

PHYSICS PACING SCHEDULE

Title:

Quarter I: (Adjust unit timelines as needed within the quarter).

UNIT I - History and Nature of Science:

(Should be incorporated now and throughout the course –

I.A.B.C.D.All See the Inquiry document with Appendices)

UNIT II -Overview of Content, Skills and Processes of Science, and Introduction to Physics-----1 week

Investigation A – Review of skills, math concepts, etc.

Investigation B – Intro to Physics

UNIT III – Motion -----7 weeks

II.D.1-9, 13-17; Investigation A - **Kinematics** – speed, velocity, acceleration, vectors, Projectile motion
C.5

II.D.1, 9, 10, 12 Investigation B – **Intro to Newton’s Laws**

II.C.I.1, 2, 3, 4 Investigation C – **Solar System** – stellar distance, size, scale

Quarter II:

UNIT I – Forces, Work and Energy ----- weeks

II.D.1, 9, 10, 12 Investigation A – **Newton’s Laws expanded**

II.D.11 Investigation B – **Momentum**

II.C.1-4, 21, 23, 24 Investigation C – **Energy and Work** – Potential and Kinetic

UNIT II – Universe ----- weeks

II.D.10 Investigation A – **Circular Motion**

II.C.5, 6 Investigation B – **Universe** – Satellite Motion, Keplers Laws

Quarter III:

UNIT I – Electricity and Magnetism----- weeks

II.C.6-8, 10, Investigation A – Relationship between AC/DC circuits
11, 13, 14, 22

II.C.15 Investigation B – Ohms Law

II.C.9, 12 Investigation C – Transformers

Unit II – Electricity Expanded----- weeks

II. E.1, 2, 3 Investigation A – Static Electricity

II.E.4, 5 Investigation B – Coulomb’s Law

Quarter IV:

UNIT I - Waves----- weeks

II.C.17-20 Investigation A – Sound, Light, Wave Characteristics

II.C.16 Investigation B – Electromagnetic Spectrum

Unit II – The Universe----- weeks

III.C.II.2-4, 6, 8 Investigation A – Stellar Astronomy

III.C.II.1, 5, 7, 8 Investigation B – History and Theories of the Origin of the Universe

I.B.1 **UNIT III – Design and Conduct an Original Experiment**-----1 week