



**Cambridge International Examinations**  
Cambridge Pre-U Certificate

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**GEOGRAPHY (PRINCIPAL)**

**9768/04**

Paper 4 Research Topic

**May/June 2016**

INSERT

**1 hour 30 minutes**

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**READ THESE INSTRUCTIONS FIRST**

This Insert contains all the Figures referred to in the Question Paper.

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The syllabus is approved for use in England, Wales and Northern Ireland as a Cambridge International Level 3 Pre-U Certificate.

This document consists of **10** printed pages and **2** blank pages.

Fig. 1 for Question 1

Survival rates of new ash and sycamore saplings in a woodland near Thetford, England, over a 5-year period

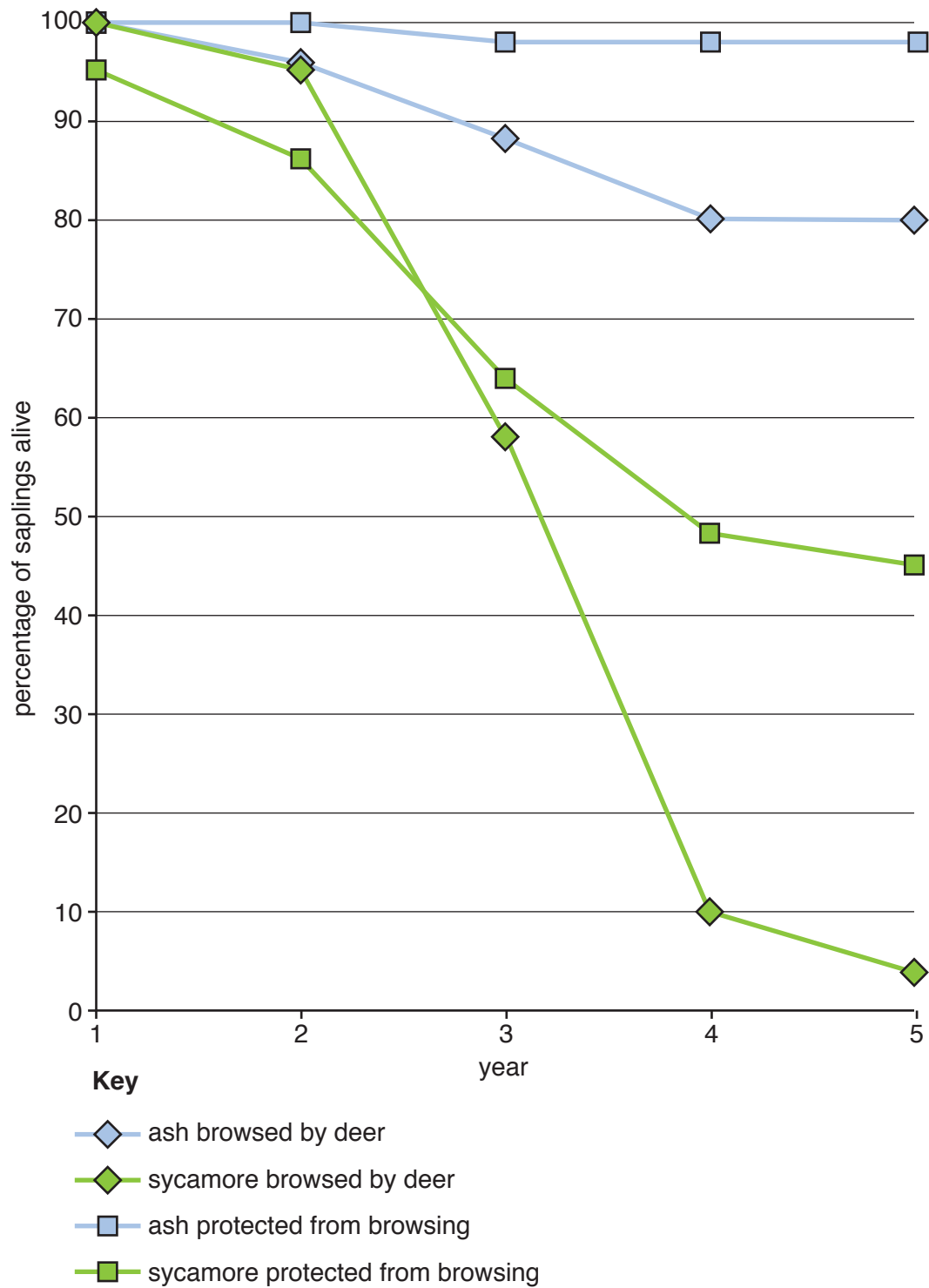
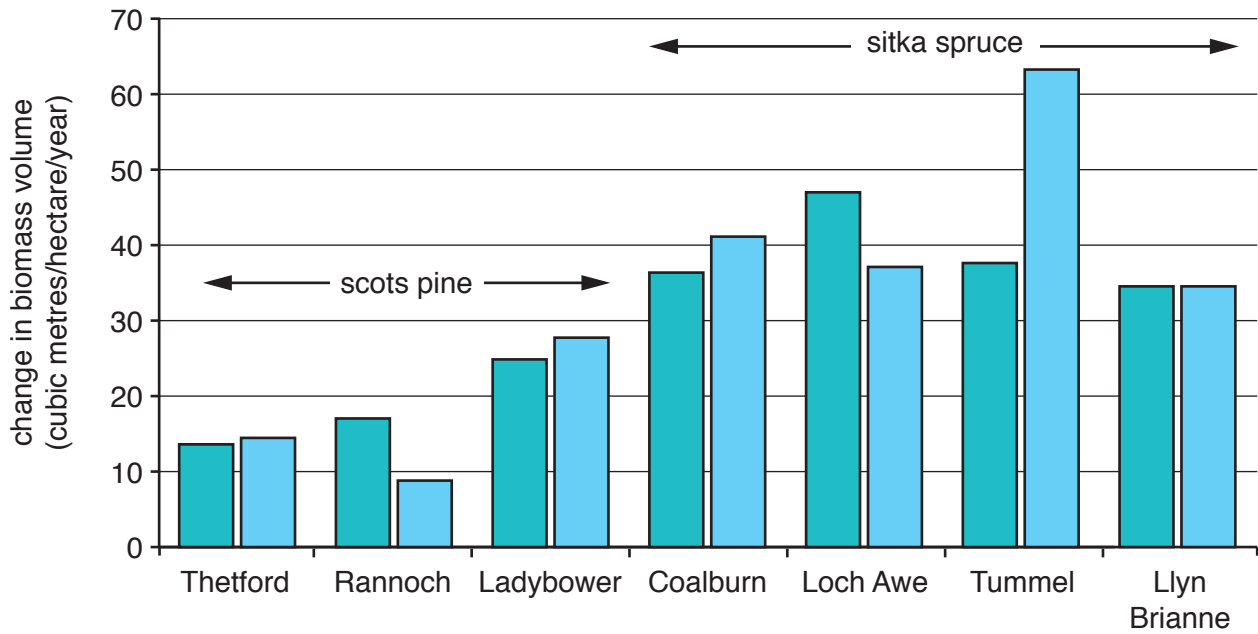


Fig. 2 for Question 1

The change in biomass volume of newly planted scots pine trees and sitka spruce trees at selected sites in the UK between 1995 and 2004



**Key**

- trees planted between 1995 and 1999
- trees planted between 2000 and 2004

Fig. 3 for Question 2

Sand dunes at Beadnell Bay, Northumberland, England

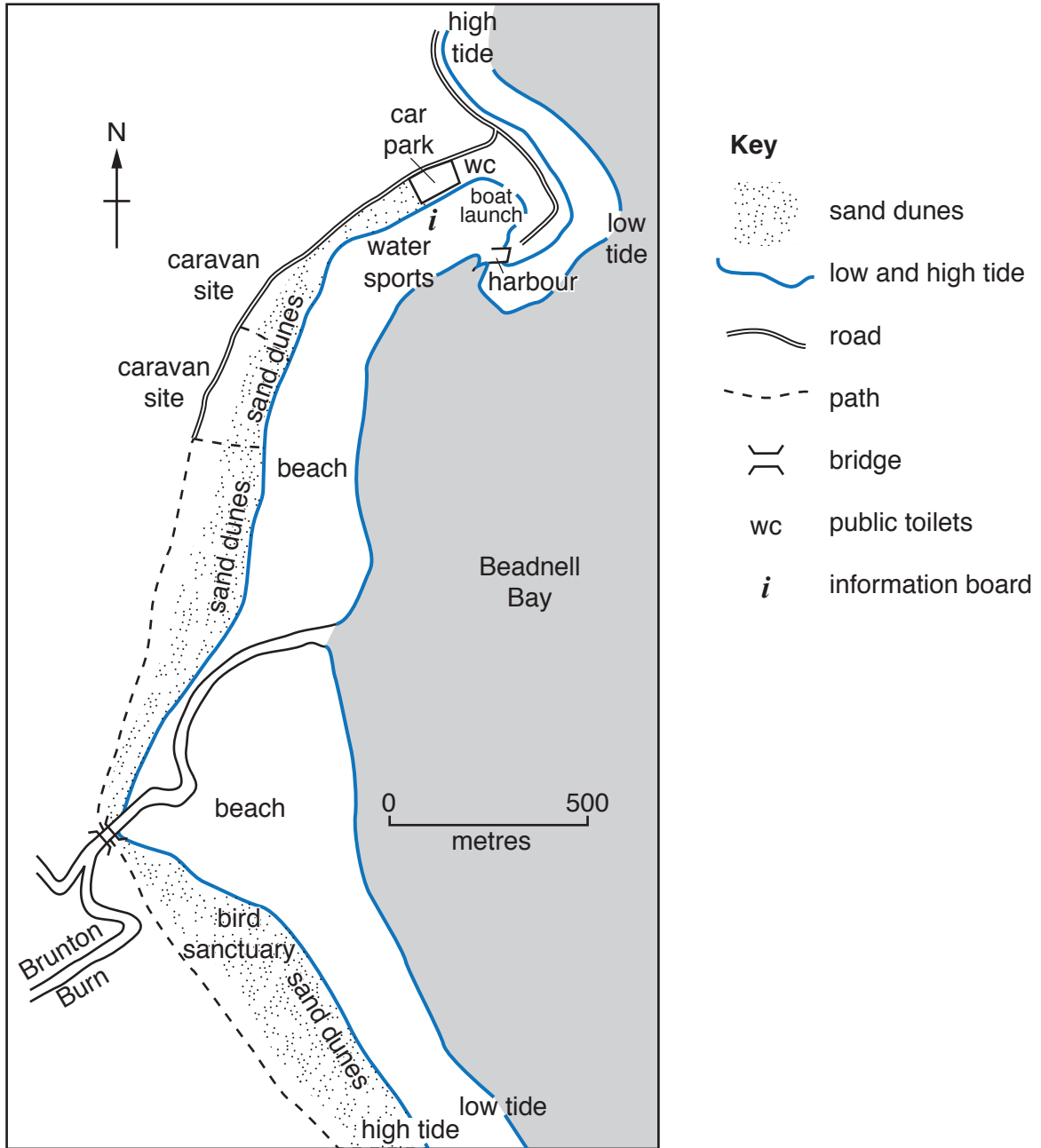
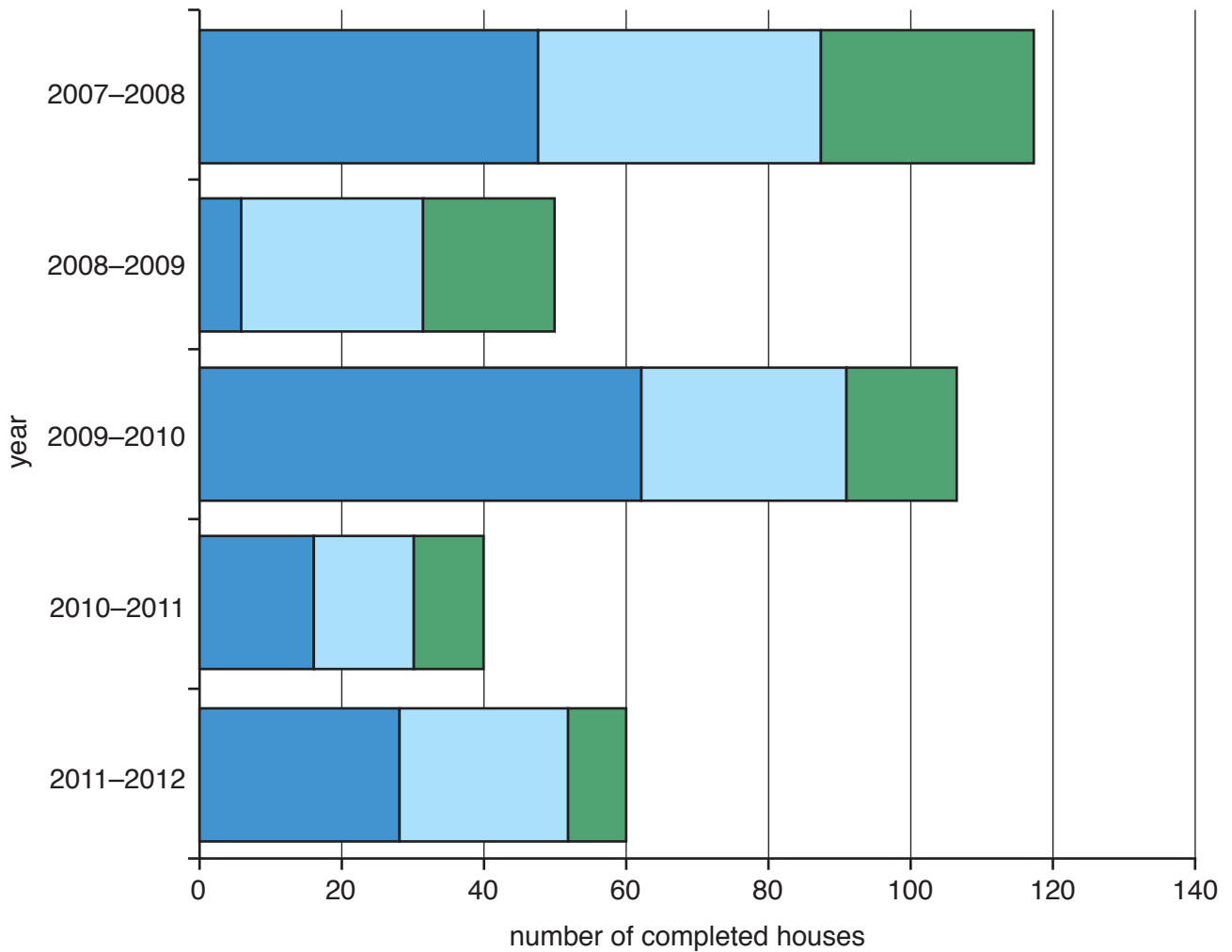




Fig. 4 for Question 5

Number of new housing completions in the Lake District National Park, England, 2007 to 2012

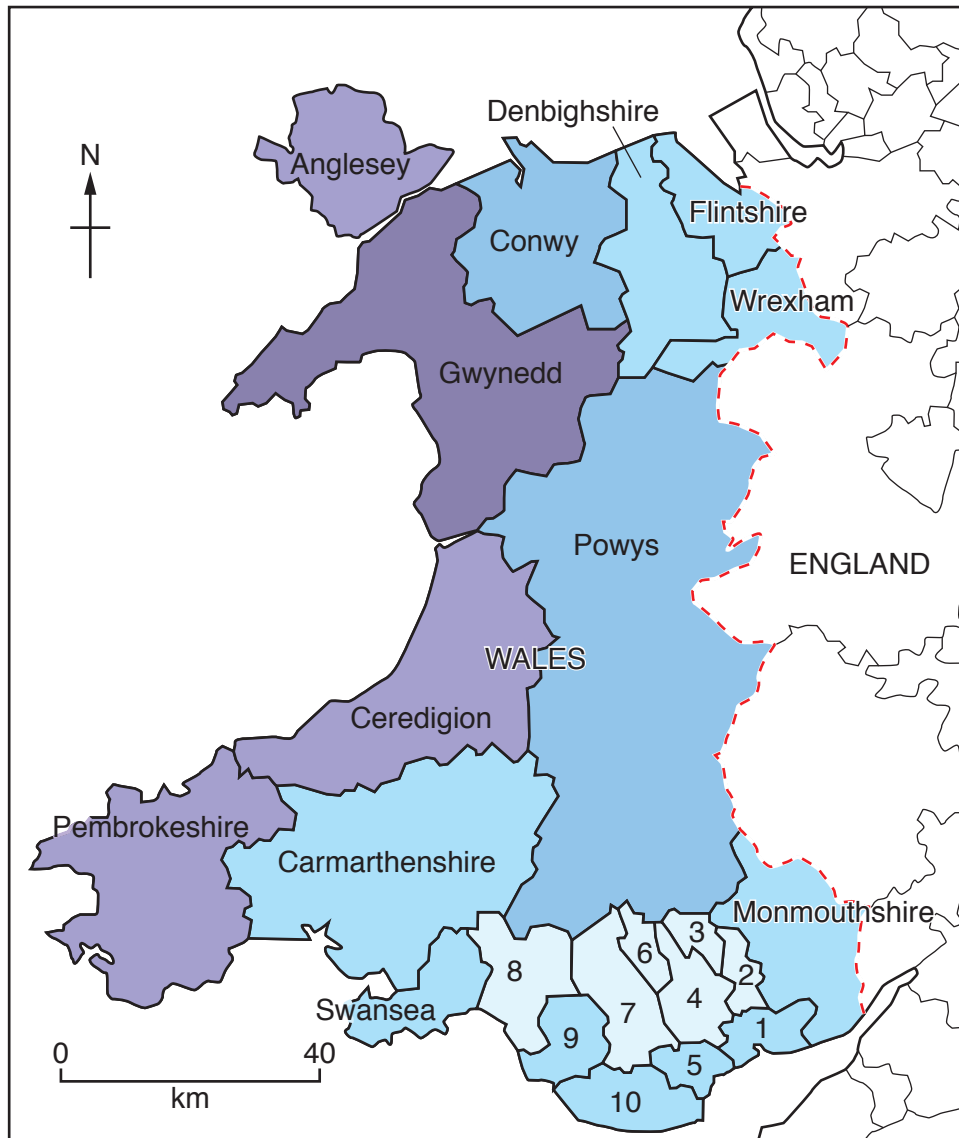


**Key**

- affordable housing – new housing priced to be affordable to local residents
- local occupancy – new housing only available to local residents
- unfettered housing – new housing available to anyone

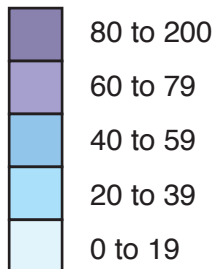
Fig. 5 for Question 5

People who have a second address in a local authority area in Wales, but who are usually resident in a different local authority in England and Wales, 2011



**Key**

per 1000 usual residents

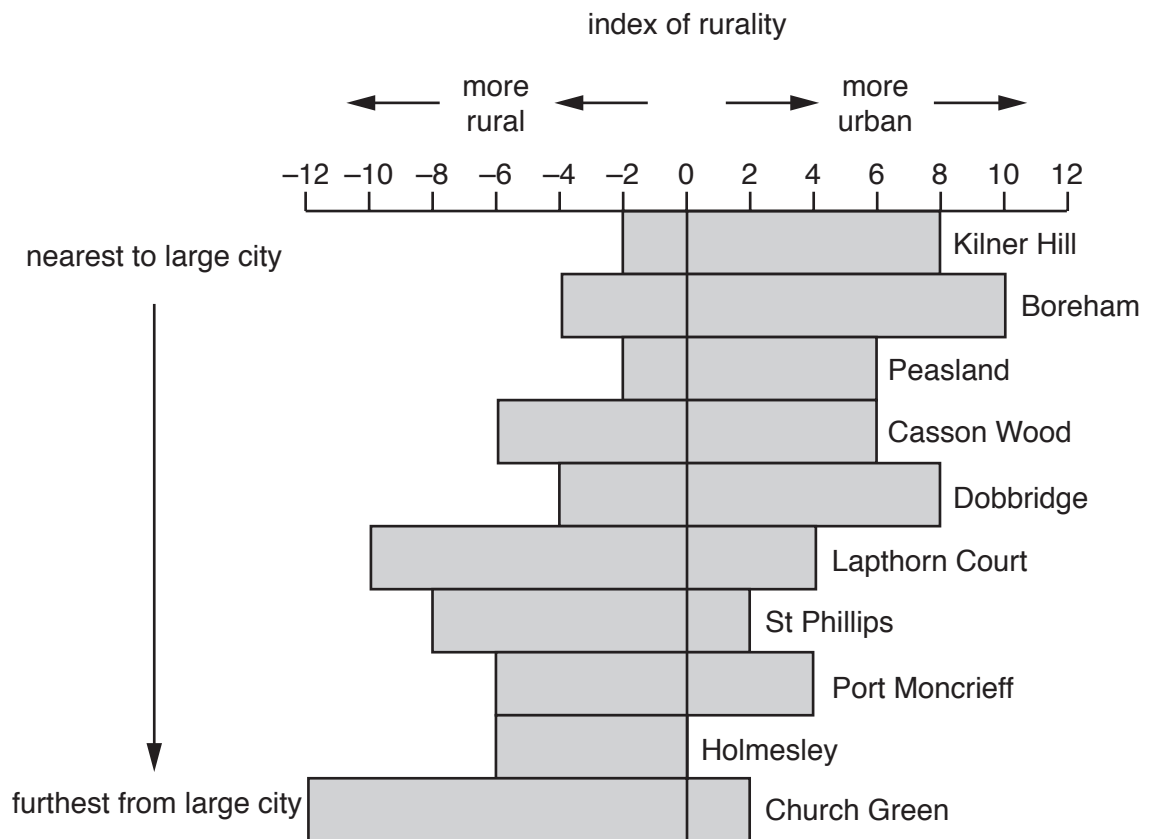


- |                 |                      |
|-----------------|----------------------|
| 1 Newport       | 6 Merthyr Tydfil     |
| 2 Torfaen       | 7 Rhondda Cynon Taf  |
| 3 Blaenau Gwent | 8 Neath Port Talbot  |
| 4 Caerphilly    | 9 Bridgend           |
| 5 Cardiff       | 10 Vale of Glamorgan |

--- Wales/England border

Fig. 6 for Question 6

Index of rurality for selected villages along a transect leading from the edge of a large UK city into the surrounding rural area



The index of rurality measures the urban and rural characteristics of the selected villages.

An extremely rural village will have a score of  $-12$  for rural and 0 for urban characteristics.

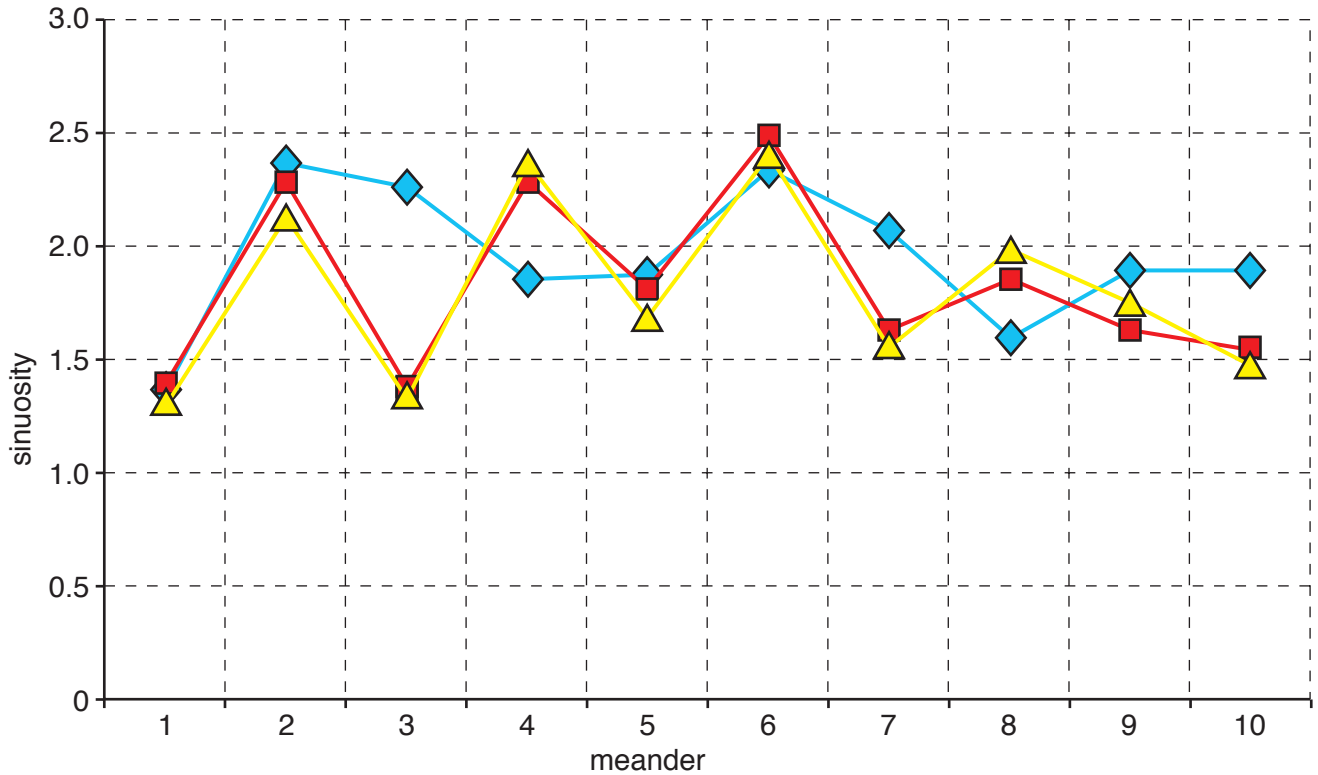
An extremely urban village will have a score of 0 for rural and  $+12$  for urban characteristics.



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Fig. 7 for Question 9

## Sinuosity index for 10 meanders along the course of a river, 1997 to 2010



Sinuosity index is the ratio between the distance along a river between 2 points and the straight line distance between the 2 points.

A completely straight river would have a sinuosity index of 1.

A typical meandering river would have a sinuosity index of 1.5 or greater.

## Key

- ◆ 1997
- 2006
- ▲ 2010

Fig. 8 for Question 9

Meanders 2 and 3 in 1997, 2006 and 2010

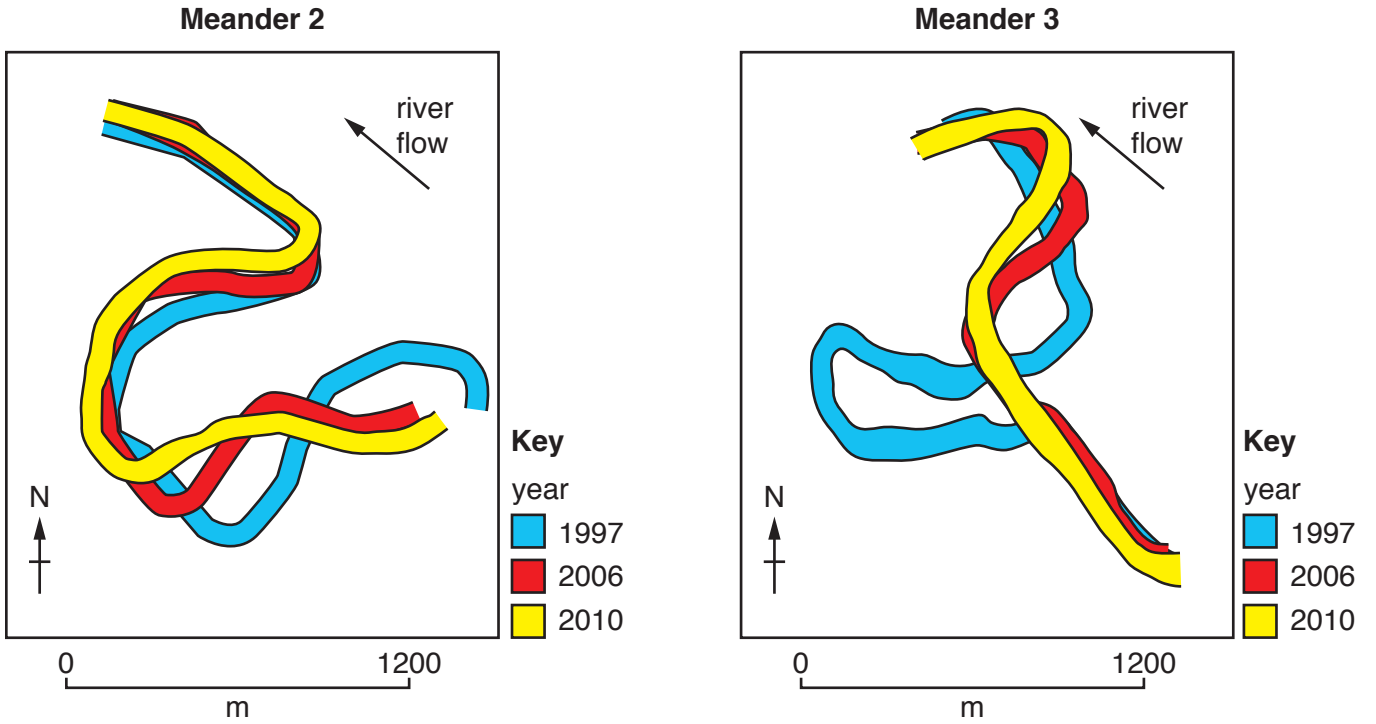
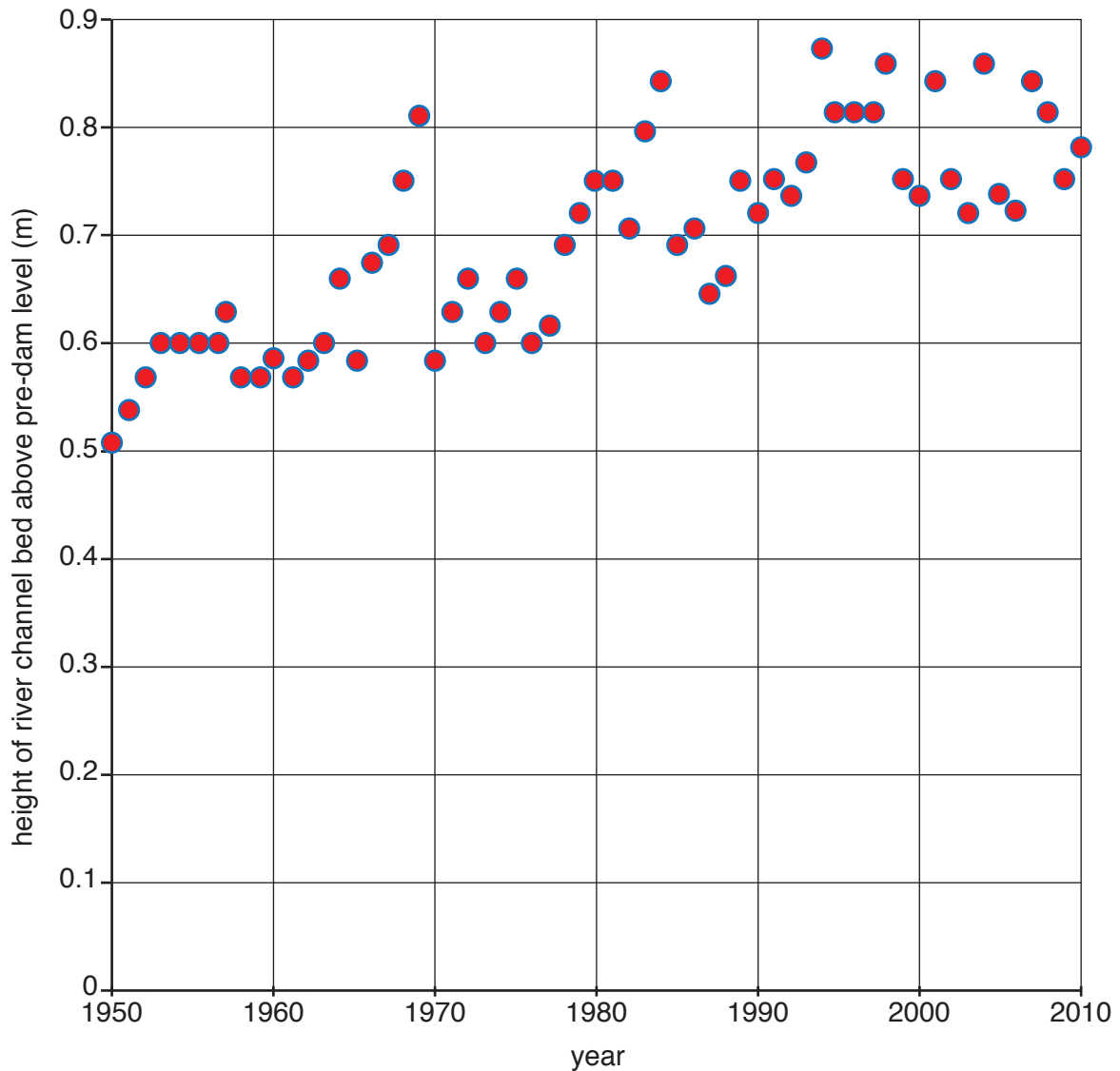


Fig. 9 for Question 10

## Height of a river channel bed upstream of a new dam, 1950 to 2010



The dam was completed in 1948.

Heights shown are in metres above the pre-dam level of the river channel bed.

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