

- If a solid angle be contained by three plane angles, any two of them must be together greater than the third.
- Circles are to one another as the squares on their diameters.

First-Class Licenses (Grade B).

BRITISH HISTORY

- Give a sketch of the reign of Edward the Confessor
- Describe the condition of the Anglo-Saxon population at the close of the reign of William the Conqueror.
- What were the social effects of the Crusades? Name the English kings and princes who took part in them.
- State the "Provisions of Oxford," and describe by whom and under what circumstances enacted.
- Mention the chief measures and events which characterized the period of Walpole's administration.
- Assign important political measures or constitutional changes to the following dates: 1265, 1628, 1679, 1701, 1716, 1829, 1846, 1867, 1870.
- Mention the leading British authors of the reign of George III, with the department or departments of literature to which the chief works of each belong.

HISTORY OF BRITISH AMERICA.

- Mention the dates and leading circumstances of the various sieges of Quebec
- Relate the history of D'Anville's expedition.
- Trace the political career of any one of the leading living statesmen of the Dominion.
- Assign important events in British American History to the following dates: 1583, 1632, 1710, 1713, 1750, 1758, 1760, 1841, 1878.
- What cities or towns occupy the sites of the ancient Stadacona, Pesiquid, Hochelaga, Paratown, Fort Frontenac, Port Royal?

GENERAL GEOGRAPHY.

- Define *Water-Shed*, *River-System*, *Mountain-chain*, and account for the names *Tropic of Cancer*, *Tropic of Capricorn*, and *Arctic Circle*.
- Describe the Austro-Hungarian Empire, (1) as to government and races, (2) as to physical features and resources.
- Where, and for what noted, are Trincomalee, Bushire, Silistria, Cordova, Timbuctoo, Pittsburg, Cuzco, Paramatta, Brindisi?
- Describe the tides, their cause, the extent of the movement and the tidal periods.
- How to find the duration of twilight at a given place on a given day? (Globe).
- Mention some noteworthy features of the general contour of the Continents.
- Name the chief rivers of the United States, with the principal cities on their banks.

BRITISH-AMERICAN GEOGRAPHY.

- Name the *coast waters*, *capes* and *islands* of Newfoundland.
- Describe the North-West Territory, (1) as to its physical features, (2) as to its natural resources.
- Name the counties of Quebec north of the St. Lawrence.
- Write brief notes on the leading industries of the Maritime Provinces.
- Draw an outline map of the Province of Ontario, locating the chief cities, and marking the adjacent waters.

CHEMISTRY.

- (a) Give symbol, combining weight, and properties of Nitrogen, mentioning any of the sources of the gas, and any process of preparing it. (b) Name the oxides of Nitrogen with their chemical formulæ, giving their properties and manner of preparing any one of them.

- (a) Give an account of the different varieties of Carbon.
- Explain the principle on which the safety of the Davy lamp depends.
- Name four of the most important Soda Salts, giving both common and chemical name.
- State fully the sources from which Lime, as an artificial manure, may be obtained, best mode of application, and its effects upon soils.
- Classify Soils (1) as to their texture and condition (Physical Analysis), (2) as to their Composition (Chemical Analysis)
- What do you understand by "rotation of crops?" Give an illustration of a five years' course adapted to Nova Scotia.

NATURAL PHILOSOPHY.

- Name the mechanical powers, and describe any one of them
- If two forces, acting at right angles to each other, be in the ratio of 1 : $\sqrt{3}$, and their resultant be 10 lbs, find the forces.
- What is a couple? How may a body be kept at rest when a couple is acting on it?
- What is meant by Centre of Gravity of a substance? Define *Stable*, *Unstable*, and *Neutral Equilibrium*, and exhibit and explain by means of a diagram a method of determining the C. of G. of a triangle.
- The Centre of Gravity of a wheelbarrow and its load, which weigh 150 lbs, is in a vertical line 20 inches from the centre of the wheel; what power applied to the handles at a distance of 4 ft. 3 in. from the Centre of Gravity will just lift the barrow?
- Which will support the greater weight, a power acting horizontally, or the same power acting parallel to the (inclined) plane? Demonstrate the answer.

SCHOOL SYSTEM AND SCHOOL MANAGEMENT.

- Describe particularly the three sources of financial support for the Public Schools of Nova Scotia.
- State the leading principles which you would keep in view in constructing a Time Table.
- Detail the steps by which you would endeavour to create and maintain in your school a popular sentiment in favor of order.
- Mention the *motives* to which you would appeal in your efforts to secure good conduct and progress on the part of your pupils.
- State at least six important rules by which, as a Teacher, you would be guided in the management of a School.
- From the subjoined specimen Register determine—
a The Grand Total Days' attendance made.
b The average number of pupils daily present.

Pupil's Number.	NAME.	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday
		1	John Smith	I	A	T	I	T	I	T	I	I	T	A	T	I
2	Sarah Jones	A	I	I	A	A	I	S	I	I	T	I	I	I	I	S
3	Ephraim Noble...	I	T	W	I	I	T	I	I	S	I	I	T	A	I	I
4	Eben McDonald..	S	I	I	T	I	W	I	A	T	I	S	I	T	W	
5	Eva McAllister ..	I	A	I	A	S	W	I	I	I	I	I	I	I	I	I
6	Nora Reynolds ...	I	A	W	I	I	T	I	A	I	A	T	I	A	I	I
7	William Thomas..	I	T	I	I	A	I	I	A	I	T	I	I	I	I	I
8	James Williams...	I	A	I	I	A	I	T	I	A	I	W	A	I	T	I

TEACHING.

- Specify some of the most common mistakes in method observable in inexperienced Teachers.
- Name not less than five important educational principles.
- State your views as to the importance of frequent and systematic review of class-work, with reasons, and explain the method which you would adopt.