

NATURAL PHILOSOPHY.

1. Describe an instrument which may be used to compare forces of different kinds with the unit of weight. (Illustrate by a diagram.)
2. Find, geometrically, the Centre of Gravity of any rectilinear figure; and find the C. G. of the remainder of a square when one of the triangles into which the diagonal divides it is taken away
3. Investigate the requisites of a good balance, and show how to find the exact weight of a body by the aid of a false balance.
4. Define *uniform* and *variable* velocity. What is meant by the acceleration due to a force, and upon what does its magnitude depend. If the velocity of a body increases from 12 to 13 feet per second while it moves over a distance of 5 feet, what is the acceleration?
5. Describe Atwood's Machine.
6. State the Third Law of Motion, and give a numerical application of it.

FRENCH.

Souffrez, ô Crétois, que je vous dise ce que je pense. Vous êtes le plus sage de tous les peuples; mais la sagesse demande, ce me semble, une précaution qui vous échappe. Vous devez choisir non pas l'homme qui raisonne le mieux sur les lois, mais celui qui les pratique avec la plus constante vertu. Pour moi, je suis jeune, par conséquent sans expérience, exposé à la violence des passions, et plus en état de m'instruire en obéissant pour commander un jour, que de commander maintenant. Ne cherchez donc pas un homme qui ait vaincu les autres dans ces jeux d'esprit et de corps, mais qui se soit vaincu lui-même; cherchez un homme qui ait vos lois écrites dans le fond de son cœur, et dont toute la vie soit la pratique de ces lois; que ces actions, plutôt que ses paroles, vous le fassent choisir.

Les hommes n'ont d'autres arts à exercer, outre la culture des terres et la conduite des troupeaux, que l'art de mettre le bois et la fer en œuvre; encore même ne se servent-ils guère du fer, excepté pour les instruments nécessaires au labourage. Tous les arts qui regardent l'architecture leur sont inutiles, car ils ne bâtissent jamais de maison. C'est disent-ils s'attacher trop à la terre, que de s'y faire une demeure qui dure beaucoup plus que nous; il suffit de se défendre des injures de l'air.

Pour tous les autres arts estimés chez les Grecs, chez les Egyptiens, et chez tous les autres peuples bien policés, ils les détestent comme des inventions de la vanité et de la mollesse,

1. Give the primitive tenses of *dise*, *devez*, *choisit*, *obéissant vaincu*, *soit*, *fassent*, *bâtissent*.
2. Give a general rule for the position of the adverb in French and give examples of the negative (1) followed by a substantive, (2) with the Infinitive Mood, (3) when there is no verb.
3. Give the derivative tenses of the verb *Chercher*, and show how they are formed from the primitive tenses.
4. Form the feminine of the following adjectives *bon*, *petit*, *jeune*, *gras*, *vif*, *heureux*, *cher*, *sec*, *doux*, *beau*, *mou*.
5. Parse the words, *ait vaincu*, *ait vos lois écrites*, *dont toute la vie*.

SCHOOL SYSTEM AND SCHOOL MANAGEMENT.

1. Describe the principles on which the *County Fund* is apportioned.
 2. State the powers possessed by trustees to secure the establishment of schools in sections whose rate-payers refuse to make appropriations therefor.
 3. What do you understand by the *public opinion* of a school? State to what extent, and by what means, you consider it under the control of the teacher.
 4. State what you regard as the *prime elements* of governing power on the part of the teacher, and write brief notes on any two of these.
 5. Define *School Classification*, and show wherein it differs from *School Organization*.
 6. Draw up a weekly Time-Table for the *eighth* grade of the prescribed Course of Study for common schools (see appended programme of subjects.)
- Reader*.—No. 5, completed. Recitation 70 lines.
Spelling.—Prescribed Speller.
Grammar.—Text-Book completed, Parsing and Analysis, application of principles of Prosody to metrical extracts in Reader
Composition.—Dalgleish's Introductory Text-Book.

Geography.—Mathematical and Physical Geography, as in Calkin's Advanced Text, with use of terrestrial globe.

History.—Brief History of England.

Arithmetic.—Hamblin Smith to Simple Interest.

Algebra.—Definitions and Fundamental Rules.

Geometry.—Definitions, mathematical construction of Geometrical Figures.

Book-Keeping.—Day Book, Cash Book, Day Book in form of Ledger.

Writing and Drawing.—Copy Book, Drawing Book, Intermediate Course No. 2, Outline Maps of Europe, Asia and Africa.

Latin. (Optional), Smith's Principia Latina, Part 1.

Lessons in Nature.

TEACHING.

1. (a) Point out the nature and utility of Object-Lessons. (b) Specify common errors in methods of conducting them. (c) Furnish outlines of a lesson on the ordinary *balance*.
2. State not less than *six* distinct points to which you would give your attention, if required to criticize a lesson taught by another.
3. State your method of conducting an exercise in Reading with a class in the 6th Reader.
4. How would you explain to a class commencing the study of Algebra the fundamental distinctions between Algebra and Arithmetic?
5. Explain and illustrate at some length the statement that the *elements* of the inductive sciences should precede the deductive sciences, but the *formal* study of the latter should precede that of the former.

COMPOSITION.

1. What do you understand by the *unity* of a sentence. Give an example of a sentence wanting that quality, and show how the fault may be corrected.
2. Define and illustrate Metonymy, Epigram, Irony, Synecdoche.
3. Write a note on "Purity of Language," stating the most frequent sources of violation of this quality.
4. Give the general rule of the position of adverbs and adverbial adjuncts in a sentence; use the adverb *only* to illustrate the principle that difference of position may involve difference of meaning.
5. Write half a dozen lines on any subject you choose, using only words of Anglo-Saxon origin.
6. In what respect does English metre differ from the classical metres?
7. Quote and scan a line, naming the author if you can, in the following measures, viz., *dactylic hexameter*, *iambic pentameter*, *trochaic heptameter*.
8. Distinguish between Epic and Dramatic Poetry. Name *seven* poems usually classed as Great Epics, giving the author, subject, and language in which each was written, and discuss as fully as you can the adaptability of different languages to Epic Poetry.

GRAMMAR.

1. Write as full an account as you can of the modes in which English nouns form the plural.
2. Discuss the propriety of calling certain words *adjective pronouns*. Point out the distinctive marks of the *adjective* and the *pronoun*. Illustrate.
3. Give the history of the *Possessive Case* in English, and define the present limits of its use.
4. Define the *Infinitive Mood*. Discuss the right of this form to be considered a *mood*, and tell what you can of the past and present use of *to* before the infinitive.
5. Parse italicized words:—
 - (1.) In consequence of *having seen it done several times*, I am confident of *being able* to do it *myself*.
 - (2.) They are not a pipe for *fortune's finger* to sound what *she please*.
 - (3.) The *third day* comes a frost a *killing* frost; and when he thinks, good easy *man*, *full surely* his greatness is a *ripening*, nips his root, and then he falls *as I do*.
6. Correct or justify the syntax in the following passages, giving rules:—