

Ans.—Adjectively: "*Which* things are an allegory." "*What* time the pea puts on its bloom." Substantively: "*The* blood *which* moves through the arteries is *what* nourishes the body." "*The* pronouns *which* and *what* are used substantively."

Explain and illustrate the statement that conjunctions fulfil the same part towards sentences that prepositions do towards words.

Ans.—Prepositions shew the logical relation between the notions represented by the words they connect, e.g.: The Queen went from London to Balmoral on a railway train. Here *from* shews one relation between *went* and *London*, *to* another and an opposite relation between *went* and *Balmoral*; while *on* shews another between *went* and *train*. Similarly, conjunctions shew logical relations between the ideas expressed by sentences, e.g.: The war rages and the people are happy. Here we are led to believe that the happiness of the people results from the war raging; now, change the conjunction to *but*—The war rages *but* the people are happy. We are told here that the people are happy not by reason of the war, but in spite of it. Again, put *though* in place of *but*—The war rages, *though* the people are happy. Here the relation between the ideas expressed by the two statements is again different.

"The north wind spends his rage; he now shut up

Within his iron cage, the effusive south warms the whole air."

(a) In analyzing the above how would you take the nominative absolute that occurs in it? The nominative absolute phrase, "He now shut up," is an extension of time, equal to the adverbial sentence, "When he is now shut up," and it qualifies the verb *warms*.

(b) Give other examples of a similar construction. *Winter coming on* the birds of passage disappear. *The rightful king a fugitive*, the usurper easily secured the throne.

GEOGRAPHY.

(Adapted from the English questions.)

What is the nearest railway station to your home? By what lines of railway should you travel to go to Toronto, Ottawa, London,

Hamilton. Trace a journey to *one* of these places as minutely as you can.

Describe fully and simply the chief objects of interest to a traveller in Italy. (Venice with its canals, buildings—as St. Mark's—and works of art; Rome with its ruins—as the Coliseum—its paintings, sculpture and architecture; Naples with its beautiful bay, and Vesuvius in the distance; Pompeii, the resuscitated city; Florence with its works of art; Pisa with its leaning tower; Milan with its Duomo; the clear blue sky, the semi-tropical fruits, the dark-complexioned peasantry with their smooth speech and partiality for music, and their significant gestures. Describe the physical features of St. Helena, Mauritius, Ceylon, Labuan and Cyprus. Describe the course and physical character of the Jordan, and the peculiarities of the Dead Sea. The Arabs in describing the Lebanon mountains say that winter rests on their head, spring on their bosom, while summer lies sleeping at their feet. Explain this.

EUCLID AND MENSURATION AND ALGEBRA.

The two triangles formed by drawing lines from any point within a parallelogram to the extremities of two opposite sides, are together half of the parallelogram. (Authorities used, I. 31; I. 41.)

The length of a rectangular field is to its breadth as 6 to 5. One-sixth of the field was planted, which left 625 square yards for ploughing. What is the length?

Ans.—30 yards.

Find in yards the diameter of a circle whose area is 11 acres 3 roods and 28 $\frac{1}{2}$ poles.

Ans.—271.09 yards nearly.

Multiply $a - b + c - d$ by $a + b - c - d$ and subtract $(a - d)^2 - (b + c)^2$ from the product.

Ans.—0.

Simplify

$$\frac{2a}{(b-2a)^2} - \frac{b-a}{b^2 - 3ab + 6a^2} + \frac{2}{b-3a}$$

Ans. $\frac{b}{(b-2a)^2}$

Find the G. C. M. of $5a^2 + 2a^2 - 15a - 6$, and $4a^2 - 7a^2 - 12a + 21a$.

(Arrange the terms according to the ascending powers of a , beginning with 6 and 12.)