

Sing Yin Secondary School
Physics Teaching Syllabus (2016-2017)

Form Three

Active Physics 1: Heat and Gases

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 Pearson

Aims

This course of study should help students:

- ① learn some knowledge and method of Physics in both qualitative and quantitative ways,
- ② apply what they learn to solve problems rationally in their academic and daily life,
- ③ deepen their sense of carefulness and safety, and
- ④ develop skills for making scientific inquiries.

Topics**Time allotted (cycle)**

1. Laboratory safety regulations and general introduction	1
2. Basic Mathematics for Physics	1
3. Temperature, heat and internal energy <ul style="list-style-type: none"> - Temperature, temperature scale and thermometers - Molecular motion and temperature - Internal energy and heat 	3
4. Transfer of heat <ul style="list-style-type: none"> - Structure of matter - Conduction, convection and radiation 	2
5. Specific heat capacity <ul style="list-style-type: none"> - Heat capacity and specific heat capacity - Mixture and conservation of energy - High specific heat capacity of water 	6
6. Change of state <ul style="list-style-type: none"> - Fusion, boiling and evaporation - Specific latent heat of fusion and vaporization 	6
7. Gas laws and kinetic theory <ul style="list-style-type: none"> - Gas and atmospheric pressure - Gas laws (excluding ideal gas law) - Kinetic theory 	4

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Signature of Teacher-in-charge:

 Checked by:
