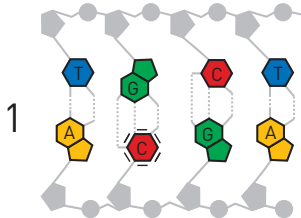
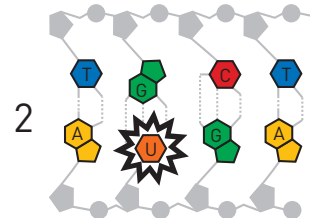


# Base excision repair

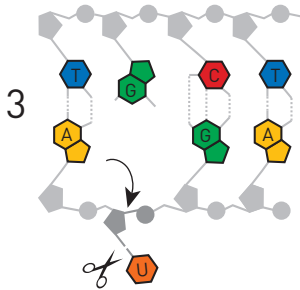
Base excision repairs DNA when a base of a nucleotide is damaged, for example cytosine.



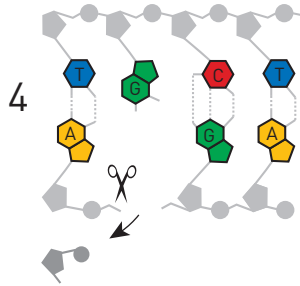
Cytosine can easily lose an amino group, forming a base called uracil.



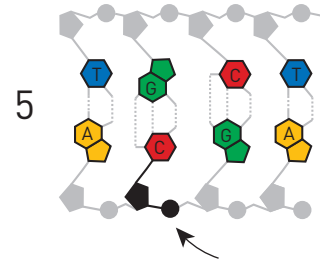
Uracil cannot form a base pair with guanine.



An enzyme, glycosylase, discovers the defect and excises the base of uracil.



Another couple of enzymes remove the rest of the nucleotide from the DNA strand.



DNA polymerase fills in the gap and the DNA strand is sealed by DNA ligase.