

3. Write down half a dozen very simple examples that would serve as an introduction to the Rule of Three, and show how you would educe the rule from the examples.

SECTION VI.

1. (a.) What are the objects of punishment? (b.) What are the chief punishments you would employ? (c.) Under what restrictions would you use corporal punishment?

2. What means would you employ for maintaining attention? Give the more important causes of inattention.

SECTION VII.

1. How would you apply the principle, "Proceed from the particular to the general," in teaching the simple rules of syntax in grammar?

2. What steps would you take to encourage honesty and independence of work?

3. "The acquisition of knowledge should be a source of pleasure." Describe the chief conditions that must be complied with to secure this result.

SECTION VIII.

What lessons can be best prepared at home? How far are home lessons beneficial to the pupil and helpful to the teacher?

CLASSES D AND E.—ELEMENTARY SCIENCE.

[NOTE.—Candidates are not to attempt more than twelve questions. Female candidates, if proficient in Needlework, may substitute for this paper the paper on Domestic Economy and the Laws of Health; but passing in Science will not exempt them from passing in Needlework also.]

1. Name the mechanical powers. Sketch a set of pulleys in which 1 lb. balances 6 lb.
2. How is the specific gravity of a substance lighter than water ascertained?
3. Explain the action of a balloon.
4. What are the laws of motion? Why are fly-wheels used in machinery?
5. Name the forces of nature, and state the laws of gravitation. If a planet were twice as heavy as the earth and half the diameter, what would one pound weigh on a spring-balance on its surface?
6. What experiments would you make to prove that a musical note consists of a regular series of impulses of the air?
7. Show by diagrams how an image is produced in a plane and a concave mirror respectively.
8. Make a sketch showing the structure of the eye, and name the several parts.
9. Describe the formation of dew. How is the dew-point ascertained?
10. What is the difference between boiling and evaporation?
11. What are the chief experiments that may be made to illustrate the properties of a bar-magnet?
12. How may an electric current be generated?
13. What are the more important phenomena that may be produced by an electric current?
14. How is it proved that the earth is a magnet?
15. Describe the chemical changes that occur in the burning of a candle.
16. When is water said to be hard?
17. What is the cause of the rusting of metals? Which are the metals that rust most easily? and which do not rust at all?
18. Describe the mechanism of breathing. Why do we breathe?
19. Make a sketch illustrating the course of the circulation of the blood.
20. How does a plant get its food?

CLASSES D AND E.—DOMESTIC ECONOMY AND LAWS OF HEALTH.

[NOTE.—This paper is for female candidates who are proficient in Needlework, and, in consideration of this, are allowed, if they prefer it, to be examined in Domestic Economy and the Laws of Health, instead of in the general subject of Elementary Science. See the note on the Elementary Science paper.]

1. What are the different ways of warming a room? Discuss the advantages of each.
2. What are the disadvantages of a house being on soil that is saturated with water?
3. Why is it necessary that drinking-water should be pure?
4. Make sketches showing how drain-pipes and sinks may be "trapped" so as to prevent the ingress of bad gases.
5. What are the usual effects of overwork upon children?
6. What are the relative advantages of grilling and frying a mutton-chop?
7. State what you know of various systems of ventilation.
8. Why is breathing necessary? What is the difference between air inspired and expired?
9. What precautions would you take to prevent an infectious disease from spreading?
10. Describe the skin, and state its functions.

CLASS D.—ENGLISH GRAMMAR AND COMPOSITION.

[Each section must be attempted.]

1. Parse the italicized words, and discuss anything peculiar in their grammatical functions: (a) O! not like me; for mine's beyond *beyond*; (b) A little more than a *little* is by much too *much*; (c) It has done *enough* for me; (d) Thou shalt not *steal*; (e) Peeping from forth their alleys green; (f) The seeds of it are *sowing*; (g) For she loved *much*; (h) A man *off* his guard; (i) The *off* horse; (j) I tell thee *what*, man, it is true; (k) Fifteen *minus* one is fourteen; (l) Fare *you* well; (m) As many as I love I rebuke; (n) *Order*, gentlemen, order! (o) Twice a year; (p) Anything that is in heaven *above*; (q) The tree is known by *his* fruits; (r) Is your father *well*? (s) He proclaimed my rights and *yours*.