



Royal Rangers

Merit Requirements: **Green-Bordered Merit**

PLANT SCIENCE

1. Make and use a germination seed tester to test ten seeds each from FOUR of the following plants: corn, cotton, alfalfa, beans, clover, wheat, rice, rye, barley, melon, and tomato. Determine the percent of live seeds.
2. Grow at least eight plants (two each of the four varieties germinated in Requirement 1) for at least five weeks using either a garden or a container. Keep a weekly record of your plants' growth.
3. Propagate at least two plants by either taking cuttings from established plants or grafting parts of two established plants into each other. Grow the plants for at least five weeks using either a garden or a container. Keep a weekly record of your plants' growth.
4. Write a 300-word report on plant science using any or all of the following Scriptures. Matthew 7:15-20; Matthew 13:3-23; Matthew 13:24-30; Luke 6:43-45; Luke 13:6-9; John 12:24; John 15:1-8.
5. Determine the method you would use to control weeds in either a garden or a field of corn and explain it.
6. Choose a crop from your state or region. Write a 250-word report about its importance to the economy of your state or region.
7. Determine the three most common pests you must control in either a garden or in a field of corn. Explain the method you would use to control those pests.
8. Conduct an experiment to determine what nutrients must be in the soil to grow beans. Record your results and write a 100-word report.