



Core units: Key understandings – Years 7–8
 Illustration 2: Scale in physical geography

Cartographic scale

Cartographic use of scale demonstrates size on maps. The smaller the scale, the greater a space it depicts.

The spectrum of scales that geographers are likely to use in maps of landforms range from the largest 1:10² to smallest 1:10² scale, spanning eight orders of magnitude.

An A4 page, 297 × 210 mm, would portray:

- a meander bend of a small stream at 1:100
- a city beach at 1:1000
- a limestone cave system at 1:10,000
- a continental glacier at 1:100,000
- a volcanic plateau at 1:1,000,000
- an Australian desert at 1:10,000,000
- coral reefs in the southern hemisphere at 1:100,000,000
- all the world's mountains, with room to spare at 1: 1,000,000,000

In order to reinforce this idea about scale, introduce students to a series of maps that depict landforms at a variety of scales. Instruct them to make measurements, draw cross-sections and examine the features of the selected landforms. Cartographic skills are best performed when they are most relevant. Familiarity with cartographic scale, and landform size and complexity can be challenging for Year 8 students.

Landforms can be studied using remotely sensed images available from Geoscience Australia: Education <<http://www.ga.gov.au/education/geoscience-basics/landforms/landforms-from-space.html>>.

Scale and selected landforms

Name	Landform	Scale	
Low Isles, Queensland	Coral cay, reef	1:5000	Large scale
Lane Cove Valley, Sydney, NSW	River valley, ria	1:10,000	
Front Beach, Trial Bay, NSW	Beach, spit	1:25,000	
Rehban Spit, eastern Tasmania	Spit	1:30,000	
Mt Ruapehu volcano, New Zealand	Volcanic cone, crater lake	1:50,000	
Kata Tjuta – Uluru National Park, NT	Inselbergs	1:100,000	
Macquarie Marshes, NSW	Alluvial fan system	1:250,000	
Ganges River, India	Floodplain	1:2,000,000	Small scale