# KEY WORDS AND PHRASES FOR HORIZONTAL GENE TRANSFER CONCEPT MAP

A DNA fragment from a dead, degraded bacterium enters a competent recipient bacterium and is exchanged for a piece of DNA of the recipient.

Conjugation genes known as *tra* genes enable the bacterium to form a mating pair with another organism, while *oriT* (origin of transfer) genes determine where on the plasmid DNA transfer is initiated.

Enables bacteria to respond and adapt to their environment rapidly by acquiring large DNA sequences from another bacterium in a single transfer.

Generalized transduction

Plasmids that lack the *tra* genes for self-transmissibility but possess the *oriT* genes for initiation of DNA transfer. They can be transferred by conjugation if the bacterium containing them also possesses a conjugative plasmid. The *tra* genes of the conjugative plasmid enable a mating pair to form and the *oriT* genes of the mobilizable plasmid enable the DNA to moves through the conjugative bridge

This results in the transfer of an F+ plasmid possessing *tra* genes coding only for a conjugation pilus and mating pair formation from a donor bacterium to a recipient bacterium.

Specialized transduction