

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.