

A barley plant has 14 chromosomes in its diploid cells. At a particular stage in its life cycle, the barley plant produces haploid cells (gametes).

a. Identify the expected number of chromosomes in a haploid cell of a barley plant.

b. Identify **and** generally describe the cellular process by which the haploid cells are produced.

c. Describe what a barley plant uses the haploid cells for **and** explain why the cells must be haploid for this purpose.