WAUCONDA SCHOOL DISTRICT 118
UNIT PLANNING ORGANIZER

Subject: Honors Physics

Grade Level or Course: 9th Grade

Unit 9 Electricity (Statics & Circuits) Pacing: 5 Weeks

STAGE 1 – DESIRED RESULTS

Driving Paradigm/Phenomenon:

Sticky Tape Lab

(Students create charges on pieces of tape by ripping them apart. They experiment with attractive and repulsive forces by holding them up to charged and neutral objects.)

I can statements:

I can draw and interpret schematic diagrams of circuits.
I can define and apply Ohm's Law in electrical circuits.
I can understand the relationships between voltage, current, and resistance.
I can describe the differences and similarities between series and parallel circuits.
I can describe the differences and similarities between open and closed circuits.
I can define and apply Coulomb's Law.
I can describe how electron arrangements change due to polarization.
I can identify the characteristics of conductors and insulators and distinguish between them on an atomic level.

NGSS (Priority Standards):

STAGE 2 – EVIDENCE

Concepts (What students need to know)	Performance Tasks (What students will be able to do)	21st Century Skills

List of CPO/Vernier Manipulables:	
Lab/Activity Name	**Description**
Paradigm Lab: Sticky Tape	**Done on first or second day: Rip two pieces of tape apart in order to give them a charge. Hold pieces of tape near**

	each other as well as insulators and conductors. It introduces attractive and repulsive forces.
Lab: Atom Building Game	CPO lab that introduces students to the different parts of an atom.
Lab: Atom Building Game??????	Students use the CPO circuit boards to experiment with series circuits as well as get more familiar with voltage, current, and short circuits.
Lab: CPO 13.2 - Parallel Circuit	Students use the CPO circuit boards to experiment with parallel circuits as well as get more familiar with voltage and current. They should be able to understand the difference between series and parallel circuits after this lab.
Lab: CPO - Resistance & Ohm's Law	Students use the CPO circuit boards to test how different voltages and resistances affect circuits.

Common Formative/Summative Assessments:

Interim Assessments (Informal Progress Monitoring checks):

Modified Common Assessments:

Modified Interim Assessments:

STAGE 3 – LEARNING PLAN
(INSTRUCTIONAL PLANNING)

Suggested Resources/Materials/Informational Texts

Suggested Research-based Effective Instructional Strategies

Academic Vocabulary/ Word Wall	Enrichment/Extensions/ Modifications	Interdisciplinary Connection
Essential Vocabulary: **Worth-knowing Vocabulary:**		