

Exercise walk-through

Urban Sustainability ■ 6.8

eXercise

You must be able to

- define **smart growth** 精明增长
- explain **mixed-use development** 混合用途开发
- define a **greenbelt** 绿化带
- state one aim of sustainable urban design

Method — Sustainable urban design

Sustainable cities aim to grow while cutting pollution, sprawl, and resource use — through compact building, transit, and green space.

Method — Smart growth and mixed-use

Smart growth concentrates development to limit sprawl. **Mixed-use development** puts homes, shops, and offices together so people can walk instead of drive.

Method — Greenbelts

A **greenbelt** is a ring of protected open land around a city that limits sprawl and preserves nature.

Practice 2.1 ■ 2 marks

Define smart growth.

Solution 2.1

Method: Smart growth and mixed-use

Worked steps

urban planning that concentrates development **B1** to limit sprawl and use land/resources efficiently **B1**.

Practice 2.2 ■ 2 marks

Explain how mixed-use development reduces car use.

Solution 2.2

Method: Smart growth and mixed-use

Worked steps

homes, shops, and workplaces are close together **B1**; people can walk or cycle instead of driving **B1**.

Practice 2.3 ■ 1 mark

A city protects a ring of farmland and forest around its edge.

- (a) Name this feature.
- (b) State one benefit it provides.

Solution 2.3

Method: Greenbelts

Worked steps

(a) a greenbelt **B1**. (b) it limits sprawl / preserves nature / provides recreation **B1**.

Exam-style 3.1 ■ 1 mark

A ring of protected open land that limits a city's outward growth is a

A greenbelt

B CBD

C shatterbelt

D relict boundary

Solution 3.1

Method: Greenbelts

A greenbelt



B CBD

C shatterbelt

D relict boundary

Worked steps

A. protected land ringing a city = greenbelt.

Exam-style 3.2 ■ 1 mark

Mixed-use development mainly aims to

- A** increase driving
- B** let people live, work, and shop close together
- C** expand sprawl
- D** raise land value only

Solution 3.2

Method: Smart growth and mixed-use

- A increase driving
- B let people live, work, and shop close together 
- C expand sprawl
- D raise land value only

Worked steps

B. mixed-use puts uses together to cut travel/driving.

Exam-style 3.3 ■ 1 mark

A city adopts smart-growth policies.

- (a) State one problem it is trying to solve.
- (b) Explain how compact development helps sustainability.

Solution 3.3

Method: Smart growth and mixed-use

Worked steps

(a) urban sprawl / car dependence / resource waste **B1**. (b) it uses less land and energy and supports transit, cutting emissions **B1**.