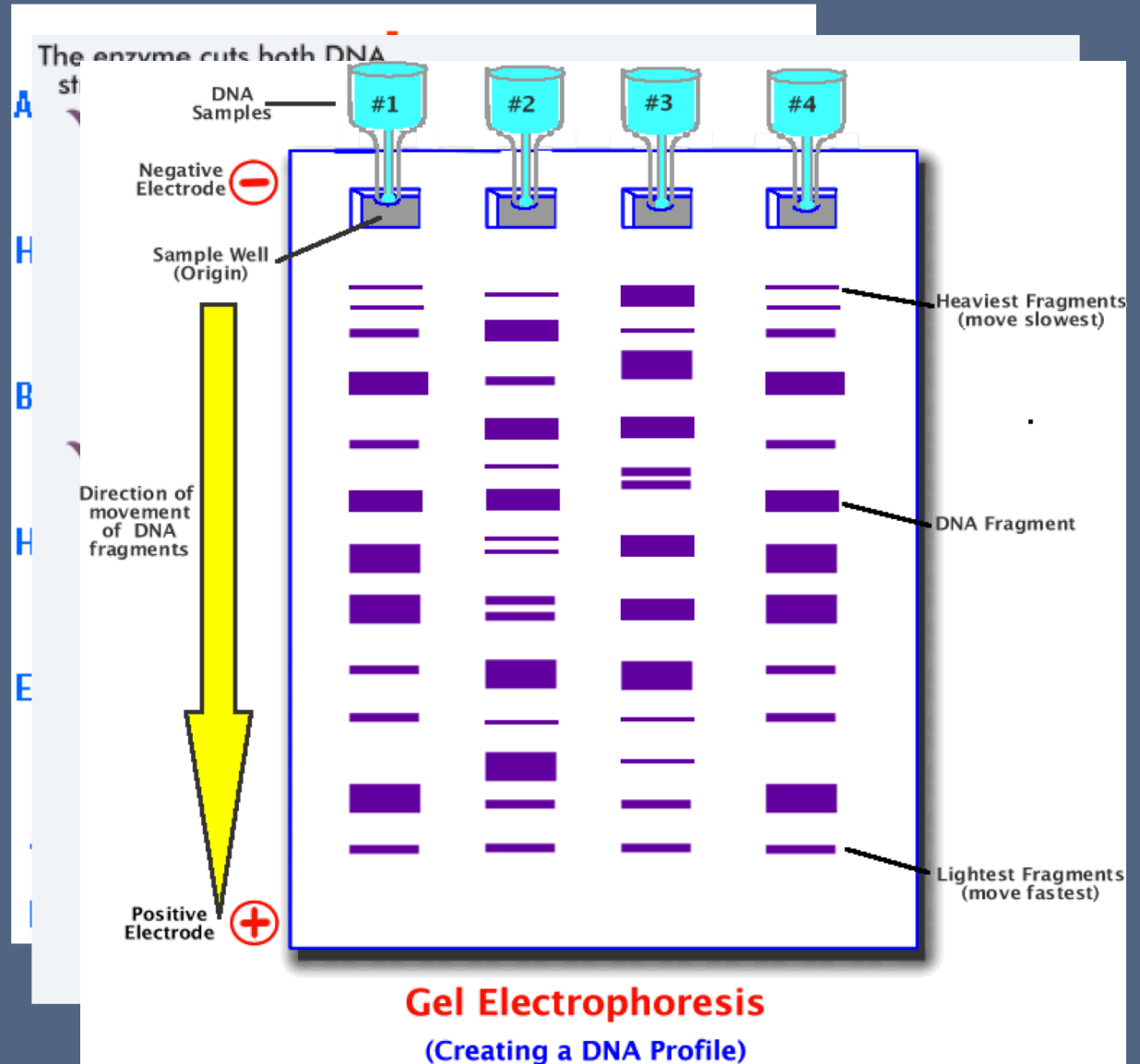


Ch 15.3: Studying the Human Genome

Essential questions:






- How can scientists read DNA base sequences?
- What research efforts have resulted from the Human Genome Project

- Manipulating DNA
 - Cutting DNA
 - Restriction enzymes
 - Separating DNA
 - Gel electrophoresis
 - Reading DNA
 - Assembling the sequence



- The Human Genome – What's Inside?

- How many genes?
- The large and the small of it
- The personal genome
- Genome privacy
- Gene imprinting
 - Genomic imprinting

Species	<i>Escherichia coli</i>	<i>Gallus gallus</i>	<i>Homo sapiens</i>	<i>Daphnia pulex</i>	<i>Oryza sativa</i>
Number of Genes	~4,200	~17,000	~21,000	~31,000	~38,000
Common Name	 Bacteria	 Chicken	 Human	 Water flea	 Rice