Investigate - Car Idling Survey!

This activity is adapted from **EPA's Idle-Free Schools Toolkit**



PROCEDURES:

How much gas was burned idling?

Select your location & survey time. Your location could be at your school, sports field or other site where cars are observed idling. For example, surveying a school ½ hour prior to school letting out is ideal.

SUPPLIES:

- Idling Data Form
- Watch or Phone
- **Practice Safety!** Survey in safe locations remain on sidewalks and not on active roads. Depending on your age, sample with a partner or responsible adult.
- **Conduct Survey.** Complete the Idling Observation Form for all vehicles in your survey zone over a period of at least 20-30 minutes. If asked, inform drivers that you are collected data on the types of cars on the road and driving behavior in general.
- **#**4 Calculate Results. Calculate the gallons burned, money spent and CO₂ released idling.

DATA RESULTS & ANALYSIS:

•	-			
Total minutes idling (cars)	\bigotimes	.0053 gallons of gas/minute		Total gallons of gas burned (cars)
 Total minutes idling (trucks) XX	.0118 gallons of gas/minute		Total gallons of gas burned (trucks)
How much money was spe	ent idlir	ng?	C + T	Total gallons of gas burned (all vehicles)
Total gallons of gas burned (all vehicles)	\bigotimes	price per gallon of gas	\$ \$	Money spent idling Money/year (multiply by 365)
How much carbon dioxide Total gallons of gas burned (all vehicles)	was re	eleased idling? 20 pounds of CO₂ released/gallon		Total pounds of CO₂ released Pounds CO₂ /year (multiply by 365)

REFLECTION:

Is idling a problem at this location? If so, what steps can be taken to reduce idling?

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Idling Observation Form

Observer N	lame:				
Location:_					
Day of Week: Date:_		Date:	Tim	ne:	
Weather (circle one):				
Sunny	Partly Clo	udy/Sunny	Cloudy	Precipitating	Windy
Outside Te	emperature (c	ircle one):			
Hot	Mild	Cool	Cold	Estimated Temp:	

						•	
Vehicle (passenger cars) or Truck (pick-	Brief Vehicle	Arrival Time		hicle ng?	Depart Time	If idling: how	Notes
up truck, SUVs, or	Descrip-		(Y/N)			many	
minivans)	tion		` '	,		minutes?	
	CIOTI					minutes:	
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