The table below illustrates the considerable scope which teachers have in choosing practical work for SBA. It is hoped that this can help teachers plan their teaching and assessment arrangement. However, teachers should feel free to devise their own innovative or/and project-based practical activities for assessment in particular areas of the syllabus as long as they are **of appropriate standard** and can meet the criteria for awarding marks. **There is no list of prescribed or recommended practical work which must be used for assessment purposes** since teaching interests and resources vary from school to school.

Some suggested experimental work	***Syllabus Topic of HKDSE***	***Suitable for assessment***
Measurement of the specific heat capacity of a liquid using a low voltage immersion heater and a foam cup.	(I)	✓
Measurement of the specific latent heat of fusion of ice using a low voltage immersion heater.	(I)	✓
Measurement of the specific latent heat of vaporization of water using a mains heater.	(I)	✓
Cooling curve of octadecan-1-ol.	(I)	
Investigation of the relationship between pressure, volume and temperature of a gas.	(I)	✓
Study the effects of the normal force, materials involved and surface area on the force of friction using a block.	(II)	✓
Investigation of the relationship between (a) acceleration and force when the mass is constant; and (b) acceleration and mass under a constant force.	(II)	✓
Measuring g by simple pendulum / spring-mass system / HDMVA method.	(II)	✓
Finding the C.G. of lamina with irregular shapes	(II)	✓
Finding an unknown mass by balancing a ruler on a knife-edge using standard weights	(II)	
Conservation of linear momentum in elastic/inelastic collision of trolleys (further investigation on loss of kinetic energy in inelastic collisions).	(II)	✓
Experimental test of $F = \frac{mv^2}{r}$ by whirling a rubber bung.	(II)	✓
Ripple Tank Experiments.	(III)	✓
Measuring critical angle and refractive index of a semi-circular plastic block.	(III)	✓
Stationary wave pattern at different frequencies using a signal generator.	(III)	
Estimation of the wavelength of light using (a) double slit; and (b) plane diffraction grating.	(III)	✓
Measurement of focal length of convex lenses by different methods: (a) image formation of a distant object; (b) plane mirror method; and (c) lens formula.	(III)	✓
Finding the wavelength / wave speed of sound wave by interference of sound waves using two loudspeakers and CRO.	(III)	✓

Some suggested experimental work	***Syllabus Topic of HKDSE***	***Suitable for assessment***
Drop in terminal p.d. of power supplies delivering current and using different voltmeters to measure the terminal p.d. of a power supply with high internal resistance.	(IV)	✓
Using a current balance to measure the magnetic fields (a) between two magnadur magnets; (b) close to the end of a current-carrying coil; and (c) inside a flat solenoid carrying current.	(IV)	✓
Using a Hall probe or a search coil to investigate the magnetic fields (a) around a long straight wire; (b) at the centre of a coil; (c) inside and around a slinky solenoid; and (d) inside a solenoid, carrying current.	(IV)	✓
Investigation of the factors affecting the induced e.m.f. in a coil.	(IV)	✓
Study of transformer action : (a) the effect of the flux linkage; (b) the relationship between voltage ratio and turn ratio; (c) the dependence of the current in the primary coil on the loading; and (d) comparison between input and output power.	(IV)	✓
(a) Measurement of the resistance of a conductor with a voltmeter and an ammeter (Ohm's law). (b) Change of the resistance of filament of a lamp with temperature. (c) Change of the resistance of a conductor with its length and cross-sectional area.	(IV)	✓
Measurement of the internal resistance of a battery.	(IV)	✓
Measurement of the power output of a battery with time	(IV)	✓
Study of the factors affecting the strength of an electromagnet.	(IV)	✓
Use of the oscilloscope as a d.c. and an a.c. voltmeter, for waveform display and time base for frequency measurement.	-	
Study the relationship between light intensity of a light bulb with distance by a light meter.	(VIII)	✓