

Sexual and asexual reproduction

1. Mitosis leads to two non-identical cells while meiosis leads to four identical cells.

Select from this box

2. Select the correct answer

i. Sexual reproduction involves the [] of male and female []

ii. These are [] and egg cells in animals, and [] and egg cells in plants.

3. Move the green boxes left or right to put them under the correct headings in the blue boxes

Sexual reproduction

Asexual reproduction

[]

Leads to variety in offspring

[]

[]

Only mitosis is involved

[]

[]

Requires gametes from meiosis

[]

Offspring are clones

Mixing of genetic information

Only one parent involved

3. Read through the statements and decide if these are **advantages or disadvantages** for **sexual reproduction**:

Produces variation in the offspring

If the environment changes, variation in offspring gives a survival advantage by natural selection

In animals, it requires two partners to find each other and successfully mate

Natural selection can be speeded up by humans in selective breeding to increase food production

4. Read through the statements and decide if these are **advantages or disadvantages** for **asexual reproduction**:

Lack of variation of offspring means less likely to survive if the environment changes or new disease appears

Only one parent needed

More time and energy efficient as a mate does not need to be found

Faster than sexual reproduction

Many offspring can be made when conditions are favourable

Offspring have no genetic variation