

16 Reproduction and flowers – Part 1

Name: _____ Class: _____ Date: _____

Vocabulary 词汇

Write each word three times. 把每个单词抄写三遍。

English	中文	Write it 3 times (English)		
Reproduction	生殖	_____	_____	_____
asexual reproduction	无性生殖	_____	_____	_____
variation	变异	_____	_____	_____
sexual reproduction	有性生殖	_____	_____	_____
gametes	配子	_____	_____	_____
fertilisation	受精	_____	_____	_____
zygote	合子	_____	_____	_____
stamen	雄蕊	_____	_____	_____
anther	花药	_____	_____	_____
pollen	花粉	_____	_____	_____
carpel	雌蕊	_____	_____	_____
stigma	柱头	_____	_____	_____
style	花柱	_____	_____	_____
ovary	子房	_____	_____	_____
Pollination	传粉	_____	_____	_____

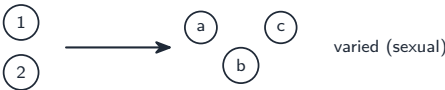
Recall

Reproduction 生殖 makes new organisms of the same kind. There are two types.

New ideas

Read these first, then do the Practice.

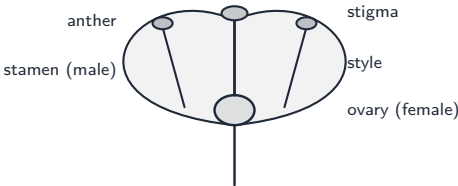
■ 1 Asexual vs sexual



- **asexual reproduction** 无性生殖: **one** parent; offspring are genetically identical (clones), so no **variation** 变异.
- **sexual reproduction** 有性生殖: **two** parents; two **gametes** 配子 (sex cells) join (**fertilisation** 受精) to make a **zygote** 合子; offspring show variation.

■ 2 Parts of a flower

A flower has male and female parts:



- the **stamen** 雄蕊 (male) = an **anther** 花药 (makes **pollen** 花粉) on a filament;
- the **carpel** 雌蕊 (female) = a **stigma** 柱头, a **style** 花柱 and an **ovary** 子房.

Pollination 传粉 is the transfer of pollen from an anther to a stigma.

Watch out: **asexual** reproduction has *one* parent and makes identical clones (no variation); **sexual** reproduction has *two* parents and gives variation. **Pollination** (pollen reaching a stigma) is not the same as **fertilisation** (the nuclei joining).

Practice

Try these in order.

16.1 How many parents does asexual reproduction need? [1]

16.2 Why do the offspring of sexual reproduction show variation? [1]

16.3 What is *fertilisation*? [1]

16.4 Name the male part of a flower and the female part. [2]

16.5 What is *pollination*? [1]

16.6 Challenge. A grower wants identical copies of a prize plant. State which type of reproduction gives this, and explain why the offspring are identical. [2]