18-BY8 Mutation and reproductive success

I think it's technically where an animal when it's born mutates and the chance it has of surviving, if it does survive, and it breeds again, its offspring carry the same DNA which then slowly carries on into a bigger amount of that animal. If it survives, it breeds again and its offspring can have the same mutated cells as the first animal and slowly that species of that animal gets bigger and bigger. I think it happens, just an accident, when cells are copying each other, but I think the animal survives because it can adapt better to its environment so it's less likely to get hunted by predators. I think it could adapt where it can camouflage into its surroundings or even be stronger for where it lives in the world.

Claim(s)

Mutations alter a living organism's DNA

Mutations are accidental errors that occur when cells are copied.

Offspring will carry the altered DNA of the parent organism.

Some mutations result in advantages to an organism's survival.

Successful breeding will cause the number of individuals in a population carrying the changed DNA to increase.

Any challenges to the expressed claim?

Anything to disagree with?

Any clarification needed?

Question(s).

What kinds of mutation, apart from camouflage, could confer survival success on a species of animals or plants?

Note: Mutations are random events. The only way in which they are associated with birth is that, to be transmitted to offspring, the mutation must be present in the egg or sperm at the time of fertilisation. Not all mutations are useful and not all mutations are bad. Most have no effect on the organism. Mutations have a central role in evolution because they increase genetic variation within a species. If environmental circumstances change, a trait that has had no obvious use previously may turn out to be particularly well-suited to that change. The **gene pool** is the set of unique alleles in a species or population and mutations increase variation. The more variation, the more genetically diverse and robust in the face of challenging environmental change the species will be. Favourable traits will tend to increase in the population due to survival and reproductive success. E**volution** can be defined as the change in allele frequencies in a population of living things over time

See the Primary Science article on Variation.