

Exercise walk-through

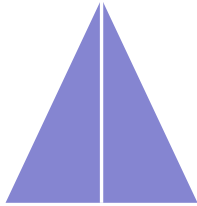
3.6

Age Structure Diagrams

AP Environmental Science

Age structure diagrams

The shape of an **age structure diagram**



Growing

wide base



Stable

straight sides



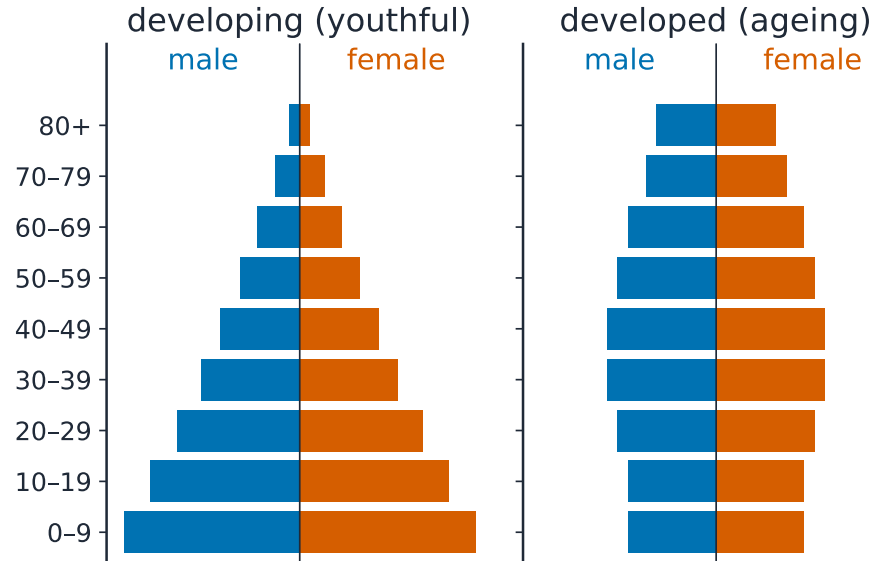
Declining

narrow base

predicts the future:

A big **pre-reproductive** group guarantees growth even if births fall today (population momentum).

Population pyramids of a developing and a developed country



Population pyramids of a developing and a developed country

Exercises 2.1-2.3

2.1 What does a wide base on an age structure diagram indicate?

[1]

2.2 What shape indicates a stable population?

[1]

2.3 What does a narrow base indicate?

[1]

Exercises 2.1-2.3

2.1 What does a wide base on an age structure diagram indicate? [1]

2.1

- Rapid future growth (many young people)
-

2.2 What shape indicates a stable population? [1]

2.2

- Straight/even sides (a column shape)
-

2.3 What does a narrow base indicate? [1]

2.3

- A declining population

Exercise 3.1

3.1 A population pyramid with a very wide base is likely to

[1]

☐

A decline rapidly

B grow rapidly

C stay perfectly stable

D have no children

Exercise 3.1

3.1 A population pyramid with a very wide base is likely to

[1]

☐

A decline rapidly

B grow rapidly

C stay perfectly stable

D have no children

3.1 B

- grow rapidly

Exercise 3.2 (a)

3.2 A country's age structure diagram has a wide base and narrows sharply toward the top.

(a) Predict its future population trend.

[1]

Exercise 3.2 (a)

3.2 A country's age structure diagram has a wide base and narrows sharply toward the top.

(a) Predict its future population trend.

[1]

(a)

- Rapid growth

Exercise 3.2 (b)

3.2 A country's age structure diagram has a wide base and narrows sharply toward the top.

(b) Explain your prediction.

[2]

Exercise 3.2 (b)

3.2 A country's age structure diagram has a wide base and narrows sharply toward the top.

(b) Explain your prediction.

[2]

(b)

- The wide base means many young people who will become parents, so births will stay high for years

Exercise 3.3

3.3 Explain what population momentum means and why a wide-based pyramid causes it. [2]

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3.3

- Population momentum is continued growth even after fertility falls, because the large group of young people already born will still reach reproductive age and have children