**Evolution Lecture #2 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Population growth produces more offspring than the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ capacity of an environment can support.

Offspring/population compete for limited resources (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ competition)

Some individuals have characteristic (or a combination ) that give them a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ advantage. These individuals are consequently 'fitter' in terms of freedom from disease, food availability etc. These individuals are more likely to successfully \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (offspring survive)

Through inheritance of the genes for these advantageous characteristics the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of these characteristics become greater in the next generation. The alleles for the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ characteristic becomes more frequent in the population

Draw a sigmoid growth curve here:

Populations of a species show \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - this means differences in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Variation shows two basic patterns.

This type of variation is called discontinuous.

There are distinct classes of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

e.g. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of a human population

Discontinuous variation usually indicates the condition is controlled by one to two genes.

This type of variation is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ variation with no distinct classes but a complete range of the characteristic

e.g. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in a forest

Continuous variation like this normally indicates a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ condition or multiple \_\_\_\_\_\_\_\_\_\_\_

**Now….how can this relate to what we’ve studied from Genetics?**

The sources of genetic variation in a population are:

i)

ii)

iii)