

OVERVIEW of the MODEL

OBSERVATION #1

Populations of organisms have the potential to grow exponentially.

OBSERVATION #2

Populations of organisms tend to stay relatively stable in size.

OBSERVATION #3

Populations are relatively stable in size due to limited resources in the environment.

INFERENCE #1

Within populations of organisms there is a struggle to survive.

OBSERVATION #4

There is variation among organisms in a population. Variation naturally exists.

OBSERVATION #5

Individuals with advantageous variations have a better chance of surviving than those with the less advantageous variations..

OBSERVATION #6

Survival allows reproduction.

OBSERVATION #7

Many variations are inherited (in other words, offspring tend to resemble their parents).

INFERENCE #2

The # of individuals with advantageous variations will increase in each new generation. The # with disadvantageous variations will decrease.

INFERENCE #3

Over many generations the species changes. **EVOLUTION occurs!**