



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
International General Certificate of Secondary Education

GEOGRAPHY

0460/41

Paper 4 Alternative to Coursework

October/November 2010

INSERT

1 hour 30 minutes

READ THESE INSTRUCTIONS FIRST

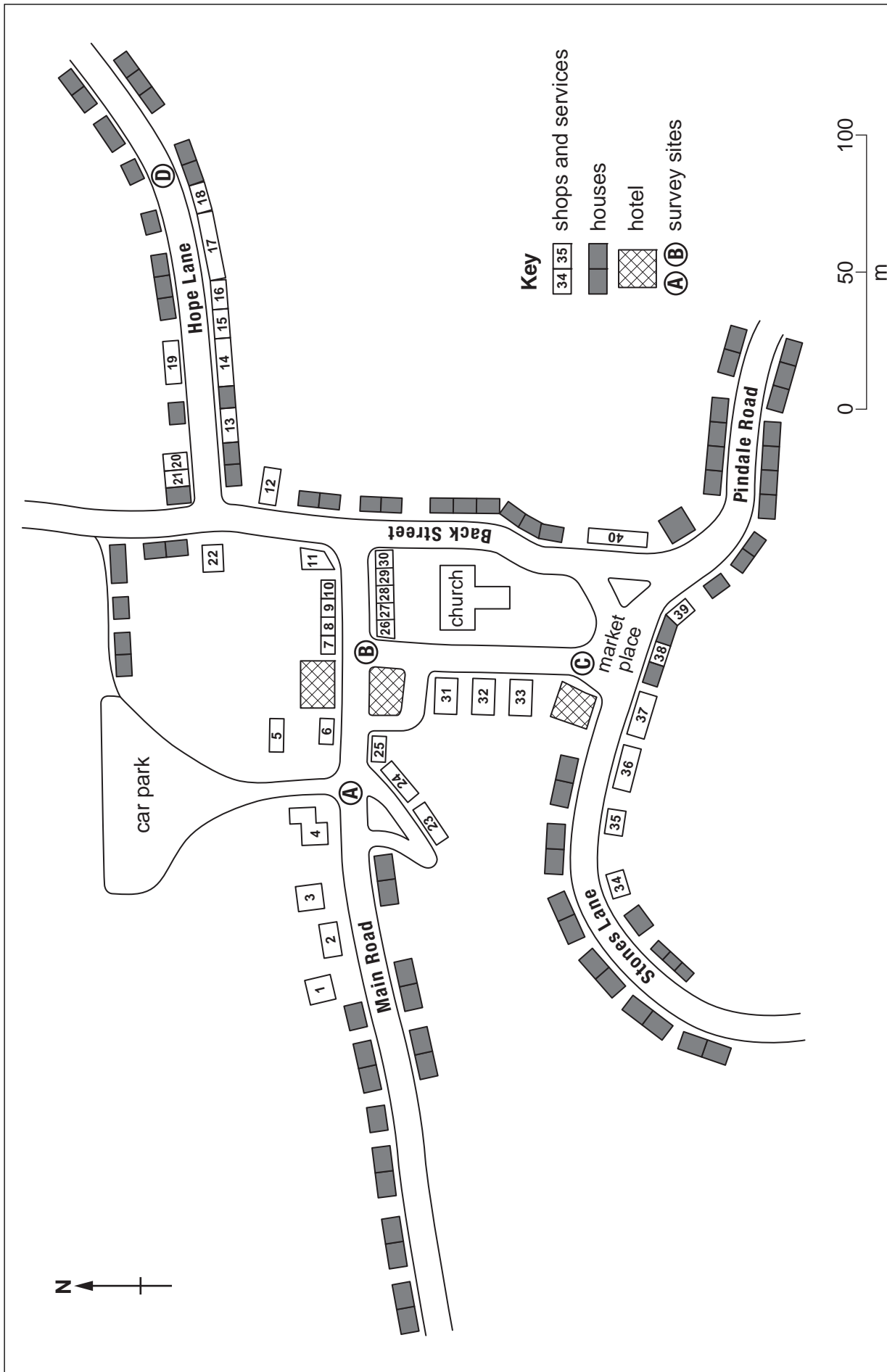
This Insert contains Figs 1 and 3 and Tables 2 and 3 for Question 1 and Figs 5 and 6 and Tables 4, 5 and 6 for Question 2.

The Insert is **not** required by the Examiner.

This document consists of **8** printed pages.



Fig. 1 for Question 1



Key to shops and services

Number on map	Type of shop or service
1	Gift shop
2	Food Take Away
3	Gift shop
4	Tourist Information
5	Sweet shop
6	Public House
7	Restaurant
8	Gift shop
9	Book shop
10	Café
11	Bank
12	Post Office
13	Butcher
14	Food store
15	Baker
16	Sweet shop
17	Public House
18	Hairdresser
19	Food store
20	Flower shop

Number on map	Type of shop or service
21	Chemist
22	Restaurant
23	Gift shop
24	Café
25	Book shop
26	Gift shop
27	Book shop
28	Gift shop
29	Gift shop
30	Café
31	Public House
32	Museum shop
33	Restaurant
34	Food Take Away
35	Flower shop
36	Restaurant
37	Food store
38	Gift shop
39	Café
40	Art Gallery

Table 2 for Question 1

Classification of shops and services

Customers

Used mainly by tourists	Number	Used mainly by local residents	Number	Used by both tourists & local residents	Number
Art Gallery	1	Baker	1	Flower shop	2
Book shop	3	Bank	1	Food Take Away	2
Café	4	Butcher	1	Public House	3
Gift shop	8	Chemist	1	Sweet shop	2
Museum shop	1	Food store	3		
Restaurant		Hairdresser	1		
Tourist Information	1	Post Office	1		
Total	22	Total	9	Total	9

Fig. 3 for Question 1

Scoring sheet for the survey of the impacts of tourism

Site:

	-2	-1	0	1	2	
Lots of litter						No litter
Noisy						Quiet
Crowded						Few people
Many tourist signs and adverts						No tourist signs and adverts
Lots of tourist buildings						No tourist buildings

Table 3 for Question 1

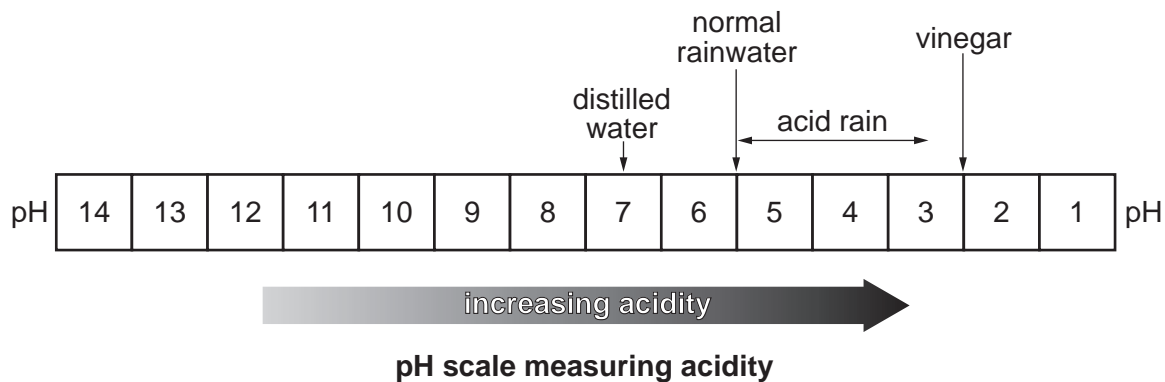
Results of the survey of the impacts of tourism

	Site A	Site B	Site C	Site D
Litter	-1	-2	-1	0
Noise	-1	-2	-1	2
Crowding	-2	-2	0	2
Tourist signs and adverts	-1	-2	-1	2
Tourist buildings	-1	-2	0	1
Total score	-6	-10	-3	7

Fig. 5 for Question 2

Acid Rain fact file

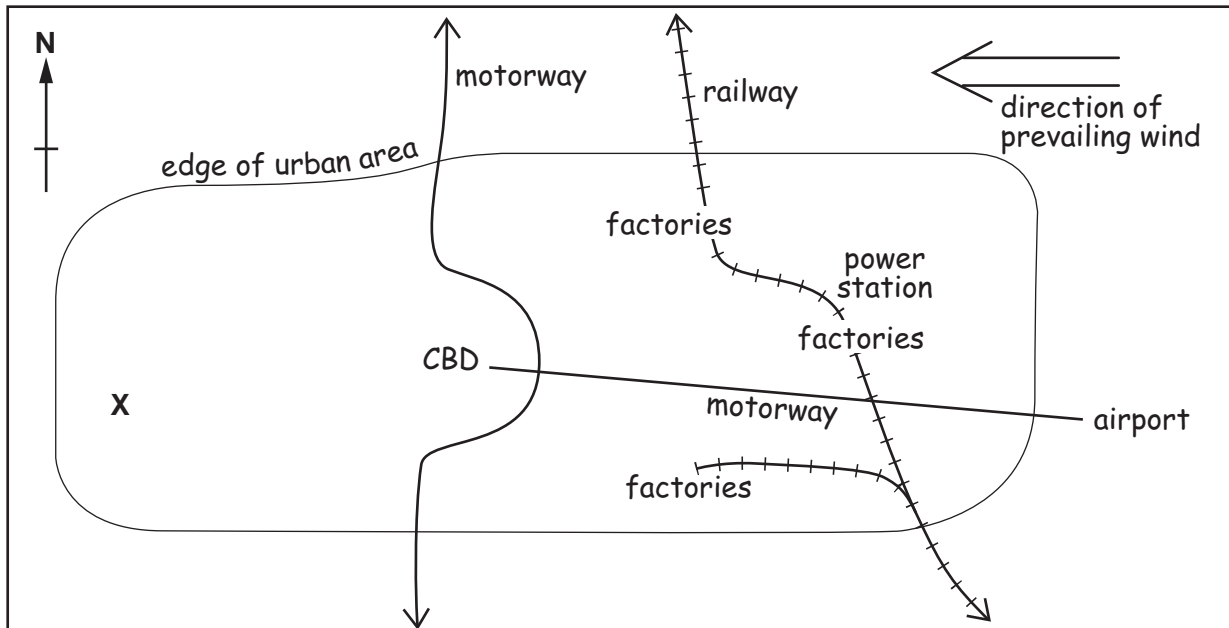
- Pollutants such as sulfur dioxide and nitrogen oxide are produced by human activity. These gases rise into the atmosphere and dissolve in water droplets in the clouds.
- This makes the water droplets become weak acid that later falls as acid rain.
- The acidic water droplets are blown by the prevailing wind so the effects of acid rain occur in different areas to those where the gases are created.
- The strength of acid rain is measured on the pH scale.



6

Fig. 6 for Question 2

Sketch map of the area where the students live (not to scale)

**Key**

CBD Central Business District

X position of students' school

Table 4 for Question 2**Data log of six selected days during the recording period**

Date	Time	Wind direction	Rainfall(mm)	pH value
2-April-09	16.00	East	5	4.4
3-April-09	16.30	South East	12	5.0
29-May-09	20.00	West	0	Not recorded
30-May-09	15.00	North West	Trace	Not recorded
26-July-09	16.00	East	20	4.7
27-July-09	13.30	North East	10	5.0

Table 5 for Question 2**Results of acid rain investigation (wind and pH)**

Direction from which wind is blowing	Number of days wind comes from this direction	Average pH reading
North	6	4.9
North East	20	4.5
East	30	4.3
South East	21	4.9
South	14	5.1
South West	12	5.5
West	10	5.7
North West	7	5.2

Table 6 for Question 2

Results of acid rain investigation (dry days and pH)

Number of dry days before rainfall	Average pH reading
10	4.3
9	4.6
8	4.7
7	5.0
6	4.9
5	5.3
4	5.1
3	5.5
2	5.7
1	5.9
0	5.7

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