

Exercise 1 Answers

Question 1.1

Eustatic sea-level: this is the distance between the sea-surface and a fixed datum (usually the centre of the Earth).

Relative sea-level: this is the distance between the sea-surface and the local datum (usually the top of the basement).

Water depth: this is the distance between the sea-surface and the top of the sediment.

Question 1.2

Sediment supply influences water depth only.

Local tectonic uplift influences relative sea-level and water depth.

Local tectonic subsidence influences relative sea-level and water depth.

Changes in global sea-level influence eustatic sea-level, relative sea-level and water depth.

Question 1.3 See Figure A1.1.

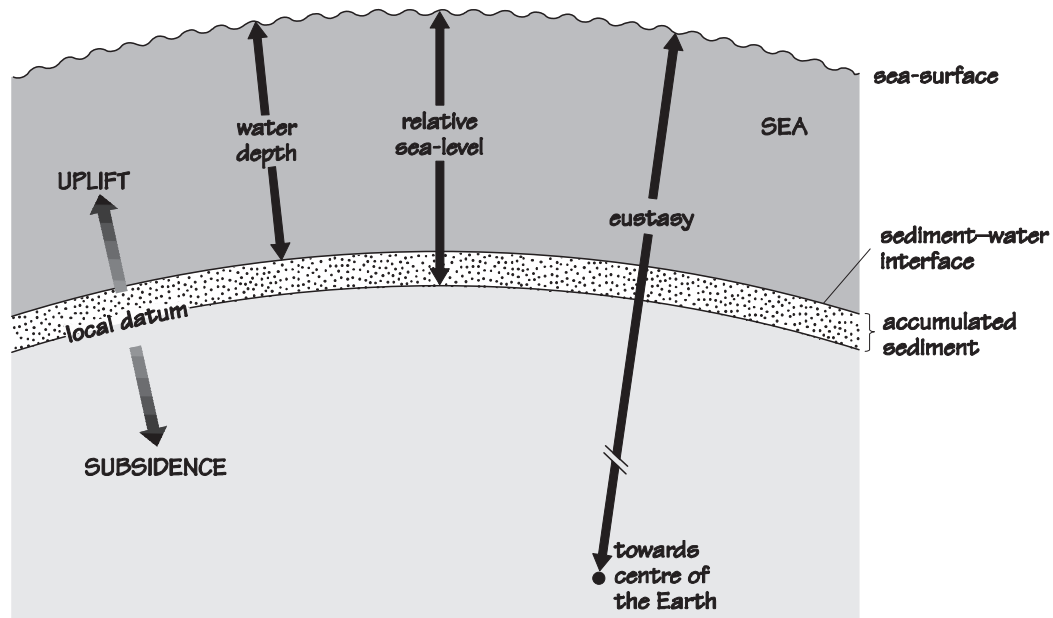


Figure A1.1 Answer to Question 1.3.