

# Reducing Road Accidents

A Mathematics Case Study

Student Handouts

<p><b>Road Safety campaign</b></p> 	<p><b>A poster and leaflet campaign</b> can be effective when it targets a particular cause of accidents. You will need to describe</p> <ul style="list-style-type: none"> <li>• the focus of the campaign,</li> <li>• the time of year it will appear,</li> <li>• the type of person it will target.</li> </ul> <p>You need to renew the campaign each year for it to continue having an effect.</p>	<p><b>£20,000 per year</b></p>
<p><b>Traffic lights</b></p> 	<p>Traffic lights can control the flow of traffic at junctions or other hazards, stopping some traffic while other traffic is allowed to go.</p>	<p><b>£30,000 per junction</b></p>
<p><b>Mini roundabout</b></p> 	<p><b>Mini-roundabouts</b> are often only marked out with white paint. They are used on roads that have an average speed of 30mph or less. They are often used to reduce speed before a series of road humps.</p>	<p><b>£10,000</b></p>

## **STUDENT HANDOUTS**

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## **S1 Instructions for Session 1**

Match the reports with the photographs.

The accident report forms are not complete.

Work out where the accidents took place on the map and enter the missing map references.

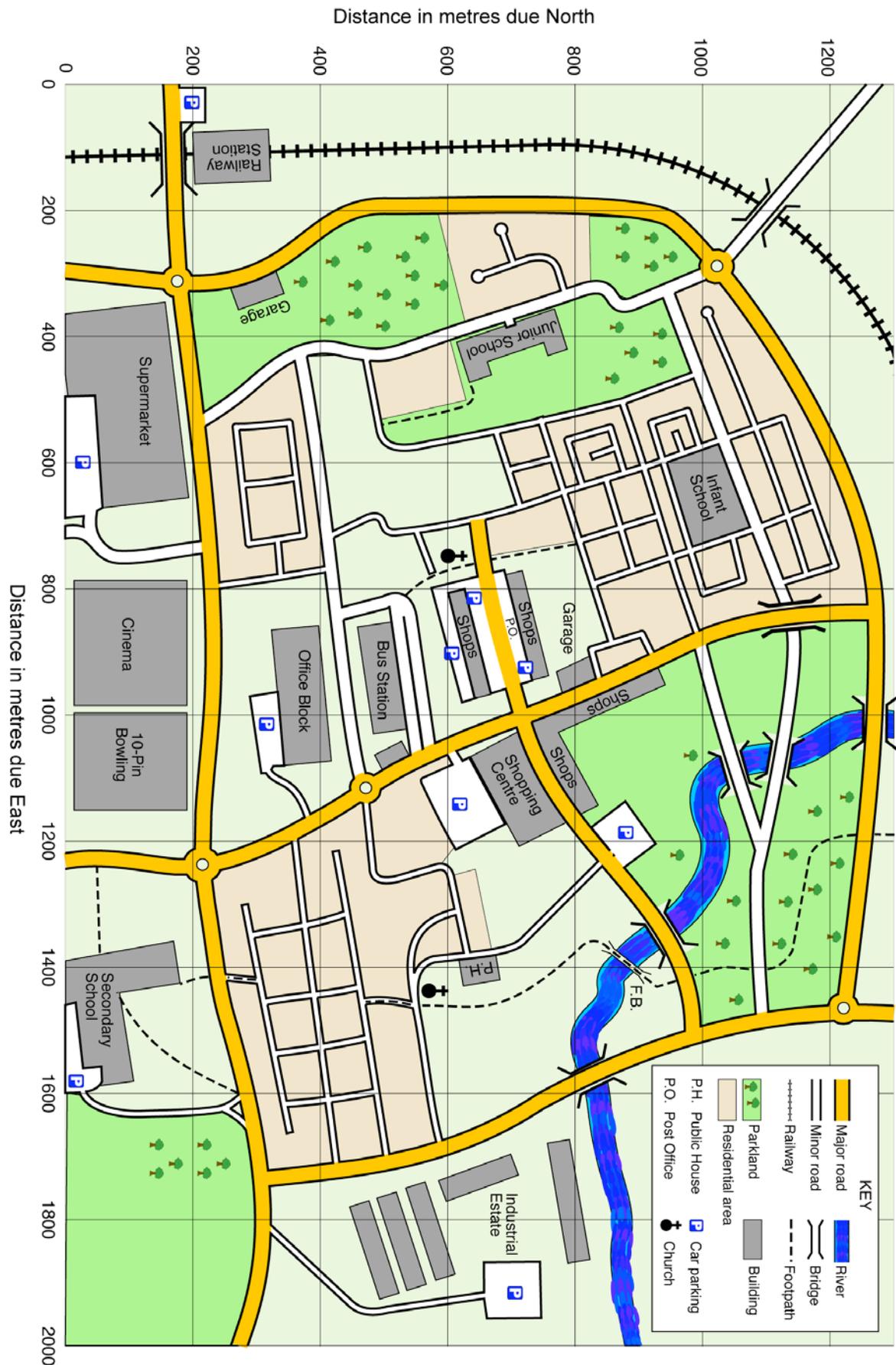
You may also be able to write some road names on the map.

The final accident report form is blank.

Using the remaining photograph, make up your own accident report for this location.

In your group, list some ideas for reducing road accidents.

## S2 Map of the Town



### S3: Six casualty report forms (cut out)

Note: If these are laminated and written on in felt pen, they may be reused.

Police Record 1							
Time <b>08.45</b>	Day <b>Monday</b>		Date <b>8th September</b>			Year <b>1</b>	
Location of accident <b>Ratrun Lane</b>			Map Reference <b>East 475 m North: 1010 m</b>				
Name of casualty <b>Sarah Crowe</b>			Age of casualty <b>30</b>				
Vehicle	<del>Pedestrian</del>	Cyclist	<del>Car</del>	Motorbike	<del>Other vehicle</del>		
Road Conditions	Dry		<del>Wet</del>	Snow		<del>Frost/ice</del>	
Speed limit	<del>40</del>	<del>20</del>	30	<del>40</del>	<del>50</del>	<del>60</del>	<del>70</del>
Severity	<del>Fatal</del>		Serious			<del>Slight</del>	
Description of accident <b>Sarah was cycling along Ratrun Lane when the door of a parked car was opened suddenly. This knocked Sarah off her bike. She had a head injury.</b>							

Police Record 2							
Time <b>15.30</b>	Day <b>Sunday</b>		Date <b>14th September</b>			Year <b>1</b>	
Location of accident <b>Bridge street</b>			Map Reference				
Name of casualty <b>Charles Rambler</b>			Age of casualty <b>38</b>				
Vehicle	Pedestrian	<del>Cyclist</del>	<del>Car</del>	<del>Motorbike</del>	<del>Other vehicle</del>		
Road Conditions	Dry		<del>Wet</del>	Snow		<del>Frost/ice</del>	
Speed limit	<del>40</del>	<del>20</del>	30	<del>40</del>	<del>50</del>	<del>60</del>	<del>70</del>
Severity	<del>Fatal</del>		Serious			<del>Slight</del>	
Description of accident <b>Charles was walking due North along the footpath at the point where the path crosses Bridge Street. The approaching car was unable to see Charles until just before the accident due to the bridge.</b>							

<b>Police Record 3</b>							
Time <b>12:30</b>	Day <b>Thursday</b>		Date <b>18th September</b>			Year <b>1</b>	
Location of accident <b>High Road Shopping precinct</b>				Map Reference			
Name of casualty <b>Rev. Vernon Backup</b>				Age of casualty <b>60</b>			
Vehicle	<del>Pedestrian</del>	<del>Cyclist</del>	Car	<del>Motorbike</del>	<del>Other vehicle</del>		
Road Conditions	<del>Dry</del>		Wet	<del>Snow</del>		<del>Frost/ice</del>	
Speed limit	<del>40</del>	<del>20</del>	30	<del>40</del>	<del>50</del>	<del>60</del>	<del>70</del>
Severity	<del>Fatal</del>		Serious		Slight		
Description of accident <b>Vernon Backup was reversing his car out of a parking space outside the shopping precinct when he collided with an oncoming car. Rev. Backup sustained a minor whiplash injury. His car was badly damaged.</b>							

<b>Police Record 4</b>							
Time <b>16.30</b>	Day <b>Tuesday</b>		Date <b>September 7th</b>			Year <b>2</b>	
Location of accident <b>Narrow lane</b>				Map Reference			
Name of casualty <b>Ben Jay</b>				Age of casualty <b>23</b>			
Vehicle	Pedestrian	<del>Cyclist</del>	Car	<del>Motorbike</del>	<del>Other vehicle</del>		
Road Conditions	<del>Dry</del>		Wet	<del>Snow</del>		<del>Frost/ice</del>	
Speed limit	<del>40</del>	20	<del>30</del>	<del>40</del>	<del>50</del>	<del>60</del>	<del>70</del>
Severity	<del>Fatal</del>		Serious		Slight		
Description of accident <b>Ben was walking home with bags full of shopping in a South Easterly direction. As there was no pavement, he walked on the outside of the bend in order to face oncoming traffic. A car, travelling North west, taking the blind right-hand bend too quickly, hit and injured Ben.</b>							

Police Record 5							
Time <b>17.30</b>	Day <b>Tuesday</b>		Date <b>September 14</b>			Year <b>2</b>	
Location of accident <b>Junction of Station road and Town street near school.</b>				Map Reference			
Name of casualty <b>Maxine Pedaller</b>				Age of casualty <b>58</b>			
Vehicle	<del>Pedestrian</del>	Cyclist	<del>Car</del>	<del>Motorbike</del>	<del>Other vehicle</del>		
Road Conditions	Dry		Wet	Snow		Frost/Ice	
Speed limit	<del>10</del>	<del>20</del>	30	<del>40</del>	<del>50</del>	<del>60</del>	<del>70</del>
Severity	<del>Fatal</del>		Serious			<del>Slight</del>	
Description of accident <b>Maxine was cycling due west along Station road. As she was turning right into Town Street at the roundabout, she was knocked off her bicycle by a lorry. She incurred a serious head injury.</b>							

Police Record 6							
Time	Day		Date			Year	
Location of accident				Map Reference			
Name of casualty				Age of casualty			
Vehicle	Pedestrian	Cyclist	Car	Motorbike	Other vehicle		
Road Conditions	Dry		Wet	Snow		Frost/Ice	
Speed limit	10	20	30	40	50	60	70
Severity	Fatal		Serious			Slight	
Description of accident							

**S4: Photographs of accident locations (cut out)**

**Photo 1: Bend**



**Photo 2: Cross Roads**



**Photo 3: School**



**Photo 4: Shops**



**Photo 5: Roundabout**



**Photo 6: Bridge**



**S5: Ideas for reducing road accidents**

<b>Causes of road accidents</b>	<b>How could they be prevented?</b> (Think of more than one method for each cause!)
1.	
2.	
3.	
4.	
5.	
6.	

## S6: Accident database

Incident ID	Year	Date	Day	Time	Age	Sex	Place (metres)		Vehicle	Weather	Speed limit (mph)	Severity
							East	North				
1	1	1-Jan	Wed	01:30	24	Male	1375	625	Pedestrian	Ice	30	Fatal
2	1	7-Jan	Tue	08:30	16	Male	1225	125	Pedestrian	Wet	50	Slight
3	1	8-Feb	Sat	22:45	19	Male	725	225	Car	Frost	50	Slight
4	1	10-Feb	Mon	17:15	45	Female	1175	1100	Car	Frost	30	Serious
4	1	10-Feb	Mon	17:15	34	Male	1175	1100	Motorbike	Frost	30	Serious
5	1	5-Mar	Wed	08:30	9	Female	425	980	Pedestrian	Wet	30	Serious
6	1	22-Mar	Sat	13:25	55	Male	325	850	Car	Dry	30	Serious
7	1	11-Apr	Fri	15:45	10	Male	600	1050	Pedestrian	Dry	30	Serious
8	1	13-Apr	Sun	09:35	40	Male	1480	980	Pedestrian	Wet	30	Slight
9	1	3-May	Sat	02:30	23	Male	1200	1100	Motorbike	Dry	30	Slight
10	1	5-Jun	Thu	15:50	27	Male	725	1100	Car	Dry	30	Serious
11	1	18-Jul	Fri	16:30	16	Female	1700	320	Cycle	Dry	50	Fatal
12	1	1-Aug	Fri	08:45	9	Female	350	725	Pedestrian	Dry	30	Slight
13	1	8-Aug	Fri	23:15	24	Male	1800	320	Car	Wet	50	Slight
14	1	8-Sep	Mon	08:45	30	Female	475	1010	Cycle	Dry	30	Serious
15	1	14-Sep	Sun	15:30	38	Male	1375	975	Pedestrian	Dry	30	Serious
16	1	18-Sep	Thu	12:30	60	Male	875	700	Car	Wet	30	Slight
17	1	12-Nov	Wed	15:45	8	Female	800	1125	Pedestrian	Wet	30	Serious
18	1	3-Dec	Wed	11:30	35	Female	1100	760	Pedestrian	Dry	30	Serious
19	2	2-Jan	Fri	01:45	19	Male	1375	630	Pedestrian	Ice	30	Serious
20	2	10-Jan	Sat	12:40	20	Male	975	725	Pedestrian	Dry	30	Serious
20	2	10-Jan	Sat	12:40	40	Male	990	725	Car	Dry	30	Slight
21	2	10-Jan	Sat	12:40	26	Female	1425	980	Cycle	Dry	30	Serious
22	2	13-Jan	Tue	12:25	18	Male	300	175	Cycle	Wet	50	Slight
23	2	10-Feb	Tue	15:45	9	Male	450	1005	Pedestrian	Dry	30	Slight
25	2	13-Feb	Fri	15:30	8	Male	410	550	Pedestrian	Frost	30	Slight
24	2	13-Feb	Fri	08:35	8	Female	625	1065	Pedestrian	Frost	30	Serious
26	2	16-Feb	Mon	15:15	16	Male	1375	965	Pedestrian	Dry	30	Slight
27	2	19-Feb	Thu	16:05	15	Male	1600	280	Cycle	Wet	50	Slight
28	2	8-Mar	Mon	08:50	37	Female	600	900	Pedestrian	Wet	30	Slight
29	2	13-Mar	Sat	23:15	18	Female	775	225	Car	Dry	50	Slight
31	2	27-May	Thu	11:55	25	Male	1100	475	Motorbike	Dry	30	Serious
32	2	2-Jun	Wed	17:02	17	Male	1450	260	Cycle	Dry	50	Serious
33	2	28-Jul	Wed	13:20	14	Female	1220	30	Pedestrian	Dry	50	Serious
34	2	28-Jul	Wed	08:45	35	Female	875	700	Pedestrian	Dry	30	Slight
35	2	6-Aug	Fri	20:30	19	Male	775	225	Car	Dry	50	Serious
36	2	6-Aug	Fri	23:15	24	Male	1800	320	Motorbike	Wet	50	Fatal
36	2	6-Aug	Fri	23:15	24	Female	1800	320	Car	Wet	50	Slight
37	2	7-Sep	Tue	16:30	23	Male	685	500	Pedestrian	Wet	20	Serious
38	2	14-Sep	Tue	17:30	58	Female	1225	225	Cycle	Wet	30	Serious
30	2	1-Oct	Fri	08:50	9	Female	650	1075	Pedestrian	Dry	30	Serious
39	2	6-Oct	Wed	18:20	25	Male	1700	320	Motorbike	Wet	50	Serious
40	2	4-Nov	Thu	13:50	45	Female	1025	630	Pedestrian	Wet	30	Fatal
41	2	5-Dec	Sun	14:20	34	Female	950	800	Pedestrian	Dry	30	Fatal
42	2	7-Dec	Tue	12:10	32	Female	800	675	Pedestrian	Dry	30	Slight
43	3	14-Jan	Fri	11:05	30	Female	1050	740	Pedestrian	Wet	30	Slight
44	3	17-Jan	Mon	08:50	14	Male	1300	230	Cycle	Dry	50	Serious
45	3	19-Jan	Wed	15:20	6	Female	650	1075	Pedestrian	Wet	30	Slight
46	3	20-Jan	Thu	15:25	12	Female	1620	150	Pedestrian	Wet	10	Slight
47	3	25-Jan	Tue	13:50	36	Female	450	200	Cycle	Dry	50	Serious
48	3	4-Feb	Fri	08:40	5	Female	375	965	Pedestrian	Frost	30	Serious
49	3	10-Feb	Thu	13:10	45	Female	700	500	Pedestrian	Dry	20	Serious
50	3	9-Mar	Wed	07:30	56	Male	300	1030	Car	Wet	50	Slight
50	3	9-Mar	Wed	07:30	45	Female	300	1030	Car	Wet	50	Slight
51	3	20-Mar	Sun	10:30	67	Male	1400	400	Car	Dry	30	Slight
52	3	1-Apr	Fri	12:15	35	Female	900	700	Car	Wet	30	Slight
52	3	1-Apr	Fri	12:15	13	Female	900	700	Cycle	Wet	30	Slight
53	3	4-Apr	Mon	08:15	45	Male	1900	700	Car	Dry	10	Slight

**S6: Accident database (continued)**

Incident ID	Year	Date	Day	Time	Age	Sex	Place (metres)		Vehicle	Weather	Speed limit (mph)	Severity
							East	North				
54	3	22-Apr	Fri	17:15	23	Male	810	1265	Car	Dry	50	Serious
55	3	9-May	Mon	08:20	16	Male	1400	240	Cycle	Wet	50	Serious
56	3	21-May	Sat	18:20	30	Male	1700	450	Car	Dry	50	Serious
57	3	5-Jun	Sun	11:30	21	Male	600	225	Pedestrian	Wet	50	Slight
58	3	6-Jun	Mon	08:40	32	Female	630	1070	Pedestrian	Dry	30	Slight
59	3	7-Jun	Tue	08:40	6	Female	630	1070	Pedestrian	Dry	30	Serious
60	3	1-Jul	Fri	17:20	28	Male	1800	320	Motorbike	Dry	50	Fatal
61	3	2-Jul	Sat	19:10	19	Male	700	225	Car	Dry	50	Slight
62	3	8-Jul	Fri	22:30	18	Male	1000	230	Pedestrian	Dry	50	Serious
62	3	8-Jul	Fri	22:30	25	Female	1000	230	Car	Dry	50	Slight
63	3	12-Jul	Tue	16:00	15	Male	1500	260	Cycle	Dry	50	Slight
64	3	14-Jul	Thu	15:30	5	Female	650	1075	Pedestrian	Dry	30	Serious
65	3	7-Aug	Sun	14:05	15	Male	1200	1245	Pedestrian	Dry	50	Serious
66	3	17-Aug	Wed	11:10	25	Male	850	675	Pedestrian	Dry	30	Slight
67	3	18-Sep	Sun	21:10	19	Male	1350	630	Pedestrian	Wet	30	Slight
68	3	25-Sep	Sun	13:05	20	Female	1400	980	Pedestrian	Dry	30	Serious
69	3	1-Oct	Sat	17:10	40	Male	1175	360	Car	Wet	30	Serious
70	3	8-Oct	Sat	22:15	35	Female	950	240	Motorbike	Wet	50	Slight
71	3	26-Nov	Sat	00:10	19	Male	1400	560	Pedestrian	Frost	30	Serious
72	3	30-Nov	Wed	18:50	28	Male	225	1075	Motorbike	Wet	50	Serious
73	3	1-Dec	Thu	12:30	35	Female	1000	700	Car	Dry	30	Serious
74	3	10-Dec	Sat	10:30	18	Female	1200	850	Pedestrian	Wet	30	Slight
75	3	24-Dec	Sat	18:00	40	Male	1375	575	Car	Frost	30	Fatal
76	4	1-Jan	Sun	13:45	20	Female	1450	565	Pedestrian	Wet	30	Slight
77	4	2-Jan	Mon	14:10	30	Male	125	170	Car	Wet	40	Slight
78	4	3-Feb	Fri	08:20	12	Male	645	785	Cycle	Frost	30	Fatal
78	4	3-Feb	Fri	08:20	17	Male	645	785	Motorbike	Frost	30	Serious
79	4	6-Feb	Mon	17:30	39	Female	1725	320	Car	Wet	50	Serious
79	4	6-Feb	Mon	17:30	20	Male	1725	320	Car	Wet	50	Serious
80	4	10-Feb	Fri	15:45	9	Male	445	1005	Pedestrian	Dry	50	Slight
81	4	15-Feb	Wed	08:35	9	Male	395	570	Pedestrian	Frost	30	Slight
82	4	16-Feb	Thu	15:15	16	Male	1375	975	Pedestrian	Dry	30	Slight
83	4	20-Feb	Mon	15:30	8	Female	625	1070	Pedestrian	Dry	30	Serious
84	4	2-Mar	Thu	18:20	35	Female	1200	210	Car	Wet	50	Slight
84	4	3-Mar	Fri	18:20	15	Male	1200	210	Cycle	Wet	50	Slight
85	4	7-Mar	Tue	16:30	16	Male	1400	240	Pedestrian	Dry	50	Fatal
86	4	7-Mar	Tue	16:00	5	Female	650	1075	Pedestrian	Wet	30	Slight
87	4	9-Mar	Thu	16:45	10	Female	350	725	Pedestrian	Dry	30	Slight
88	4	7-Apr	Fri	18:40	18	Male	725	225	Motorbike	Dry	50	Fatal
88	4	7-Apr	Fri	18:40	28	Female	725	225	Car	Dry	50	Serious
89	4	11-Apr	Tue	18:20	35	Female	1150	400	Car	Dry	30	Serious
89	4	11-Apr	Tue	18:20	24	Male	1150	400	Car	Dry	30	Serious
90	4	5-May	Fri	23:12	19	Male	1325	625	Pedestrian	Dry	30	Fatal
91	4	6-May	Fri	07:50	19	Male	1480	1100	Motorbike	Wet	30	Slight
92	4	11-May	Thu	17:30	18	Male	1245	500	Motorbike	Dry	30	Fatal
92	4	11-May	Thu	17:30	20	Male	1245	500	Car	Dry	30	Serious
93	4	9-Jun	Fri	15:40	13	Male	100	175	Cycle	Wet	40	Serious
94	4	13-Jul	Thu	16:50	8	Male	360	675	Pedestrian	Wet	30	Slight
95	4	15-Jul	Sat	12:20	29	Female	1000	725	Car	Dry	30	Slight
96	4	28-Jul	Fri	08:45	15	Male	1220	30	Pedestrian	Dry	50	Serious
97	4	1-Aug	Tue	14:00	23	Male	1475	975	Pedestrian	Dry	30	Fatal
98	4	2-Aug	Wed	19:10	16	Male	820	435	Cycle	Dry	30	Fatal
98	4	2-Aug	Wed	19:10	35	Female	820	435	Car	Dry	30	Serious
99	4	14-Aug	Mon	07:45	30	Female	1450	1220	Car	Dry	50	Serious
99	4	14-Aug	Mon	07:45	40	Male	1450	1220	Car	Dry	50	Serious
100	4	15-Aug	Tue	18:10	30	Male	875	550	Pedestrian	Dry	20	Slight
101	4	11-Nov	Sat	23:10	16	Male	700	500	Pedestrian	Wet	30	Fatal
101	4	11-Nov	Sat	23:10	28	Male	700	500	Car	Wet	30	Serious
101	4	11-Nov	Sat	23:10	25	Female	700	500	Cycle	Wet	30	Serious
102	4	6-Dec	Wed	16:45	9	Male	350	700	Pedestrian	Wet	30	Fatal
103	4	23-Dec	Sat	19:20	18	Female	700	225	Car	Wet	50	Serious
103	4	23-Dec	Sat	19:20	18	Female	700	225	Cycle	Wet	50	Serious

**S7: Making notes on your ideas (optional)**

Each time you think you have found a possible cause of accidents, note down your thoughts in this table:

What is a possible main cause of accidents?	
Where do they occur?	What is my evidence?
When do they happen?	What is my evidence?
Who do they happen to?	What is my evidence?
What might be done to reduce the number of accidents?	

**S8: Some possible lines of enquiry (optional)**

Here are some possible questions you could ask yourself as you begin.  
 Choose one of the following lines of enquiry.  
 The dots ... mean 'carry on asking questions'.  
 See how far you can get!

<p>Where do the fatal road accidents occur?                  On what day do these accidents happen?                  At what times do they happen?                  Which age groups are involved?                  .....</p> <p><b>So – why might these fatal accidents happen?</b></p>	<p>Which age group has the most road accidents?                  Where are these accidents?                  Do they mostly involve males or females?                  ...</p> <p><b>So – why might these accidents have happened?</b></p>
<p>At what time of day do most road accidents happen?                  Where do these accidents happen?                  What ages are involved?                  ...</p> <p><b>So – why might these accidents have happened?</b></p>	<p>Where do most teenagers have accidents?                  Which vehicles are involved?                  Is it mostly males or females that are involved?                  ....</p> <p><b>So – why might these accidents have happened?</b></p>
<p>Where do most of the weekend accidents occur?                  At what times of day are these?                  Where are they on the map?                  ....</p> <p><b>So – why might these accidents have happened?</b></p>	<p>Where do most of the lunchtime accidents occur?                  Is it mostly males or females that are involved?                  ....</p> <p><b>So – why might these accidents have happened?</b></p>

## **S9: Group task sheet**

### **A plan for improving road safety**

You have a budget of £100,000 to spend on reducing road accidents. Your task is to prepare a plan for the town council answering the following questions:

1. What are main reasons for the road accidents?  
Where are the accidents located?  
Who do they affect most?  
When do they happen?
2. What is your evidence?  
Use maps, graphs and charts to back up your answer.
3. Suggest a possible plan for reducing the number of these road accidents. Use some of the suggestions on sheet S10. Keep within your budget!
4. What would be the total cost of your plan?
5. About how many lives will you save?

Of course, there might be more than one problem, so there is likely to be more than one solution!

Prepare your case carefully, as you will need to present your arguments to the whole class.

#### **Remember:**

**The best case will be the one that is likely to save the most lives and keep within budget. Try to make your case persuasive and back it up with evidence.**

## S10: Possible measures for improving road safety

<p><b>Road Safety campaign</b></p> 	<p><b>A poster and leaflet campaign</b> can be effective when it targets a particular cause of accidents. You will need to describe</p> <ul style="list-style-type: none"> <li>• the focus of the campaign,</li> <li>• the time of year it will appear,</li> <li>• the type of person it will target.</li> </ul> <p>You need to renew the campaign each year for it to continue having an effect.</p>	<p><b>£20,000 per year</b></p>
<p><b>Traffic lights</b></p> 	<p>Traffic lights can control the flow of traffic at junctions or other hazards, stopping some traffic while other traffic is allowed to go.</p>	<p><b>£30,000 per junction</b></p>
<p><b>Mini roundabout</b></p> 	<p><b>Mini-roundabouts</b> are often only marked out with white paint. They are used on roads that have an average speed of 30mph or less. They are often used to reduce speed before a series of road humps.</p>	<p><b>£10,000</b></p>
<p><b>Large roundabout</b></p> 	<p><b>Large roundabouts</b> are used to control the flow of traffic at junctions between major roads.</p>	<p><b>£40,500</b></p>
<p><b>Road narrowings</b></p> 	<p><b>Road narrowings</b> slow traffic down by forcing one stream to give-way to the other. When they are on both sides of the road they are called <b>chicanes</b> or <b>pinch points</b>.</p>	<p><b>£10,000</b></p>

<p><b>Pelican crossing</b></p> 	<p><b>Pelican crossings</b> control vehicle and pedestrian movements with traffic lights. Pedestrians must wait for the 'green man' before crossing the road</p>	<p><b>£18,000</b></p>
<p><b>Cycle lane</b></p> 	<p><b>Cycle lanes</b> help keep bikes separate from other road users. They can be either on the side of the road or off-road.</p>	<p><b>£60 per metre</b></p>
<p><b>Traffic island and pedestrian refuge</b></p> 	<p><b>Traffic islands</b> in the centre of a road to help reduce vehicle speeds and stop over-taking. If it includes a gap in the middle of the island it is called a <b>refuge</b>; it allows pedestrians to cross half the road at a time.</p>	<p><b>£3,000</b></p>
<p><b>Speed camera</b></p> 	<p>Speed cameras automatically photograph the number plates of drivers exceeding the speed limit. Many speeding drivers have been convicted by the photographic evidence.</p>	<p><b>£25,000</b></p>
<p><b>Speed humps</b></p> 	<p><b>Speed humps</b> can only be put on roads with speed limits of 30 mph or less. A series of humps should be about 50 metres apart and have a speed reducing feature at both ends, such as a road narrowing or mini roundabout.</p>	<p><b>£1,000 per hump</b></p>
<p><b>School crossing patrol</b></p> 	<p>A lollipop lady can help to ensure the safety of younger children. It is helpful if approaching traffic is slowed down by other measures.</p>	<p><b>£5,000 per year</b></p>

## S11: Presentation feedback sheet

**Names of Presenters**

**What was good about the reasoning given?**

**How could the reasoning have been improved?**

**Were you convinced by the argument?  
Why was this?**

## **S12: Evaluating our own presentation**

**Names of Presenters**

**What was good about what we did?**

**How could our own reasoning have been improved?  
What did we forget? What did we do wrong?**

**What have you learned from this activity?**