**Stage 2 Biology – DNA & Proteins**

**Key Processes:**

Transcription

mRNA processing

Translation

DNA Replication

PCR

Cloning Genes (amplifying) using Bacterial Plasmid

DNA Profile Using Gel Electrophoresis

DNA Sequencing (Gel Electrophoresis)

DNA Sequencing (Capillary Electrophoresis using ddNTPs)

Genetic Engineering:

1. Isolation of Gene
2. Separate and find Gene
3. Insert Gene into Host

Bacterial plasmid Vector

Viral Vector

Microinjection

CRISPR/Cas9