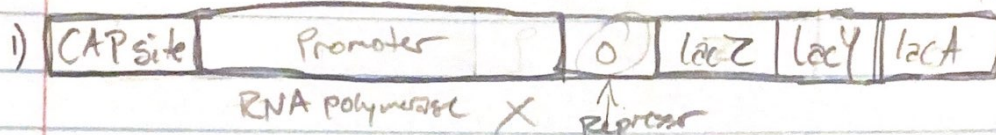


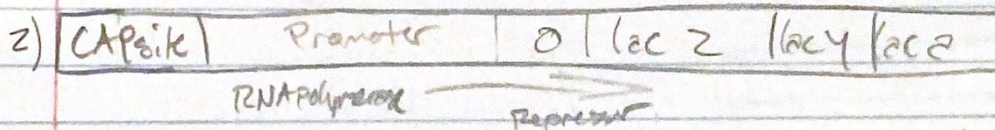
Lac Operon Assignment

Ian Corcoran

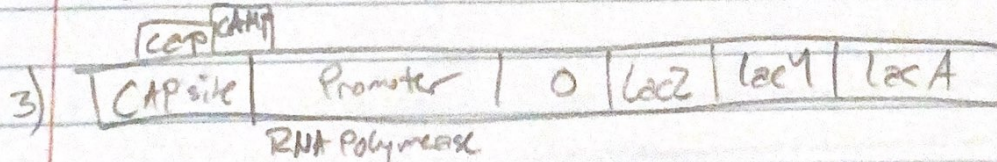
Gene expression is often controlled in transcription but can also happen in translation



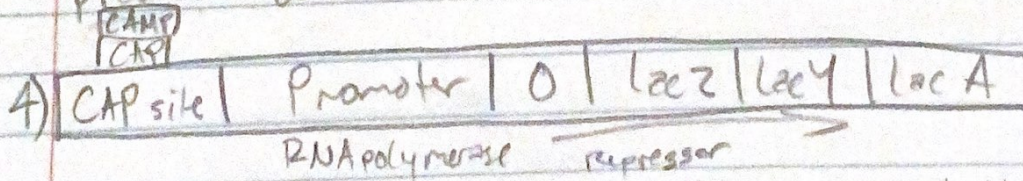
When Lactose is absent the lac repressor binds to the operator and stops the RNA polymerase from transcription



When Lactose is present the lac repressor is unable to bind DNA which breaks off + allows the RNA polymerase to transcribe the operon.



When glucose is absent cAMP attaches to CAP which binds DNA. CAP helps RNA polymerase bind to the promoter which allows for fast transcription



When Glucose is absent and Lactose is present the repressor breaks off and allows the RNA polymerase to transcribe quickly. CAP helps RNA polymerase to bind to the promoter.