

3. Describe experiments which you would use to illustrate a lesson on the composition of the air. How does a knowledge of the composition of the air aid in the study of plant-life?
4. What experiments would you make use of to illustrate the composition of plants, and to make clear the meaning of the terms "organic" and "inorganic"?
5. Describe any soil you have examined, stating the district in which such soil is found. Give some account of the mechanical and physical properties of the soil you refer to, and show how they are related to (a) the fertility of the soil, (b) the mode of cultivation to be adopted.
6. How would you classify soils according to (a) their mechanical condition, (b) their mode of origin, (c) conspicuous features in their chemical composition?
7. By what principles would you be guided in choosing a manure for a particular soil and crop?
8. What are the advantages of allowing land to remain fallow? What objection is the system open to? By what other method can the same ultimate object be secured?
9. What is superphosphate, and how is it made? Give the chemical composition of materials used and the changes which take place in its manufacture. What is the real object in using superphosphate instead of any other phosphatic manure?

Elementary Knowledge of Agriculture.—For Class E. Time allowed: 3 hours.

1. Describe the roots of any plant you have examined, and show how they grow. What are the functions of roots?
2. How can it be shown that certain elements are essential to the growth of plants? How can you account for the occasional presence in the plant of other elements?
3. What is the composition of the air? Describe experiments illustrating your answer. What connection is there between the composition of the air and the nutrition of plants?
4. What is humus, and what is its value in the soil?
5. In what way does the mechanical condition of the soil influence the growth of a crop? Describe the condition of the soil in which it is best adapted for the growth of plants.
6. What are bacteria, and what useful changes do they produce in the soil?
7. What changes are promoted in the soil by free exposure to the atmosphere?
8. What advantages are secured by a rotation of crops, and upon what principles can these advantages be explained? How far may the growth of mixed grasses and clovers be described as equivalent to a rotation of crops?
9. Give some account of the general composition of farmyard manure. Distinguish between general and special manures. Under what conditions would you prefer to use some special artificial manure? Give examples.

English Grammar and Composition.—For Class D. Time allowed: 3 hours.

1. "A pronoun is a word that stands instead of a noun." Discuss this definition, and classify the pronouns in accordance with your conclusions.
2. Explain the grammatical construction of the words in italics in the following sentences:—
 - (a.) I walked twenty-five *miles* yesterday.
 - (b.) Let knowledge grow from *more* to more.
 - (c.) The boy was run *over* by a cab.
 - (d.) I saw them *go*.
 - (e.) My little boy is four *years* old.
 - (f.) Simon Peter saith, I go *a fishing*.
 - (g.) The lightning struck the man *dead*.
 - (h.) John was taught *music* by his mother.
3. Explain the various uses of *a* or *an* in the following sentences:—
 - (a.) Shall I weep if *a* Poland fall?
 - (b.) He had to retreat more than *a* dozen times.
 - (c.) Fowls of *a* feather flock together.
 - (d.) To be popt *a* like pigeons for sixpence *a* day.
 - (e.) I might *a* had husbands afore now, tho' I spake not of it.
 - (f.) And made him trot, barefooted, on before himself, who rode *a* horseback.
 - (g.) I thought he gave you something, because he called you *a* to-side.
 - (h.) Why did you not set out *a* Monday, like a true country parson?
 - (i.) It moves at the rate of between four and five miles *an* hour.
 - (k.) Why dost thou garter up thy arms *a* this fashion?
 - (l.) Whilst these things were *a* doing.
 - (m.) You'd have thought 'twas the Bishops or Judges *a* coming.
 - (n.) Coming into college at ten or eleven *a* clock at night.
 - (o.) We know what manner *a* one that is.
 - (p.) *A* Home! *A* Gordon! was the cry.
4. Punctuate the following, and put capital letters where they are required:—

Do you think my dear nieces pretty whispered their affectionate aunt to Mr. Tupman I should if their aunt wasn't here replied the ready Pickwickian with a passionate glance oh you naughty man but really if their complexions were a little better don't you think they would be nice-looking girls by candlelight yes I think they would said Mr. Tupman with an air of indifference oh you quiz I know what you were going to say what inquired Mr. Tupman who had not precisely made up his mind to say anything at all you were