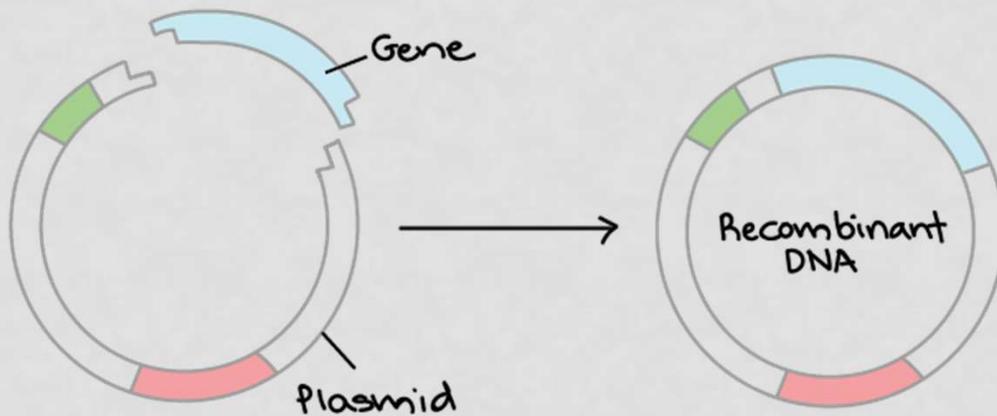


# RECOMBINANT DNA AND CLONING

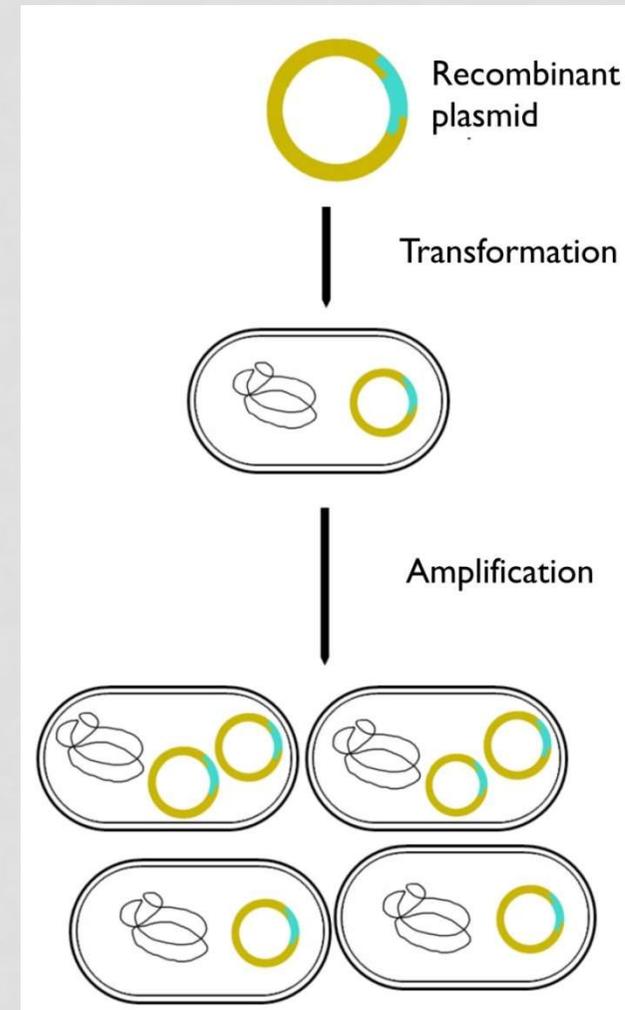
MOERI & BUDDHINI



# WHAT IS RECOMBINANT DNA, CLONING?



[https://omaharentalads.com/explore/puc19-vector-simple/#gal\\_post\\_7111\\_puc19-vector-rdna-technology-5.png](https://omaharentalads.com/explore/puc19-vector-simple/#gal_post_7111_puc19-vector-rdna-technology-5.png)  
2019/6/19



<http://usmle.biochemistryformedics.com/cloning/> 2019/6/28

# TYPES OF CLONING

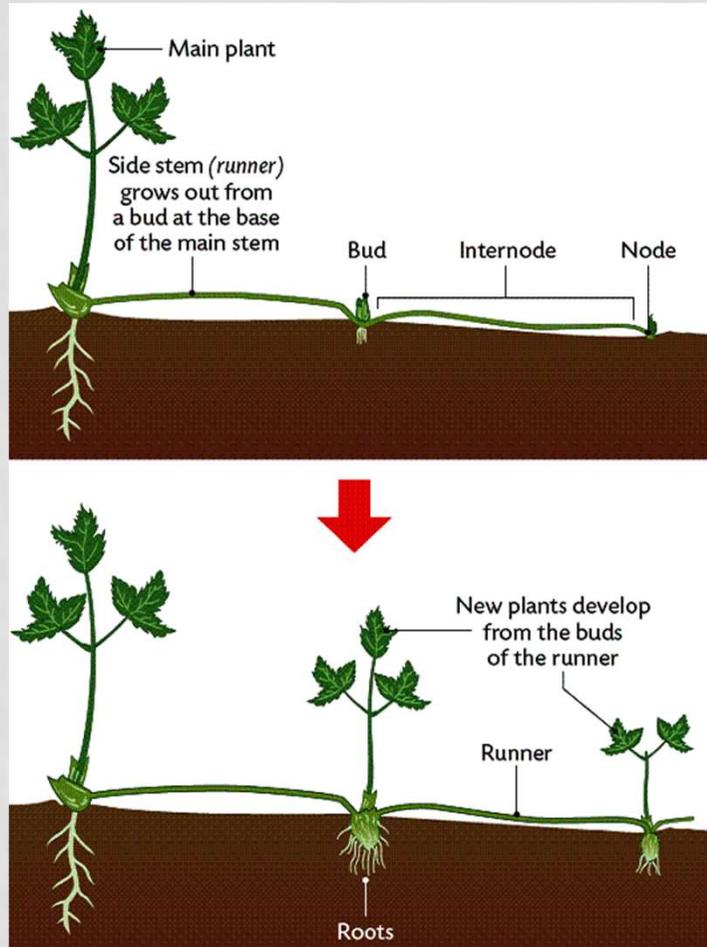
- **Reproductive cloning:** making genetically identical copy of organism
- **Non-reproductive cloning/Therapeutic cloning:** use of stem cells generate replacement cells, tissues or organs which may be used to treat particular diseases or conditions in humans.

# CLONING IN PLANT & ANIMALS

# CLONING PLANTS FROM SINGLE CELLS

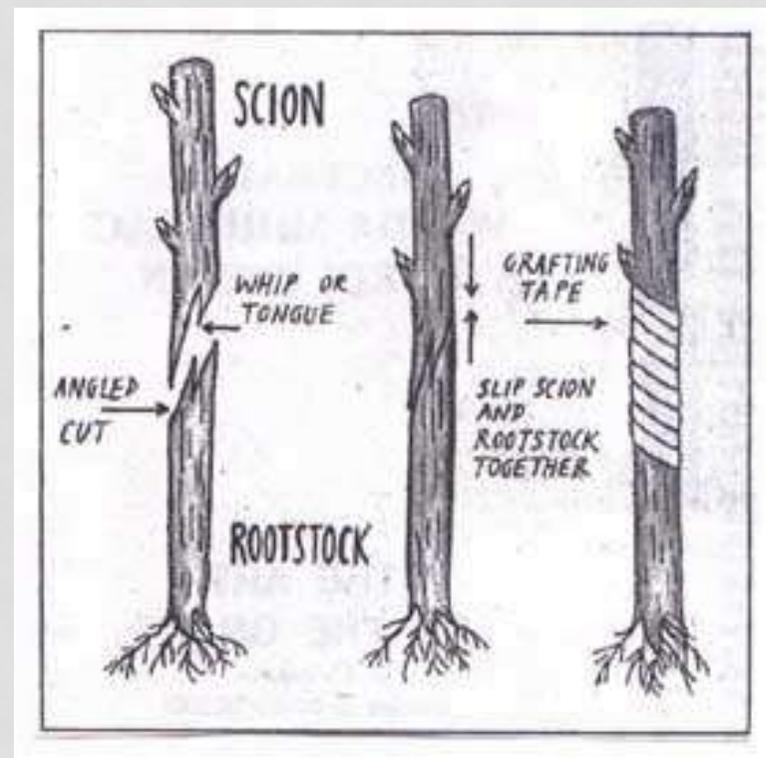
- Traditional methods
- Artificial methods

# TRADITIONAL



<https://koiserscience.wordpress.com/biology-the-living-environment/cells/asexual-reproduction/> 2019/6/19

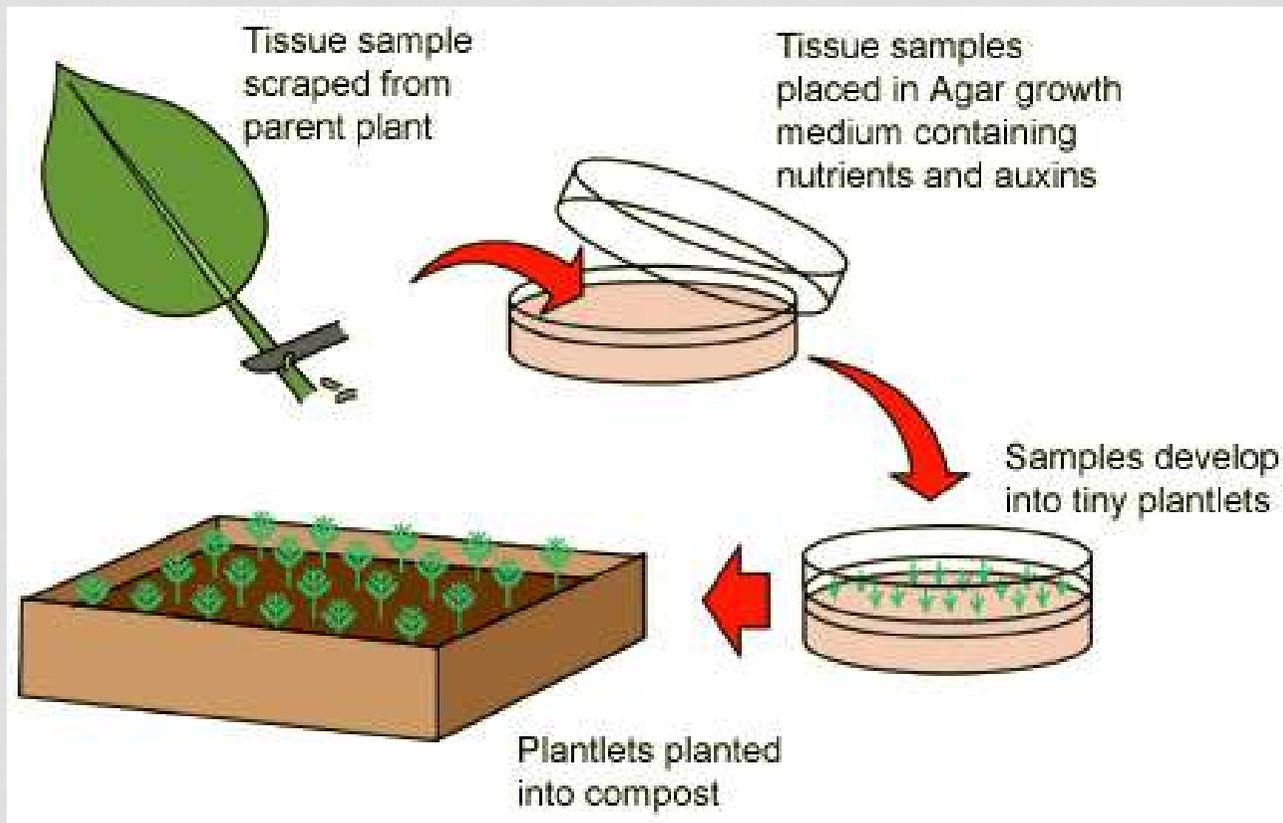
CUTTING



<http://usmle.biochemistryformedics.com/cloning/> 2019/6/28

GRAFTING

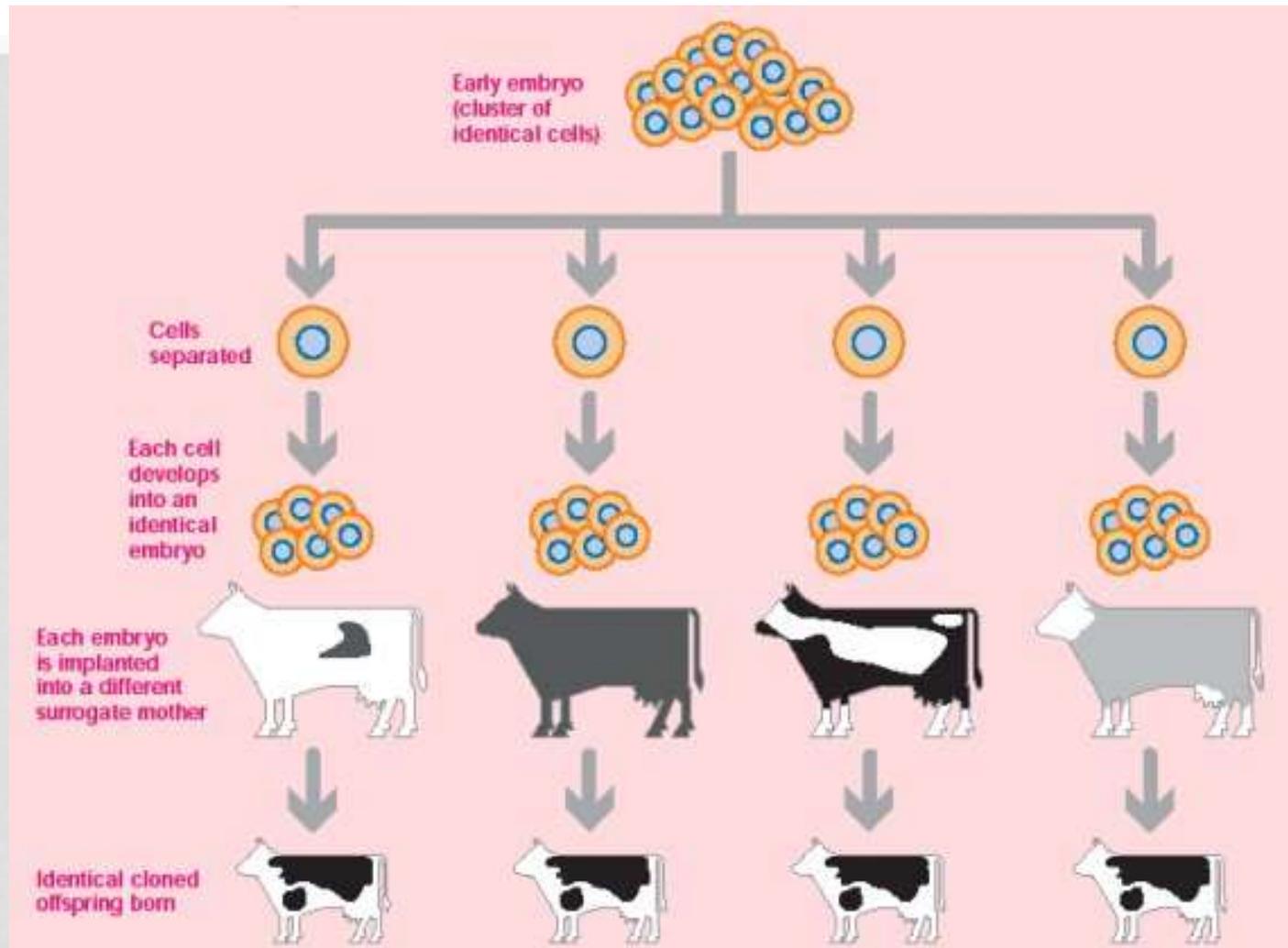
# ARTIFICIAL PLANT CLONING



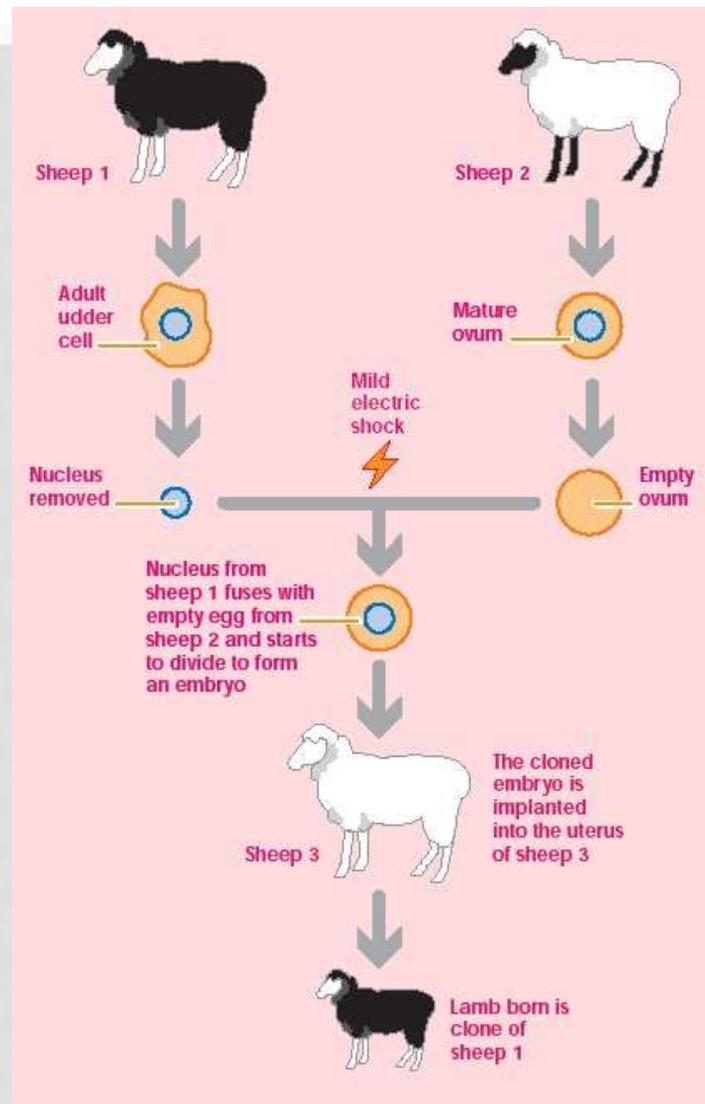
# CLONING ANIMALS

- TWO TECHNIQUES
  - Embryo splitting
  - Nuclear transfer

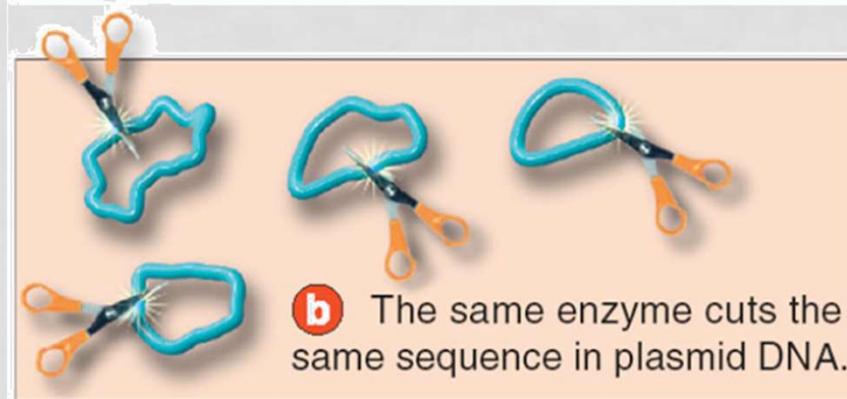
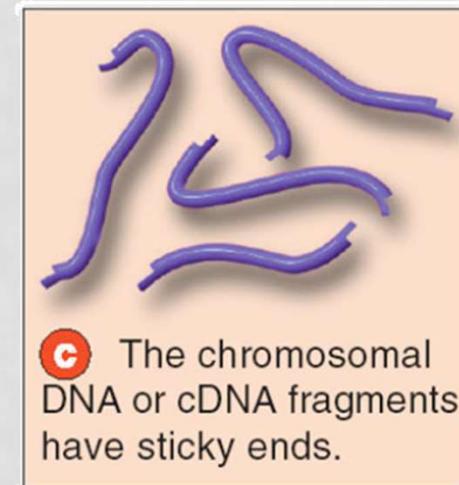
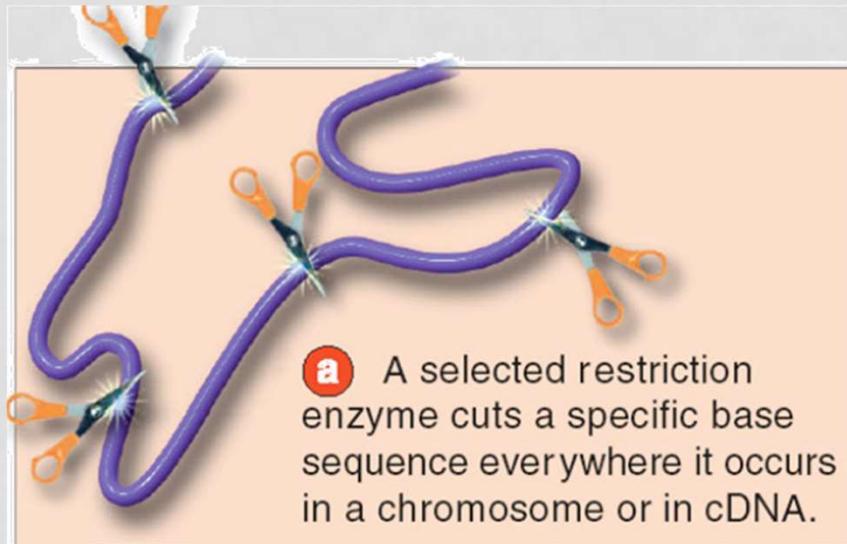
# EMBRYO SPLITTING



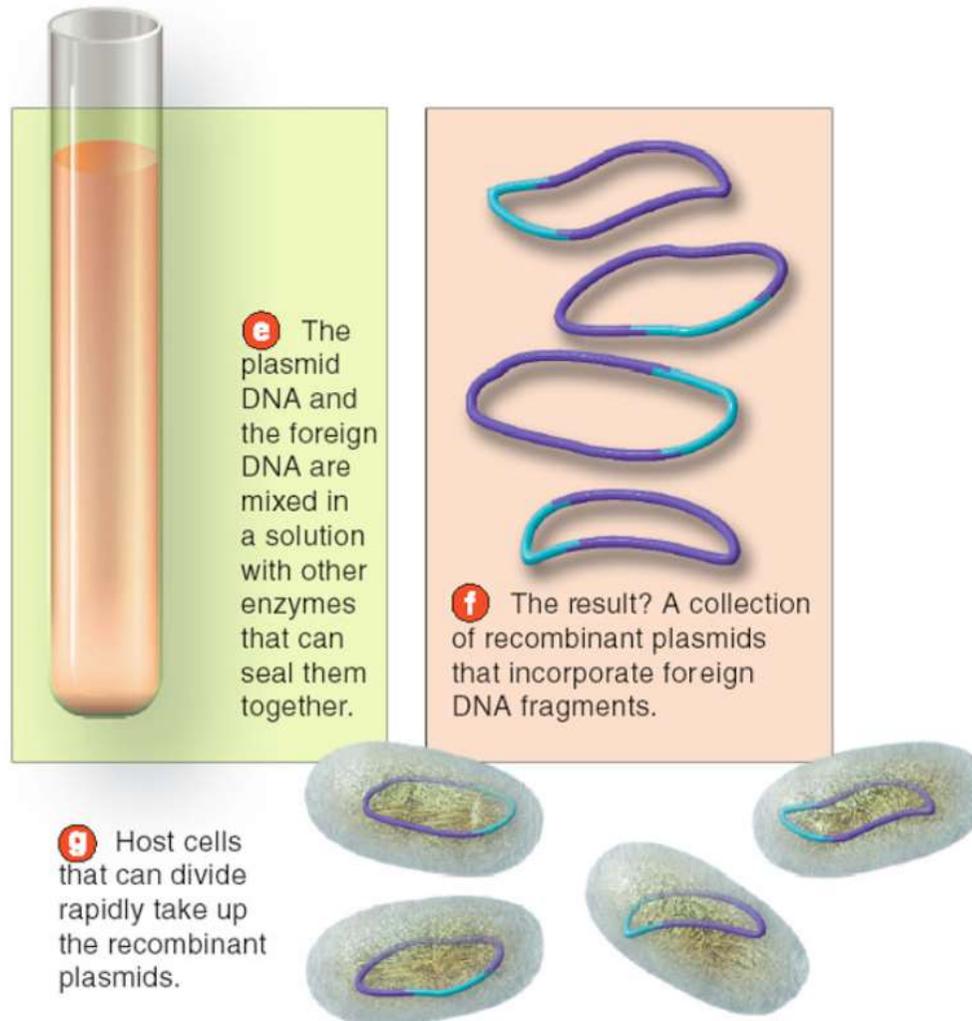
# NUCLEAR TRANSFER



# OUTLINE OF GENE CLONING



# OUTLINE OF GENE CLONING



THANK YOU FOR  
LISTENING😊