

To do a murderous deed, to rob a man,
To reave the orphan of his patrimony,
And have no other reason for this wrong
But that he was bound by a solemn oath?

—King Henry VI.

(a) Parse all the words in the last line.

(b) Analyse the two sentences contained in the last two lines, supplying any words that are required to make the analysis complete.

N.B. Take care to point out the character of each sentence.

(c) When is the infinitive mood used without being preceded by the word *to*? Give examples of this from the above passage, and mention others that occur to you.

2. Write the subject-matter of a lesson on either of the following:—Mood, Tense.

3. Give the Latin prepositions that mean under, with, across, out of.

GEOGRAPHY.

1. Draw a full map of our possessions in South Africa. Insert the lines of latitude and longitude, and explain how they are useful in drawing a map.

2. Give notes of a lesson on "The Caspian Sea."

SECOND PAPER.

ONE HOUR ALLOWED FOR FEMALES, TWO HOURS AND A-HALF FOR MALES.

HISTORY.

1. Give the names and dates of sovereigns of the House of Tudor, and show the relationship between them.

2. Do you consider our Stuart sovereigns to have been fortunate or unfortunate? Give your reasons.

3. During the reign of George III. a large foreign possession was lost to England. Explain the event and give some particulars.

EUCLID.

(All generally understood abbreviations for words may be used.)

1. If two triangles have two sides of the one equal to two sides of the other, each to each, but the base of one greater than the base of the other; the angle contained by the sides of the one which has the greater base shall be greater than the angle contained by the sides, equal to them, of the other.

2. The opposite sides and angles of a parallelogram are equal to one another and the diameter bisects it, that is, divides it into two equal parts.

3. If in the sides of a square, at equal distances from the four angles, four points be taken, one in each side, the figure formed by joining them will also form a square.

ALGEBRA.

1. Explain the terms *coefficient*, *expression*, *factor*, *index*, *greatest common measure*, *identical equation*.

Find the coefficient of x^3 in the product of $ax^4 - bx^3 + cx - d$ and $px^2 - qx + r$.

2. Reduce $\frac{x^2 - 5x + 6}{x^2 + 2x - 8}$ and $\frac{6 + x - x^2}{8 + 6x + x^2}$ to lowest terms, and then add them together.

3. Solve the equations:—

$$(1) \frac{1}{2}(x - \frac{1}{2}) - \frac{1}{3}(\frac{1}{3} - x) = 1\frac{1}{6}.$$

$$(2) \frac{7x+1}{x-1} = 3\frac{1}{2}(\frac{x+4}{x+2}) + \frac{2}{3}.$$

PUPIL TEACHERS AT END OF FOURTH AND FIFTH YEAR.

THREE HOURS AND A HALF ALLOWED.

ARITHMETIC.

MALES.

1. Sold goods for £225 10s. 0d. with a gain of $12\frac{1}{2}$ per cent., how much per cent. would have been gained or lost by selling them for £187 10s. 0d.?

2. What sum must I have invested (neglecting fractions of a penny) in $3\frac{1}{2}$ per cent. stock at 89 $\frac{1}{2}$, in order that, spending daily 15s. 6d. out of my income, I may lay by in a year (365 days) £123.55?

3. If the loss per cent. in selling 50 copies of a book at 7s. 6d. per copy, 80 at 4s., and the remainder of the edition for £12, was $35\frac{1}{2}\%$; what was the cost of publishing the book?

4. By how much greater or less than £25 5s. 6d. will be the in-

terest on £321.76875 for 2 years 5 months at $3\frac{1}{2}$ per cent. per annum?

5. What is the length of the four equal sides of a rectangular park containing 98759.3476 square yards;

or, what fraction of a mile is the side of a similarly shaped park containing 694 square mile?

FEMALES.

1. If I buy a yard of cloth for 14s. 6d. and sell it for 16s. 9d., what do I gain per cent?

2. At what rate per cent. will £956 amount to £1314 10s. in $7\frac{1}{2}$ years at simple interest?

3. A young man received £210, which was $\frac{2}{3}$ of his elder brother's portion; now three times the elder brother's portion was half of the father's estate, how much was the estate worth?

4. Find the interest of £985 2s. 7d. for 5 years 127 days, at $5\frac{1}{2}$ per cent. per annum.

GRAMMAR.

1. "Let it be remembered, that to write, however ably, merely to convince those who are already convinced, displays but the courage of a boaster."—COLERIDGE. *The Friend*.

(a) Analyse the above passage.

(b) Parse fully all the words in italics.

(c) What is meant by a finite verb, and what is the nature of the infinitive mood? Illustrate from the above passage.

2. In what respects is the English alphabet incomplete?

GEOGRAPHY.

1. Give notes of a lesson to an advanced class on "The Lines of Latitude and Longitude, as shown on a globe, their meaning and their usefulness.

Draw a map of North America, with the lines inserted, and refer to this map at each point of the lesson.

2. What is a Coral Island? Where are such islands found?

SECOND PAPER.

ONE HOUR ALLOWED FOR FEMALES, TWO HOURS AND A HALF ALLOWED FOR MALES.

HISTORY.

1. What English sovereigns have died a violent death? Distinguish between accident and design, and give dates of the events.

2. When and how did the conquest of Ireland begin, and under what circumstances was the legislative union with that country effected?

3. Mention what you consider to be the most important events which have happened so far in the reign of the Queen.

EUCLID.

(All generally understood abbreviations for words may be used.)

1. ABCD is a parallelogram; through A draw any line, and show that the distance of C from this line is equal to the sum or difference of the distance of D and B, according as the line passes within or without the parallelogram.

2. If a straight line be divided into any two parts, the square on the whole line is equal to the squares on the two parts, together with twice the rectangle contained by the parts.

3. To describe a square that shall be equal to a given rectilineal figure.

ALGEBRA.

1. Show that $3(y-x)(y+x)(5y^2-8xy)+5x^2=(x-2y)^2-(2x-y)^2$.

2. Find a number such that, whether it be divided into two or into three equal parts, the continued products of the parts shall be the same.

3. Solve the equations:—

$$(1) \begin{cases} 10x - 11y + 12 = 0. \\ 13x - 14y + 11 = 0. \end{cases}$$

$$(2) \frac{7x}{3} + \frac{3-x}{2x} = 20\frac{1}{2}.$$

MENSURATION.

1. "The area of a triangle is half the product of the base and the altitude." How would you prove this to a class of boys who have read the first book of Euclid?

2. An oblong grass plot 120 feet by 60 is to be levelled at £6 1s. per square chain, and a lawn tennis court 78 feet by 36 is to be turfed within it at 4d. per square yard. What will be the cost?