

BOOK-KEEPING.

FIRST DIVISION.

1. What is the use of a Daybook; Journal; Ledger?
2. What is the difference between Single and Double Entry in Book-keeping?
3. What is meant by Posting?
4. What are Bills Receivable; Bills Payable; Bank Cheques; Invoices?
5. Journalize the following:—Do't Goods from Mr. A., \$5,000; paid him in cash, \$200; gave my note for the balance, at 3 months.
6. Of what use is a Trial Balance?
7. What three accounts are closed last in Double Entry, and in what order?

THIRD AND SECOND DIVISION.

THIRD DIVISION will take Questions 1, 2, 3, 4.

SECOND DIVISION will take Questions 4, 5, 6, 7, 8.

1. What is the object of Book-keeping?
2. What is a Receipt? a Note?
3. Put the following items into the form of an Account:—June 1st, Received Cash, \$100.00; 2nd, Received Cash, \$25.00; 3rd, Paid Cash, \$50.00; 4th, Received Cash, \$10.00; 5th, Lost Cash, \$8.00.
4. Put the following items into the form of an account, and show how much James Smith owes you:—1. Borrowed from Jas. Smith, \$200.00; 2. Sold him 30 yards of fine Cloth, @ \$4.00 per yard; 3. Sold him 80 yards Cotton, @ 15 cents per yard; 4. Sold him 100 Fine Silk Hats, @ \$5.00 each; 4. Received from him Cash, \$50.00.
5. What is the use of a Day Book and Ledger?
6. What is meant by Posting?
7. Write out a Receipt for \$250.00, paid this day in Toronto, by Jas. Jones to John Smith.
8. Write out a Note for \$100.00, payable in 10 months, @ 8 per cent. per annum, to Dr. A. from Mr. B.

NATURAL PHILOSOPHY.

FIRST AND SECOND DIVISIONS.

1. Define any three of the properties of matter, one of which must be an essential property of matter.
2. Explain clearly what is meant by the (1) centre of gravity of a body, and by specific gravity.
- (2) A cylindrical pillar of white marble, 12 feet long, diameter 16 inches, sp. gr. 2.84. Find the weight of it in pounds.
3. Required the force to put the pillar in question 2 into a wagon, the bottom of which is 4 ft. 6 in. above the ground, on a plank 10 feet long (assuming that there is no friction).
4. Classify levers, giving an example of each class.

HYGIENE.

FIRST AND SECOND DIVISIONS.

1. What are muscles? How many distinct muscles are there in the human body?
2. Name three principal uses of the bones, how many bones are found in the adult human being?
3. What useful purposes are served in the Spinal Column not being straight, nor all in one piece?
4. Tell where the Cranial Nerves are to be found, also the Spinal Nerves; how many pairs of each are there?
5. Through what vessels does the blood flow? Name the two great arteries; tell the difference between arterial and venous blood.
6. Why should our dwelling places receive much fresh air and sunlight?
7. Name as many as you can of the most common causes for producing ill-health.

MUSIC.

FIRST AND SECOND DIVISIONS.

1. Distinguish between Melody and Harmony.
2. How many notes (or sounds) in the ordinary or Diatonic scale? Where do the semitones occur?
3. What is the object of sharps and flats?
4. What is a Chromatic scale?
5. Write down the different characters called notes, and compare them in regard to their duration.

6. What is the signature when the key note is 1st D, 2nd A?
7. What is the key note when there are 1st two flats in the signature, 2nd two sharps?
8. Draw a staff; on it place the treble clef, and one sharp in the signature. Write the key note (a semibreve) on the staff, also two minims, each of which shall form a common chord with the key note. Draw a bar after the first and the third note. Next place a crotchet on the second space and a minim on the second space above the staff. Fill out this last measure with a rest, and draw another bar. Place a dotted minim on the first space and a note on the first ledger line below, to fill out the measure. Close with the proper kind of bar and some mark to show that the strain is to be repeated. Attach to each note the letter and syllable by which it is known.
9. In the music you have just written what is the interval between the first and third notes and that between the fourth and fifth?

THIRD AND FOURTH DIVISIONS.

1. Define Bar, Slur, Ledger line.
2. What is the use of Sharps and Flats?
3. How many notes in a Diatonic Scale? Where do the semitones occur?
4. Name the notes, first by letters, and second by syllables.
5. What is the key note when there is neither sharp nor flat in the signature? When there are two sharps? When there is one flat?
6. When the key note is G, what is the signature?
7. If there are two minims or their equivalent in a measure, what mark should be put at the beginning of the staff to indicate the time?
8. Write down the different characters called notes and compare them with regard to time, also the rest corresponding to each note.
9. Name the notes which, when sounded together, produce full chords.

Practical Department.

PHYSICAL EDUCATION.

Dr. Felix Oswald has been contributing of late some very valuable papers to the *Popular Science Monthly* under the above title. The directions they have given concerning food and drink, exercise and the rules of hygiene, are excellent, and to be commended to all readers. In the March number of the magazine the subject discussed by the physician is that of "Indoor Life." His theory is—and there is little doubt of its correctness—that to our indifference to the important matter of pure air, we owe by far the larger proportion of our physical ills. To stuffy bedrooms, and unventilated living rooms, are directly traceable the origin of the pulmonary disorders and scrofulous diseases that yearly carry so many victims to the grave. Especially does he protest against "night air superstition," which makes more invalids than any other cause. He calls attention to the facts that this so-called pernicious air has been breathed by delicate animals—fawns, lambs and young birds—since the very dawn of creation; that the anthropoid apes, which so soon perish with consumption in the artificially heated atmosphere of menageries, breathe it with impunity in their native forest; that soldiers, hunters, and lumbermen sleep in tents and open sheds without injury, while men in the last stage of consumption have been saved by adopting a semi-savage mode of life, and living out doors night and day.

The absolute need of fresh air to preserve the health of children is also insisted upon. Half of the tempers for which little folks are punished, are the direct effect of the poisoned air of their bedrooms. The rooms in which children live must be well aired. And this is especially true of the school-room, where the little folks spend so many hours each day, and where they are kept at mental toil, which, more than any other work absolutely requires pure air. Pure air clears and invigorates the brain; impure air beclouds and stupefies it. There is no doubt that this question is an important one. The average school-house is constructed with no regard whatever to the need of ventilation; but teachers should give the matter careful attention, and endeavour, as far as lies in their power, to make up for the stupidity and indifference of school boards.

Health, comfort and convenience are sadly ignored in the building of the school-room; it may be too much to hope to secure either