

KEY FACTS

- Selective breeding: select desired traits → breed → repeat. Reduces gene pool.
- ★ Genetic engineering: restriction enzyme (cut) → insert into plasmid → ligase (join) → host cell
- GM concerns: ecological effects, allergens, ethics

KEY TERMS

Restriction enzyme	Cuts DNA at specific sequences
Ligase	Joins DNA strands
GM organism	Contains gene from a different species

■ EXAM TIP: Restriction = CUT. Ligase = JOIN. Evaluate GM crops: benefits (yield, resistance) AND concerns (ecology, ethics).