

16.1 Asexual reproduction

Name: _____ Class: _____ Date: _____

Total: 6 marks

KEY WORDS reproduction 生殖 • sexual reproduction 有性生殖 • asexual reproduction 无性生殖
• offspring 后代 • parent 亲本

Objective

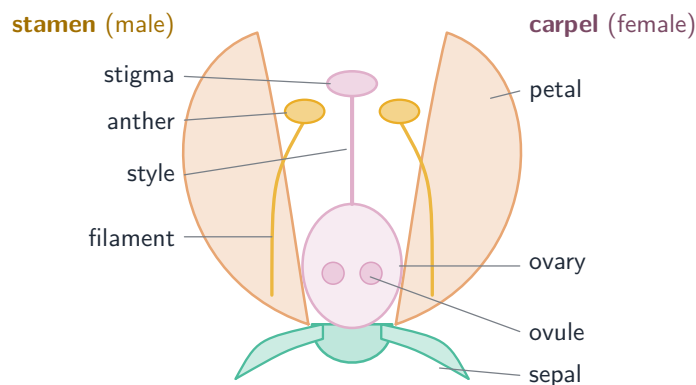
Build the skills to answer exam questions on **asexual reproduction** 无性生殖 — what it is, and its advantages and disadvantages.

You must be able to:

- define asexual reproduction (one parent, identical offspring)
- give the advantages and disadvantages
- compare it with sexual reproduction

1 Worked examples

■ Asexual reproduction



Asexual reproduction: one parent, offspring genetically identical (clones)

- **advantage:** fast; only one parent needed; good in stable conditions.
- **disadvantage:** no variation — a change (e.g. a new disease) could kill them all.

2 Practice

2.1 State how many parents are needed in asexual reproduction. [1]

2.2 State how the offspring of asexual reproduction compare with the parent. [1]

3 Exam-style questions

3.1 A disadvantage of asexual reproduction is that the offspring: [1]

- **A** are all different
 - **B** are genetically identical, so a change could kill them all
 - **C** need two parents
 - **D** grow slowly
-

3.2 A farmer grows a field of genetically identical crop plants.

(a) State one advantage of this. [1]

(b) Explain one risk of growing identical plants. [2]

Solutions

2.1 one.

2.2 they are genetically identical to the parent (clones).

3.1 B. Identical offspring could all be killed by a single change.

3.2 (a) the plants are uniform / give an even harvest.

(b) the plants are genetically identical, so one disease could wipe out the whole crop.