.1B, P4.1c, P4.1d, P4.1e, P4.2A, P4.2B, P4.2C, P4.2D, P4.2e, P4.2f,	1. Here are ener Assignment Lesson 4.1: Energy Lesson 4.2: Work and	Description  4.1 Energy Transfer Diagrams  4.2 Lab Activity - Pulley Lab  4.3 Lab Activity - Pendulum
Essential Questions Standards P1.2B, P3.2B, P3.3b, P3.3d, P3.4f, P3.4g, P3.5a, P4.1A, P4.1B, P4.1c, P4.1d, P4.1e, P4.2A, P4.2B, P4.2C, P4.2D, P4.2e, P4.2f, P4.3A, P4.3B, P4.3C,	1. Here are ener Assignment Lesson 4.1: Energy Lesson 4.2: Work and Potential Energy Lesson 4.3:	Description  4.1 Energy Transfer Diagrams  4.2 Lab Activity - Pulley Lab  4.3 Lab Activity - Pendulum
Essential Questions Standards P1.2B, P3.2B, P3.3b, P3.3d, P3.4f, P3.4g, P3.5a, P4.1A, P4.1B, P4.1c, P4.1d, P4.1e, P4.2A, P4.2B, P4.2C, P4.2D, P4.2e, P4.2f, P4.3A, P4.3B, P4.3C,	1. Here are ener Assignment Lesson 4.1: Energy Lesson 4.2: Work and Potential Energy	Description  4.1 Energy Transfer Diagrams  4.2 Lab Activity - Pulley Lab  4.3 Lab Activity - Pendulum  4.4 Quiz on Momentum and Impulse
Essential Questions Standards P1.2B, P3.2B, P3.3b, P3.3d, P3.4f, P3.4g, P3.5a, P4.1A, P4.1B, P4.1c, P4.1d, P4.1e, P4.2A, P4.2B, P4.2C, P4.2D, P4.2e, P4.2f, P4.3A, P4.3B, P4.3C,	1. Here are ener Assignment Lesson 4.1: Energy Lesson 4.2: Work and Potential Energy Lesson 4.3:	Description  4.1 Energy Transfer Diagrams  4.2 Lab Activity - Pulley Lab  4.3 Lab Activity - Pendulum  4.4 Quiz on Momentum and Impulse
Essential Questions Standards P1.2B, P3.2B, P3.3b, P3.3d, P3.4f, P3.4g, P3.5a, P4.1A, P4.1B, P4.1c, P4.1d, P4.1e, P4.2A, P4.2B, P4.2C, P4.2D, P4.2e, P4.2f, P4.3A, P4.3B, P4.3C,	1. Here are ener Assignment Lesson 4.1: Energy Lesson 4.2: Work and Potential Energy Lesson 4.3: Kinetic Energy	Description  4.1 Energy Transfer Diagrams  4.2 Lab Activity - Pulley Lab  4.3 Lab Activity - Pendulum  4.4 Quiz on Momentum and Impulse
Essential Questions Standards P1.2B, P3.2B, P3.3b, P3.3d, P3.4f, P3.4g, P3.5a, P4.1A, P4.1B, P4.1c, P4.1d, P4.1e, P4.2A, P4.2B, P4.2C, P4.2D, P4.2e, P4.2f, P4.3A, P4.3B, P4.3C,	1. Here are ener  Assignment  Lesson 4.1: Energy  Lesson 4.2: Work and Potential Energy  Lesson 4.3: Kinetic Energy  Lesson 4.4:	Description  4.1 Energy Transfer Diagrams  4.2 Lab Activity - Pulley Lab  4.3 Lab Activity - Pendulum  4.4 Quiz on Momentum and Impulse
Essential Questions Standards P1.2B, P3.2B, P3.3b, P3.3d, P3.4f, P3.4g, P3.5a, P4.1A, P4.1B, P4.1c, P4.1d, P4.1e, P4.2A, P4.2B, P4.2C, P4.2D, P4.2e, P4.2f, P4.3A, P4.3B, P4.3C,	1. Here are ener  Assignment  Lesson 4.1: Energy  Lesson 4.2: Work and Potential Energy  Lesson 4.3: Kinetic Energy  Lesson 4.4:	Description  4.1 Energy Transfer Diagrams  4.2 Lab Activity - Pulley Lab  4.3 Lab Activity - Pendulum  4.4 Quiz on Momentum and Impulse
Essential Questions Standards P1.2B, P3.2B, P3.3b, P3.3d, P3.4f, P3.4g, P3.5a, P4.1A, P4.1B, P4.1c, P4.1d, P4.1e, P4.2A, P4.2B, P4.2C, P4.2D, P4.2e, P4.2f, P4.3A, P4.3B, P4.3C,	1. Here are ener  Assignment  Lesson 4.1: Energy  Lesson 4.2: Work and Potential Energy  Lesson 4.3: Kinetic Energy  Lesson 4.4: Momentum  Lesson 4.5:	Description  4.1 Energy Transfer Diagrams  4.2 Lab Activity - Pulley Lab  4.3 Lab Activity - Pendulum  4.4 Quiz on Momentum and Impulse
Essential Questions Standards P1.2B, P3.2B, P3.3b, P3.3d, P3.4f, P3.4g, P3.5a, P4.1A, P4.1B, P4.1c, P4.1d, P4.1e, P4.2A, P4.2B, P4.2C, P4.2D, P4.2e, P4.2f, P4.3A, P4.3B, P4.3C,	1. Here are ener  Assignment  Lesson 4.1: Energy  Lesson 4.2: Work and Potential Energy  Lesson 4.3: Kinetic Energy  Lesson 4.4: Momentum	Description  4.1 Energy Transfer Diagrams  4.2 Lab Activity - Pulley Lab  4.3 Lab Activity - Pendulum  4.4 Quiz on Momentum and Impulse

Unit 5 Big Idea	Rotation	
<b>Essential Questions</b>	1. What makes o	bjects rotate the way they do?
Standards	Assignment	Description
P2.1F, P2.1h, P2.2D,	Lesson 5.1:	5.1 Lab Activity - Circular Motion
P3.1b, P3.4D, P3.6A,	Uniform Circular	
P3.6B, P3.6C, P3.6d	Motion	5.2 Quiz on Circular Tracks
P3.6e		
	Lesson 5.2:	5.3 Quiz on Gravitation
	Circular Tracks	
		5.4 Lab Activity - Orbital Motion
	Lesson 5.3:	
	Universal	
	Gravitation	
	Lesson 5.4:	
	Orbital Motion	
Unit C Dia Idea	Thormal Dhysics	
Unit 6 Big Idea	Thermal Physics  1. Where does h	eat come from and where does it go?
Essential Questions	1. Which does in	
Ctandards	Assignment	
Standards	Assignment	Description
<b>Standards</b> P1.1f, P4.11a, P4.11b	Lesson 6.1:	<b>Description</b> 6.1 Quiz on Temperature, Fahrenheit,
		Description
	Lesson 6.1: Temperature	Description 6.1 Quiz on Temperature, Fahrenheit, Celsius
	Lesson 6.1: Temperature Lesson 6.2:	<b>Description</b> 6.1 Quiz on Temperature, Fahrenheit,
	Lesson 6.1: Temperature	Description 6.1 Quiz on Temperature, Fahrenheit, Celsius 6.2 Lab Activity - Energy Conversion
	Lesson 6.1: Temperature Lesson 6.2: Heat	Description 6.1 Quiz on Temperature, Fahrenheit, Celsius
	Lesson 6.1: Temperature Lesson 6.2: Heat Lesson 6.3:	Description 6.1 Quiz on Temperature, Fahrenheit, Celsius 6.2 Lab Activity - Energy Conversion 6.3 Lab Activity - Specific Heat
	Lesson 6.1: Temperature Lesson 6.2: Heat	Description 6.1 Quiz on Temperature, Fahrenheit, Celsius 6.2 Lab Activity - Energy Conversion
	Lesson 6.1: Temperature Lesson 6.2: Heat Lesson 6.3:	Description 6.1 Quiz on Temperature, Fahrenheit, Celsius 6.2 Lab Activity - Energy Conversion 6.3 Lab Activity - Specific Heat
	Lesson 6.1: Temperature  Lesson 6.2: Heat  Lesson 6.3: Specific Heat	Description 6.1 Quiz on Temperature, Fahrenheit, Celsius 6.2 Lab Activity - Energy Conversion 6.3 Lab Activity - Specific Heat
	Lesson 6.1: Temperature  Lesson 6.2: Heat  Lesson 6.3: Specific Heat  Lesson 6.4:	Description 6.1 Quiz on Temperature, Fahrenheit, Celsius 6.2 Lab Activity - Energy Conversion 6.3 Lab Activity - Specific Heat
	Lesson 6.1: Temperature  Lesson 6.2: Heat  Lesson 6.3: Specific Heat  Lesson 6.4:	Description 6.1 Quiz on Temperature, Fahrenheit, Celsius 6.2 Lab Activity - Energy Conversion 6.3 Lab Activity - Specific Heat

Thermodynamics