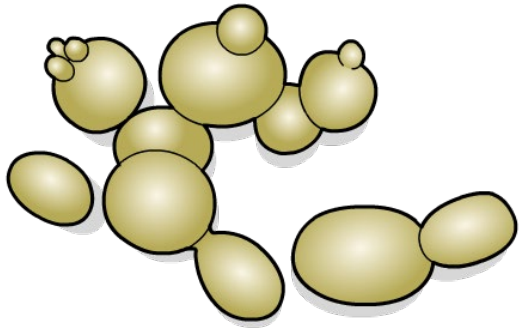
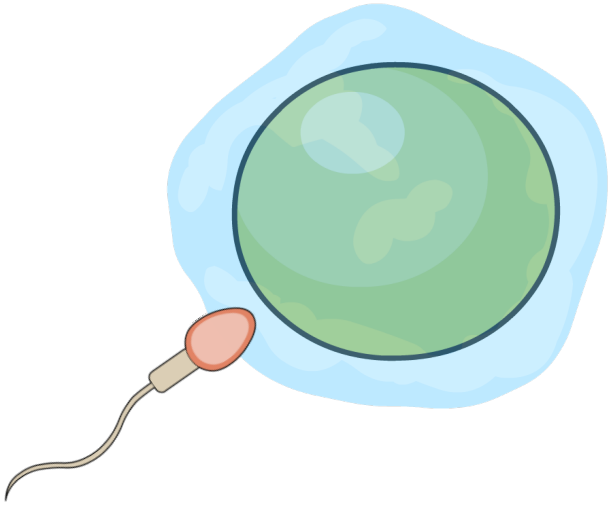
Types of Reproduction

Types of reproduction

There are two main ways by which organisms can reproduce:



- **asexual reproduction** - a single organism makes a copy of itself that contains exactly the same genetic code

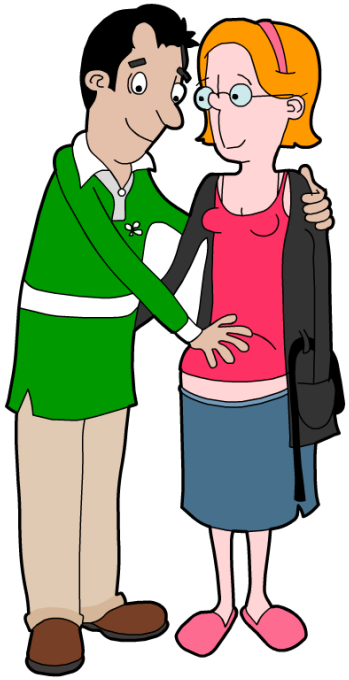


- **sexual reproduction** – two cells from two different organisms combine, producing an organism with a unique genetic code.

Sexual reproduction

In **sexual reproduction**, genes from two parent organisms are combined to produce an organism with a unique genetic code.

The advantage of sexual reproduction is that it produces **natural variation** among a species, enabling it to adapt to environmental change.



Most animals and many plants reproduce sexually.

Asexual reproduction

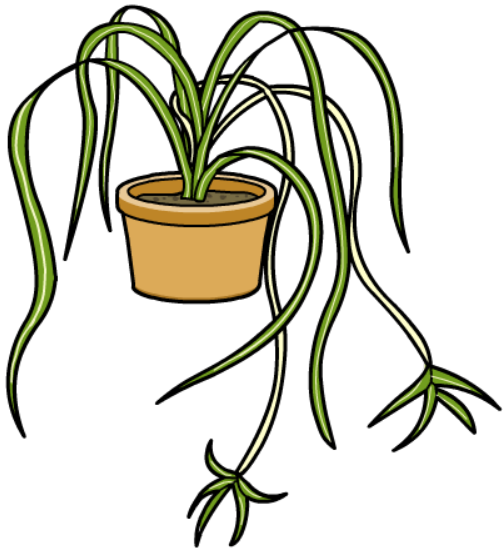
In **asexual reproduction**, a single organism makes a copy of itself with exactly the same genetic code. The new organism is a **clone** of the original.

Strawberry plants have adapted specialized stems or runners that grow from the parent plant. These form the new strawberry plants, which are clones of the parent plant.

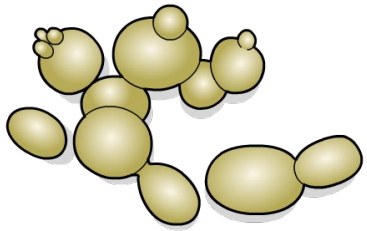
Asexual reproduction

Asexual reproduction enables an organism to quickly populate a new habitat and ensures that, if it is well-adapted to its environment, successful characteristics are passed on.

Organisms that reproduce asexually include:

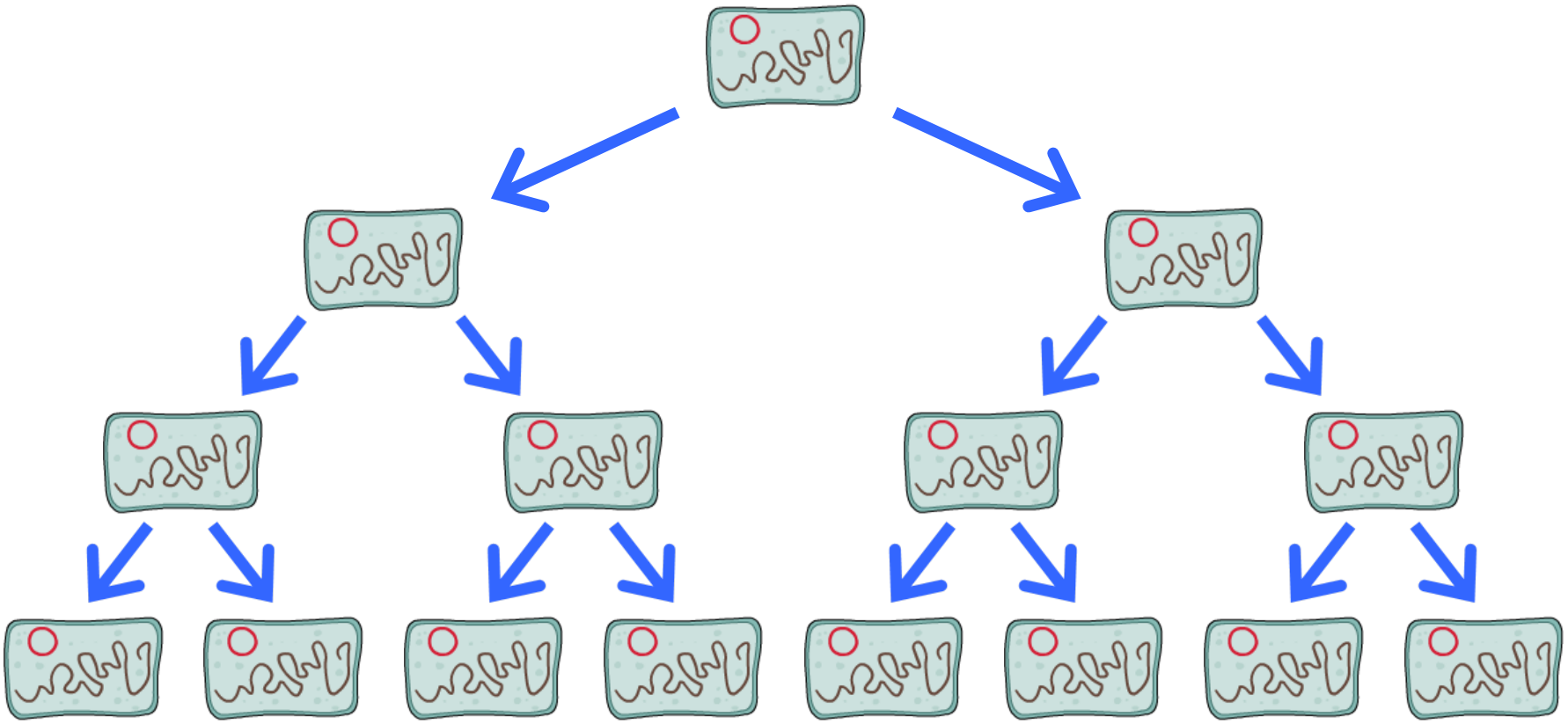


- many plants, such as spider plants, strawberries and potatoes
- microorganisms, such as bacteria and yeast
- some insects, such as aphids.



Speedy bacterial clones

Bacteria can copy themselves very quickly – their numbers can double every **20 minutes**! That's 10 times faster than the quickest animal cells.



Asexual or sexual reproduction?

Are these statements about asexual or sexual reproduction?

asexual reproduction	sexual reproduction

all the genetic material comes from a single parent

?

C solve