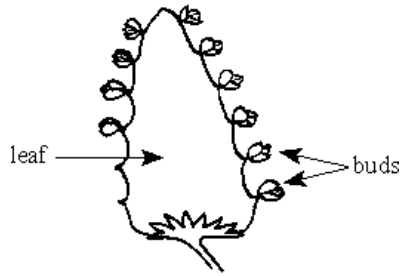


Leaf of Mexican hat plant

This task is about reproduction.



The Mexican hat plant has buds on the leaf edge that break off and fall to the ground (two from this leaf have already fallen). These fallen buds are capable of growing into new plants.

Sexual reproduction in plants involves combining the genetic material of two individual plants (by the pollination of flowers). In sexual reproduction, 50% of the genetic material of the offspring is from each parent plant.

Asexual reproduction in plants is a method of producing new individuals (by budding off, spores or a part of the parent breaking off and developing roots and shoots). In asexual reproduction, 100% of the genetic material of the offspring is the same as the single parent.

a) What type of reproduction is this?

b) The new plants formed by this method all look very similar. Explain why this is so.

c) What is an advantage of this type of reproduction to the species?