

Checklist Daily Trip to School

School:.....

Group (names of all pupils):.....

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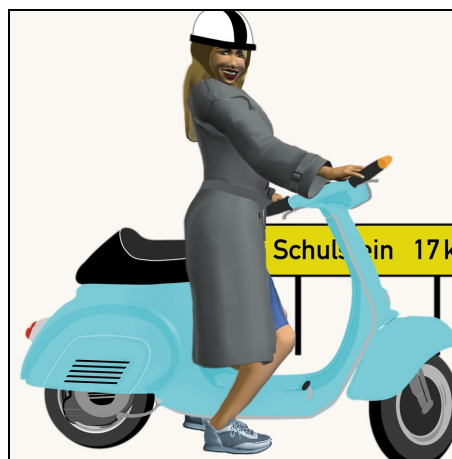
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Taker of the minutes:

Tutor of the group (name, position):.....

Dialogue partners (name, position):

Date:



Each day there are a lot of people who come to our school – they walk, cycle or come by bus, train or use other means of transport. Examine these daily trips to school! Find out the impact our traffic has on our environment! Think about the conditions you meet as someone who takes part in traffic and how – if necessary – these could be improved!

Try to work independently as much as possible and ask your teacher for help if necessary.

Answer the questions in sequence! Be considerate when walking through the school! If possible take pictures that are in line with your topic!

1 The daily trip to school of the pupils

First find out how pupils go to school every day and which distances they cover.

a) First prepare for the questioning:

You should interview at least 10 % of all the pupils of all grades.

You should fill one line of the checklist (on the next page) for each respondent – so do enough copies of the checklist.

Ask which grade they are in and enter this in column 2 of the checklist.

Ask which is the *most important* means of transport for their daily trip to school (so if someone walks 500 m to the bus station and then goes by bus, you only count the trips by bus, or if someone goes to school by car 4 times a week and cycles just once you only count the car). Mark the corresponding column with a cross.

Determine the distance for a *single trip* and enter it into column 7.

Ask for the time they need for a single trip and enter it into column 9.

The two grey columns only need to be filled after questioning (see task 1c).

Best would be to do the questioning in pairs of two, so one can ask the questions and the other one takes notes of the answers.

If you notice anything special during questioning, write it down at the end of the page.

Before you start discuss with your teacher how you want to proceed!

b) Now start the questioning.

Climate detectives: checklist daily trip to school p. 2

Daily trip to school									
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9	Column 10
Pupil	Grade	On foot bicycle, skater	Bus, train, tram, tube, railway	Moped, motorbike	Car	Distance for a single trip (km)	Distance per year (km)	Time for a single trip (min)	Time per year (min)
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
Sum:								Sum:	

Climate detectives: checklist daily trip to school p. 3

c) Now evaluate the questioning:

Calculate the distances *for each respondent* per school year by multiplying the distance for one single trip by 380 (about 190 trips to school and 190 back home per year). Enter the results into column 8.

Calculate the times *for each respondent* per year by multiplying the time needed for a single trip by 380. Enter the results into column 10.

Calculate the sum of all the trips you recorded for *each single means of transport* and enter this into the following list (column B). Divide this sum by the number of all pupils you questioned (column C).

Multiply this value by the number of all pupils of the school (column D) – thus you calculated the total trip (in km) that is done by pupils in one particular means of transport per year. You can multiply this value by thefactor (column E) – you now get the respective CO₂-emissions, enter them into column F.

Column A	Column B	Column C	Column D	Column E	Column F
Means of transport	Sum of the distances per year (km)	÷ number of all the pupils you questioned	x number of all the pupils of the school	Factor	CO ₂ -emissions (kg per year)
On food bicycle, skater...				0 kg CO ₂ /km	
Bus, DB Tram, S/U-Bahn				0,06 kg CO ₂ /km	
Bus, train, tram, tube, railway				0,1 kg CO ₂ /km	
Caro				0,2 kg CO ₂ /km	
Sum (km):				Sum (kg CO ₂):	

d) Calculate the average time a pupil needs for their daily trip to school! Think yourself how to proceed!

Calculate the result in hours and enter it here:

2 The daily trip to school of the teaching personnel

Also find out how the teachers get to school every day and which distances they do. Proceed in the same way as you did for the pupils. Ask at least 10 %. You can use the same checklists, apart from column 2 which of course is left out.

Daily trip to school of the teaching personnel – summary

Means of transport	Sum of the distances per year (km)	÷ number of all the teachers you questioned	x number of all the teachers of the school	Factor	CO ₂ -emissions (kg per year)
On food bicycle, skater...				0 kg CO ₂ /km	
Bus, DB Tram, S/U-Bahn				0,06 kg CO ₂ /km	
Bus, train, tram, tube, railway				0,1 kg CO ₂ /km	
Caro				0,2 kg CO ₂ /km	
Sum (km):				Sum (kg CO ₂):	

3 Conditions for those who take part in traffic

Find out about the conditions offered by the school to those who take part in the different kinds of transport. For this have a look around the school grounds.



a) Cyclists: How much parking space is there for bicycles on the school grounds?

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Is it sufficient? yes no

Are the bike racks safe (solid, firm, no rust or sharp edges)? yes no

Are the bikes protected from rain? yes no

Are they protected from theft? yes no

Are you satisfied with the parking space for bicycles? yes no

Do you have any more remarks?

.....

b) Cars (mopeds, motorcycles): How much parking space is there on the school grounds?

Is it sufficient? yes no

Are the drivers satisfied with the parking spaces? yes no

Do you have any more remarks?

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c) Busses and trains: How far to the next stop?

Are you protected from bad weather at the stop? yes no

Do the time-tables of transport and school go well together? yes no

Are you able to pass waiting times at school? yes no

Are you satisfied with the transport by bus and train? yes no

Do you have any more remarks?

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4 Effects of traffic

Observe the effects the traffic has on our school:

a) Noise: Traffic	is quiet	can be heard	loud and disturbing
in the schoolyard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
in the classrooms with the window open	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
in the classrooms with the window closed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Is it particularly loud anywhere? Where?.....

When is it particularly loud?

Who also makes noise that can be heard at the school?

b) Exhaust fumes: Can you smell any traffic exhaust fumes in front of the school? yes no

Ask you r teacher of the secretary:

c) Accidents: Were teachers or pupils involved in any accidents in the past few years?

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Which means of traffic were involved?

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5 Evaluation and presentation

Try to evaluate your findings: What is good – what is less good about the daily trips to school of the pupils and teachers of our school?

It is good...

It is less good...

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Discuss what we could do better!

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Think about how you would like to present your results to other pupils and teachers!

Try to visualise the distances done by all pupils and teachers together during one year. Find comparable distances on a map: Is it a distance like the one from Hamburg to Munich for example – or from Berlin to Peking?

Try to visualise the amount of carbon dioxide that is set free by this traffic. First calculate the volume of our CO₂-emissions (1 kg carbon dioxide gas equals about 0,5 m³). Get some balloons which you can inflate to a volume of 5 l. Calculate how many balloons you would need to cover all our CO₂-emissions!

Describe the most amazing experiences you have had on your way to school so far. You could write a newspaper report for example or draw a comic strip. Ask the editors of the school magazine if they could publish it!

Imagine what an agreeable and environmentally friendly trip to school might look like. Describe it in a short story or a comic strip and again ask the school magazine to publish it.

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Now get ready to present your results!

