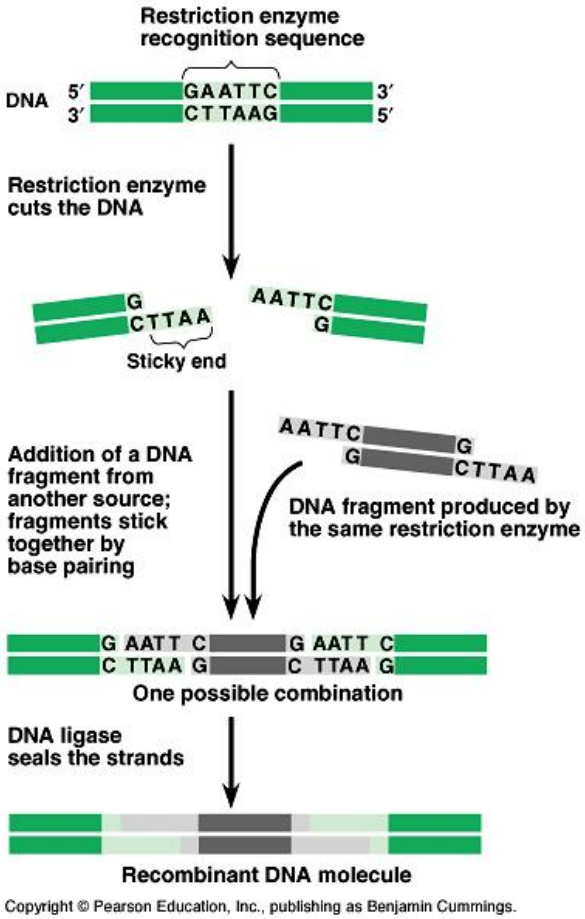
Continuity and Diversity Free Response

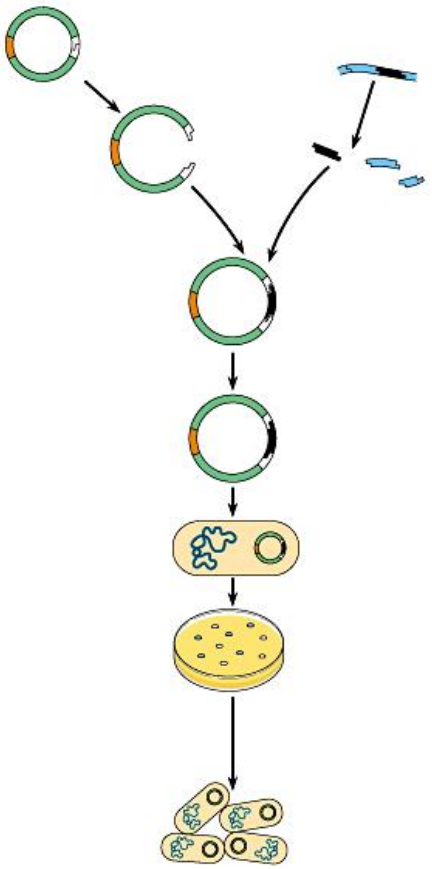
Notebook:	[aNote] BHS AV / Tech		
Created:	4/18/2011 9:37 PM	**Updated:**	4/18/2011 10:19 PM

Cont. and Divers. 2002
The human genome illustrates both continuity and change.

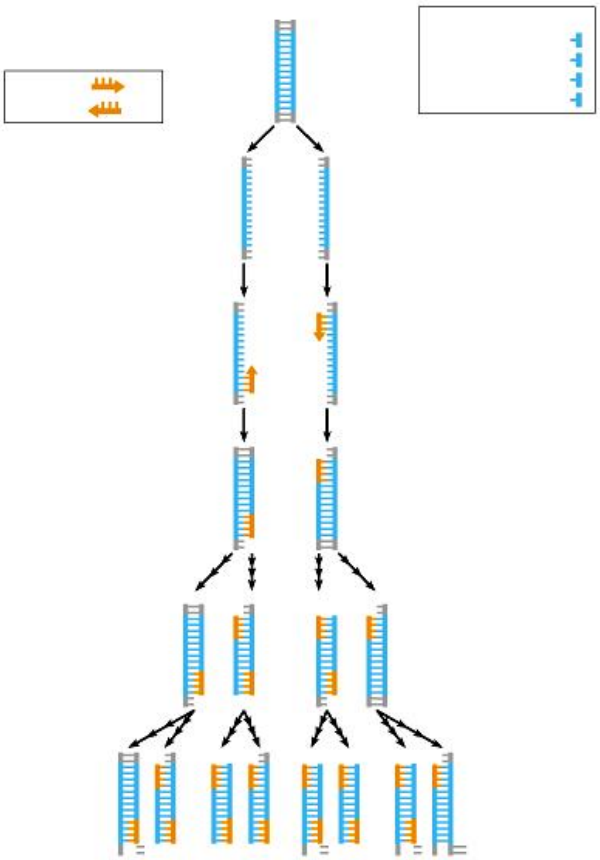
(a)
Describe the essential features of two of the procedures/techniques below. For each of the procedures/ techniques you describe, explain how its application contributes to understanding genetics.

- *The use of a bacterial plasmid to clone and sequence a human gene*

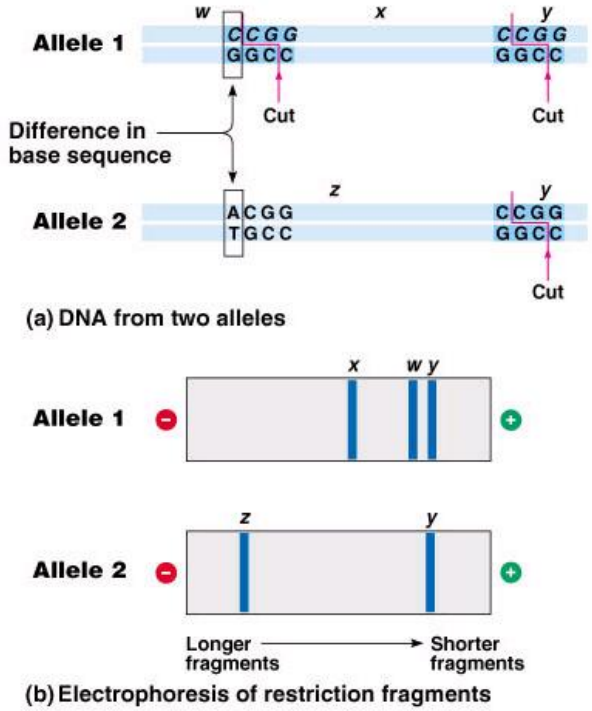


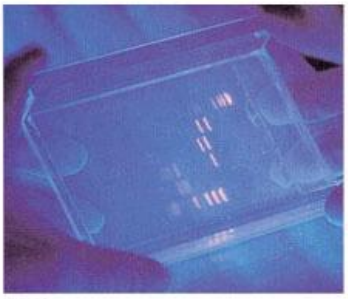


- Poymerase chain reaction (PCR)



- a Restriction fragment length polymorphism (RFLP) analysis





(c) Completed gel

(b)
All humans are nearly identical genetically in coding sequences and have many proteins that are
identical in structure and function. Nevertheless, each human has a unique DNA fingerprint Explain
this apparent contradiction.