

Comparing Sexual and Asexual Reproduction

Asexual Reproduction	Sexual Reproduction
One parent	Two parents
Offspring genetically identical to parent	Each parent contributes one-half the genetic information to offspring
All genetic information is passed to offspring from one parent	Offspring has combination of genes from both parents
Genetic differences are rare and come from mutations	Allows greater genetic variation since offspring will always differ from parents and other offspring

Asexual Reproduction

Advantages	Disadvantages
There is no need to find a partner	Reduced genetic variability
Less energy is required to produce offspring asexually	Sensitive to environmental changes
Offspring are usually well adapted to the environment because of the success of the parent	An asexual species runs the risk of suddenly disappearing because of a catastrophe that affects all organisms of the species that are genetically identical

Sexual Reproduction

Advantages	Disadvantages
Produces a new organism results from a combination of traits of two parents	Finding a reproductive partner and producing gametes requires the output of a lot of energy
It increases the genetic viability in organisms of the same species and even within the offspring of one couple	Genetic "errors" happen more frequently because meiosis is more complex than mitosis and diploid organisms have more chromosomes to double
In the long run, allows the best adaptations to be widespread within a species, especially in changing circumstances	
Two parents can watch over offspring	