MUTATIONS

- a change in the DNA that may cause an incorrect protein to be made
- · mutations can be helpful as well as harmful
- substitutions (aka point mutation) changing one base for another

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(M&M's instead of chocolate chips) (salt instead of sugar)
```

 deletions dropping a base from the code

```
(forgot the nuts)
(forgot the flour)
```

 additions adding a base to the code

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(added M&M's to chocolate chips) (added motor oil)
```

 sometimes mutations are silent because the same amino acid is coded and no change is seen in the resulting protein Amino Acid chart.pdf