



2019/2020

Year

7 GRADE SYLLABUS

(SECONDARY CHECKPOINT)

PREPARED BY:

Physics Department

1ST SEMESTER

01

MEASUREMENTS

- Introduction to Physics
- Phenomena and Illusions
- Base units, derived units, measuring length, mass and time
- estimating quantities
- accuracy of measurements
- heat and temperature

02

FORCES AND MOTION

- What forces do
- Different type of forces
- Friction,
- Air Resistance
- Mass and Weight
- Gravity and weight
- How springs stretch

03

ENERGY

- What is energy
- Forms of energy
- Energy changes
- Wasted energy
- Fuels

04

ENERGY TRANSFER

- How energy use increased
- Measuring work
- Energy transfer diagram
- Sankey diagram
- Plants and energy
- Energy and ourselves
- Generating electricity
- Conservation of energy

2ND SEMESTER

01

THE EARTH AND BEYOND

- Movements in the sky (and how the Earth moves)
- Light in the sky
- Measuring with light
- The moon
- Early studies of the solar system
- Discovering Uranus and Neptune
- The parts of the Solar System
- The Milky Way galaxy
- Planets around other stars
- Beyond the Milky Way Galaxy

02

SPEED

- Speed records
- Measuring speed
- The distance/time graph
- Velocity

03

SOUND

- From vibration to sound wave
- Describing the wave
- Detecting sound
- Oscilloscopes
- The loudness of a sound
- The pitch of the sound

STUDENT'S REPORT

75%

ASSIGNMENTS (Projects,
Portfolio, Workbook, Hands
on, Discussion, Presentation)
AND QUIZZES

25%

MIDTERM AND
FINAL EXAM

