

TOPIC 4. EVOLUTION - the process by which a population of organisms change over time.

simple, single-celled -----> complex-single-celled -----> complex, multicellular

34. **Charles Darwin** - developed the Theory of Natural Selection.
(nature chooses)

35. **Natural Selection** - the environment chooses those individuals who are best fit to in **THAT** survive.

(a) Overproduction - more offspring are produced than can survive

(b) Competition - the fight for *limited* resources.

(c) Variation - differences among organisms in a species.

- Due to meiosis and fertilization, sexually reproducing organisms have more variation than **asexually** reproducing organisms.

36. Adaptation - any trait that helps an organism survive.



Bummer of a birthmark Hal.

Why is Hal's birthmark a bad thing in **THAT** environment?

37. Extinction - the disappearance of an entire species.

Extinction may result from the failure of a species to adapt to a changing environment or an environment changing too fast for the species to adapt to.