

## Evolution of Populations + Speciation

Gene Pool - all genes of one population belonging to one species

Species - ability to breed (mate) + produce fertile offspring

Adaptive Radiation - organisms fill different niches which leads to speciation

Natural selection can lead to a change in the allele frequencies of a population and thus to evolution.

With adaptive radiation, a single species evolves into several distinct species. This may occur when species fill different niches, <sup>in some environment</sup> migrate to new environments, or when extinction eliminates competing species. Examples: Galápagos finches  
Hawaiian honeycreepers

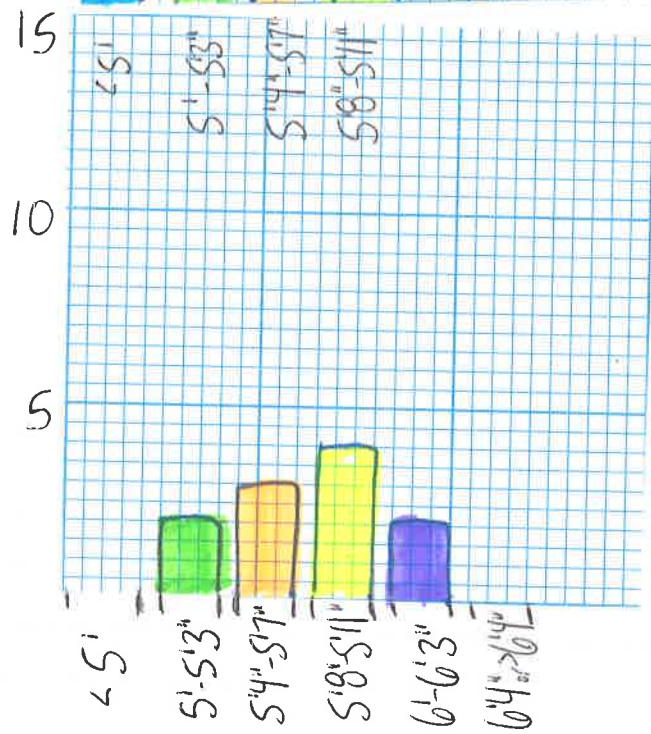
# Example of Directional Selection

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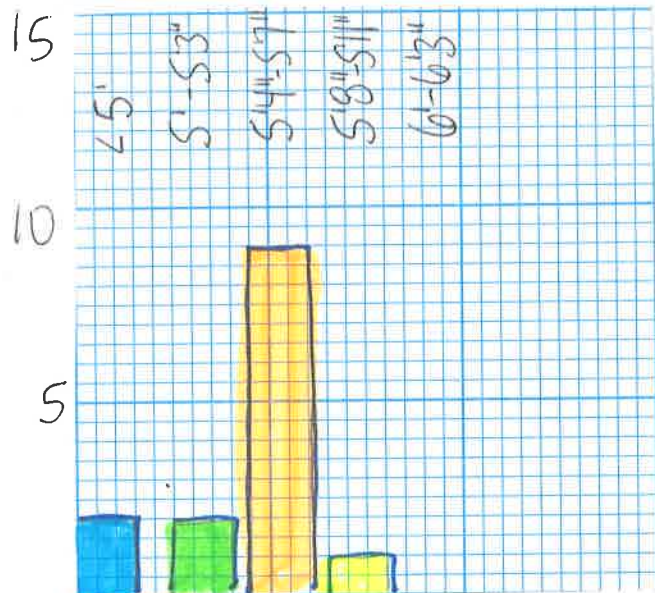
Number of People

Number of People

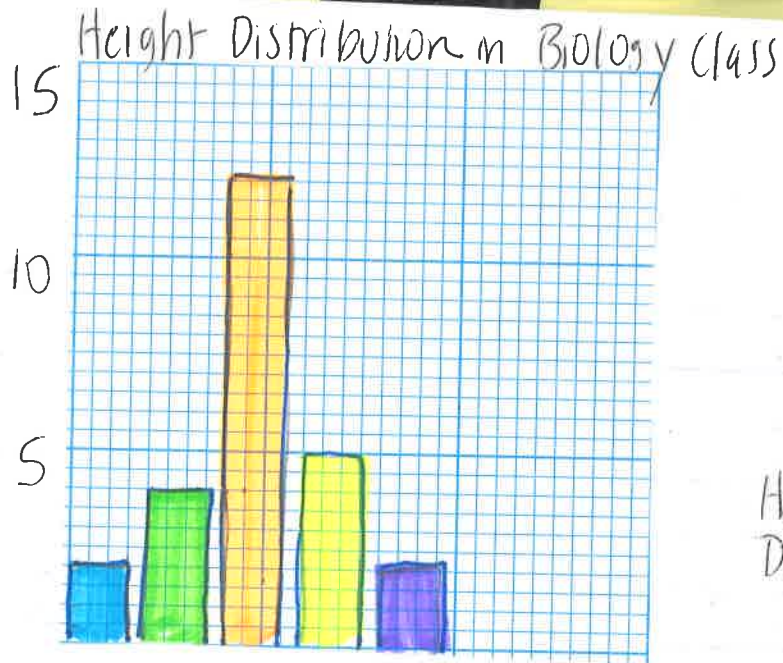
Number of People



Height Distribution in Males



Height Distribution in Females



Total Class  
Height Distribution