

Town of Aurora Anti-Idling Toolkit:
printable resources and school
curriculum connections



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SAMPLE NEWSLETTER TO PARENTS/GUARDIANS

Date

Re: (School) is now Idle-Free

Dear Parents and Guardians,

On <Date> we are officially launching our Idle-Free Campaign. Our Aurora Eco-Activist Committee will be taking charge to educate the public on Aurora's new Anti-Idling Policy and the issues with idling. Alongside, our school will be participating in monthly environmental challenges related to this campaign. Please join us and offer your support by no longer idling outside of the school.

Studies by Health Canada and community health departments demonstrate a direct link between air pollution and respiratory health effects. Studies reveal that vehicle emissions are a large contributor to air pollution and smog resulting in hospitalization, illnesses and other health issues. Children are particularly vulnerable to air pollution as they breathe in more air per kg of body weight than adults. Not only can vehicle emissions lead to health issues among staff and students, but it is also contributing to climate change through the production of additional greenhouse gases. For these reasons, <School> will be Idle-Free.

In the coming weeks, you will notice our Eco-Activist committee communicating with drivers this important message. Please keep an eye out and take the time to hear their message for cleaner air and sign the pledge to stop idling.

See attached educational brochure on anti-idling.

Optional: If your child is interested in joining the Eco-Activist committee, it is not too late. Please contact _____.

Sincerely,
<Name>

Attach visual infographic/fact sheet to e-mail/Newsletter and Aurora by-law.

SAMPLE NEWSLETTER TO BUS COMPANY

Date

Re: (School) is now Idle-Free

Dear <Bus Company>,

<School> will be collaborating with the Town of Aurora's first campaign launch "Idle Free Aurora" to promote the new Anti-Idling Policy and educate the public on the negative effects of idling.

On <Date> we are officially launching our Idle-Free Campaign. Please join us and offer your support by no longer idling outside of the school.

Studies by Health Canada and community health departments demonstrate a direct link between air pollution and respiratory health effects. Studies reveal that vehicle emissions are a large contributor to air pollution and smog resulting in hospitalization, illnesses and other health issues. Children are particularly vulnerable to air pollution as they breathe in more air per kg of body weight than adults. Not only can vehicle emissions lead to health issues among staff and students, but it is also contributing to climate change through the production of additional greenhouse gases. For these reasons, <School> will be Idle-Free.

In the coming weeks, you will notice our Eco-Activist committee communicating this important message. Please keep an eye out and take the time to hear their message for cleaner air and sign the pledge to stop idling.

[See attached educational brochure on anti-idling.](#)

Sincerely,
<Name>

Attach visual infographic/fact sheet to e-mail/Newsletter and Aurora by-law.

IDLE-FREE PLEDGE FORM

"I pledge to turn off my engine if I plan on being stopped for more than 30 seconds (unless in traffic) to reduce greenhouse gas emissions, improve air quality and health, and save fuel.

By signing this pledge, I also agree to support anti-idling by sharing information with others; trying to carpool, bike, or walk where possible; and avoid using remote control car-starters."

Name of Student collecting: _____

Date: _____

	Name (Printed)	Signature	Email (optional) For more information on anti-idling
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

SAMPLE INTERVENTION SCRIPT

Note: it is recommended students wear some sort of Aurora Eco-Activist badge or School-logo so drivers are able to clearly identify where this information is coming from.

FOR IDLING DRIVERS:

Introduce yourself - your name and who you are representing

"Hi there, my name is _____ and I am a part of the Aurora Eco-Activist Committee here at _____(name school)."

Introduce the campaign and the key messages within

"We are currently running an anti-idling campaign and are hoping to educate the school and community on the negative effects of idling and the new Town of Aurora Anti-Idling Policy. We are now an Idle-Free zone. Would you like to hear more about it?"

If NO, say "thank you" and move on. If YES, proceed:

"By idling your vehicle you are emitting carbon dioxide and other toxic pollutants into the atmosphere. This is contributing to climate change! Additionally, idling causes air pollution that can lead to negative health effects such as respiratory issues. Did you know that children are extra vulnerable to air pollution as they breathe in more air compared to adults? Aside from the environment and health, idling is costing you money - both wasting fuel and wearing down your car!"

"Would you be willing to commit to being an Idle-Free driver, especially on our school grounds, by signing this pledge?"

Offer drivers an information fact sheet

"Thank you and have a great day"

FOR NON-IDLING DRIVERS

Introduce yourself - your name and who you are representing

"Hi there, my name is _____ and I am a part of the Aurora Eco-Activist Committee here at _____(name school)."

Introduce the campaign and the key messages within

"We are currently running an anti-idling campaign and are hoping to educate the school and community on the negative effects of idling and the new Town of Aurora by-law. We are in fact now an Idle-Free Zone and would like to thank you for turning off your vehicle while you wait. Would you be willing to commit to being an Idle-Free driver, especially on our school grounds, by signing this pledge?"

Offer them an additional information fact sheet

"Thank you and have a great day"

ONTARIO CURRICULUM CONNECTIONS

Below are some of the different ways that anti-idling education can be connected to school curriculum. Please be advised that these are only rough guidelines, and each teacher/ school should make their own assessment of curriculum needs. While every effort has been made to ensure accuracy, we recommend that teachers review both the curriculum and the connections.

Grades 1-8
The Arts
Curriculum Strands
<ol style="list-style-type: none"> 1. Creating and Presenting/Performing 2. Reflecting, Responding, and Analysing 3. Exploring Forms and Cultural Contexts <ol style="list-style-type: none"> A. Dance B. Music C. Visual Arts
Curriculum Connection
<p>A1: Create a dance in response to how the effects of idling makes them feel B1: Interact in a skit about idling and the negative effects/ways forward D1: Express feelings and ideas on experience with air pollution/climate change</p>
Health and Physical Education
Curriculum Strands
<p>Strand B: Active Living Strand C: Movement Competence: Skills, Concepts, and Strategies Strand D: Healthy Living</p>
Curriculum Connection
<p>Personal safety and injury prevention can be implemented into the topic of contributing to air pollution and climate change through idling.</p> <p>D3. Making Connections for Healthy Living</p>
Languages & FSL

Curriculum Strands

1. Oral Communication
2. Reading
3. Writing

Curriculum Connection

1. Oral communication: speak and interact on idling; brainstorm the effects of it
2. Reading: analyzing media/graphic text forms such as newsletters, infographics, etc. on anti-idling. Educators can use the graphics/newsletters provided by the school and present in this toolkit.
3. Writing: students can proof-read and correct a text or essay on anti-idling; students can write for different audiences using the topic of idling or air pollution.
4. Media literacy: analyze anti-idling info-graphics and powerful images on idling/air pollution

Mathematics

Curriculum Strands

- A. Social Emotional Learning Skills in Mathematics and the Mathematical Process
- B. Number
- C. Algebra
- D. Data
- E. Spatial Sense
- F. Financial Literacy

Curriculum Connection

- Use questions using idling data, statistics and facts (i.e. "If a car that idles for 10 minutes uses X amount of fuel...")
- The calculations of idling and fuel waste/emissions itself
- Incorporation of discussion of climate change (Strand A)
- Connecting cost-saving with fuel and idling (Strand F)

Science & Technology

Curriculum Strands & Key Related Topics

1. Understanding Life Systems:
 - Grade 1: Needs of Living things
 - Grade 4: Habitats and Communities
 - Grade 6: Biodiversity
 - Grade 7: Interactions in the Environment
2. Understanding Structures and Mechanisms:
 - Grades 1-8
3. Understanding Matter and Energy:
 - Grade 2: Liquids and solids
 - Grade 5: Properties of and changes in matter

- Grade 6: Electricity
- 4. Understanding Earth and Space Systems:
 - Grade 2: Air and Water in the Environment
 - Grade 3: Soils in the Environment
 - Grade 5: Conservation of Energy and Resources
 - Grade 7: Heat in the Environment
 - Grade 8: Water Systems

Curriculum Connections

1. Understanding Life Systems:
 - Discuss how air pollution impacts human health
 - Connection on air pollution and idling, climate change and biodiversity
 - Connection on habitats and communities contribute to air pollution (idling cars!)
 - Students can create a mindmap, poster, discuss, present these concepts
2. Understanding Structures and Mechanisms:
 - Incorporate the idea of car structures in questions and discussions
 - One can analyze and discuss structure, gears, mechanisms of the car and how they need fuel to function. Can discuss where the exhaust is and what comes out of it. While these function, students can reflect upon what they cause to the environment.
 - Students can be in groups and provided different parts of a car (pully, gear, fuel tank, tire) and discuss how it may impact the environment.
 - Can play "guess who" with structure of a car using idling and air pollution words (i.e. this part of the car is found at the back, it is a metal tube and releases exhaust that produces Co2")
3. Understanding Matter and Energy:
 - Can utilize the topic of gas, and Co2 as a topic/example questions
4. Understanding Earth and Space Systems:
 - Connect the topic of Co2 emissions to air and water pollution, climate change and soil degradation, global warming.
 - Connection of conserving resources of oil for fuel - what can we do? Reducing idling saves fuel!

1-6 Social Sciences ; 7-8 History & Geography

Curriculum Strands

Grade 1-6 Social Studies

Strand A: Heritage & Identity
Strand B: People and Environments

Grade 7 History

Strand A: New France and British North America, 1713-1800.
Strand B: Canada, 1800-1850: Conflict and Challenges.

Grade 8 History

Strand A: Creating Canada, 1850-1890
Strand B: Canada, 1890-1914: A Changing Society

Grade 7 Geography

Strand A: Physical Patterns in a Changing World
Strand B: Natural Resources around the World: Use and Sustainability

Grade 8 Geography

Strand A: Global Settlement: Patterns and Sustainability
Strand B: Global Inequalities: Economic Development and Quality of Life

Curriculum Connections

Grade 1-6 Social Studies

- B. People and Environments:
- Students can examine the different regions in the world (local, national and global) in terms of use of vehicles and amount of idling occurring. Students can connect that it is a citizen/social responsibility to keep the air clean (Responsible Citizenship)
- Students can explore the interrelationships between humans and the environment
- Students can write letters to the government discussing why they must monitor air pollution with idling
- Students can use idling and air pollution data for mapping and graphing

Grade 7 History

- A1.1
- Comparing the lives of people to present-day Canada - can discuss the difference in air pollution, consumerism, use of technology and vehicles and the state of the environment. How do Indigenous/FNMI live compared to non-Indigenous peoples then and now?

Grade 8 History

- A3.3, A3.5
- Explain the impact of historical events and how it impacted FNMI everyday lives compared to ours. Who is impacted most by climate change issues? (Water contamination)

Grade 7 Geography

- Strand A: strong connection to human activities and the change of the environment. Can connect air pollution and idling to this. Additionally, connections of extraction of fossil fuels for cars contributing to air pollution and climate change. Further connection of viewing environmental catastrophes from different perspectives (FNMI)

are possible.

○ A1.1, A1.2, A1.4, A2.,1 A2.2, A2.3, A3.5, A3.10

- Strand B: the extraction of oil in connection to Co2 and fossil fuels and a sustainable future; how is oil extraction impacting different people? (Geographic perspectives)

○ B1.4, B2.1, B3.2, B3.3

Grade 8 Geography

- *Strand A*

- Strong connection to human use of resources and sustainability. Here, you can connect the human use of cars and fossil fuels to climate change and air pollution.

- Additionally, the many trends of idling differentiating in region and time in society can be analyzed (ex: now versus a different region, era, etc.).

- Using idling regions as a database for mapping, patterns & trends.

- Analyzing sustainable ways forward to idling

○ A1.2, A2.1, A2.5, A3.1, A3.5, A3.2, A3.6, A3.7

- *Strand B*

- Can analyze air pollution in Canada compared to other regions in the world and discuss the factors that *could* be contributing (i.e. idling)

- Use air pollution and idling as an example to quality of life across the globe alongside the health effects it is causing.

○ B1.1, B2.3, B2.4, B3.1, B3.3

Concepts of Thinking Connections

Social Studies

1. Significance: your role or who's role is it to monitor idling and air pollution?
2. Cause and Consequence: impact and effect of air pollution, idling and climate change (short and long term effects)
3. Continuity and Change: as you get older, how do your responsibilities change and how does this impact the environment? Do you think that the more you use your car the more it will impact the environment? Why?
4. Patterns & Trends: What are the characteristics of somewhere with clean air? What would it look like in society with lots of pollution?
5. Interrelationships: how do humans work together with the environment? Which level of the government should address air pollution? Do you think animals are impacted by idling exhaust?
6. Perspective: do you think somewhere that uses biking and walking more than cars see the issue of idling more? Do you think regions of schools or community centres see idling as more severe than elsewhere?

Geographical Thinking

1. Spatial Significance: why is air pollution so high in certain regions? Why is idling high in school regions?
2. Patterns and Trends: where is idling an issue the most around the world? Locally? On a map?
3. Interrelationships: what factors contribute to air pollution?
4. Geographic Perspective: what impact does Co2 and air pollution have on society? The environment?

Historical Thinking

1. Historical significance: connecting previous human actions to current state of the

environment

2. Cause and consequence: what were key moments that led to poor air pollution and human health issues? What caused the increase in idling?
3. Continuity and Change: what can we learn from poor environmental issues in the past? How did the industrial revolution impact our Earth today?
4. Historical Perspective: analyze climate change from different perspectives

Compulsory Secondary Courses: Grades 9-12

Note: can be adapted for all Applied classes

The Arts

Curriculum Strands

Strand A: Creating and Presenting/Performing
Strand B: Reflecting, Responding, and Analyzing
Strand C: Foundations

Curriculum Connections

Dance:

- Using the theme of climate change and idling to create a dance (9-12 A1.1; Grade 10 A2.2); reflect on the power of it (9-10B2.2)

Drama

- Using media forms such as infographics, video and images on anti-idling, air pollution and/or climate change to present dramatic ideas and works (Grade 9, 10 A.1.1, A1.2; Grade 11 A2.2)
- Provide different roles of different people involved in idling - the one in the car versus the one affected severely by air pollution (ex: health issues) and reflect on the impact on personal growth (Grade 9-12 B2.2)

Integrated Arts, Media Arts, Visual Arts

- Using anti-idling posters, infographic, images, etc. as tools to build off of for creations and analysis in the classroom

Music

- What type of music would you choose to represent idling and climate change? (Grade 9-10 B 1.1)
- Listen to an anti-idling commercial and analyze the music (Gr. 12 B1.1)

Mathematics (MPM1D, MPM2D, MCR3U)

Curriculum Strands

Grade 9	Grade 10	Grade 11
Number Sense and Algebra	Quadratic Relations	Quadratic Functions

Linear Relationships Analytic Geometry Measurement and Geometry Number Sense and Algebra Linear Relations Measurement and Geometry	Analytic Geometry Trigonometry	Exponential Functions Trigonometric Functions
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Curriculum Connections

Grade 9

Number Sense & Algebra:

- Use questions on homework, examples, lessons, assignment and test using anti-idling, air pollution, and climate change statistics and data

Linear Relations:

- Using specific idling and air pollution data to explore relationships

Grade 10 & 11

Quadratic Relations:

- Collecting and utilizing idling specific data

Canadian and World Studies (CGC1D, CHC2D)

Curriculum Strands

<p style="text-align: center;">Grade 9 Geography</p> Strand A: Geographic Inquiry and Skill Development Strand B: Interactions in the Physical Environment Strand C: Managing Canada's Resources and Industries Strand D: Changing Populations Strand E: Liveable Communities	<p style="text-align: center;">Grade 10 History</p> Strand A: Historical Inquiry and Skill Development Strand B: Canada, 1914-1929 Strand C: Canada, 1929-1945 Strand D: Canada, 1945-1982 Strand E: Canada, 1982 - Present
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Curriculum Connections

<p style="text-align: center;">Grade 9 Geography</p> Strand A: Using data specific to idling for students to analyze and organize (A 1.2) or in general idling/air pollution cases Strand B: Assess consequences of climate change and the connections within (B 1.3) Strand C: Analyzing oil and the impact on the environment and human health; consumer choice in terms of which types of cars they choose. (D3.3) Strand E: The more people there are the more cars on the road, therefore more idling. How will this affect us? Will we need to change to be more sustainable? (E2.1, E2.2)
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Grade 10 History

Strand B: describe key event of introducing items poor for the environment (B.1)

Strand E: describe changes in inventions to improve the environment (E.1)

Concepts of thinking

Historical

Historical significance: connecting previous human actions to current state of the environment

Cause and consequence: what were key moments that led to poor air pollution and human health issues? What caused the increase in idling?

Continuity and Change: what can we learn from poor environmental issues in the past? How did the industrial revolution impact our Earth today?

Historical Perspective: analyze climate change from different perspectives

Geographic

Spatial Significance: why is air pollution so high in certain regions? Why is idling high in school regions?

Patterns and Trends: where is idling an issue the most around the world? Locally? On a map?

Interrelationships: what factors contribute to air pollution?

Geographic Perspective: what impact does Co2 and air pollution have on society? The environment?

English & FSL (ENG1D, ENG2D, ENF3U, ENG4U & FSF1D)

Curriculum Strands

- Oral Communication
- Reading
- Writing
- Media Studies
- Listening (FSL)

Curriculum Connections

- Oral Communication: using anti-idling and air pollution as a topic of discussion
- Reading: reading different text forms on idling
- Writing: editing anti-idling documents, writing an opinion piece
- Media studies: studying commercials, ads, other media on anti-idling and air pollution
- Listening (FSL): playing clips of anti-idling and air pollution topics; explaining these ideas out-loud and students have to draw a representation of what they heard.

Sciences (SNC1D, SNC2D)

Curriculum Strands

Strand A: Scientific Investigation Skills and Career Exploration
Strand B: Biology
Strand C: Chemistry
Strand D: Earth and Space Science
Strand E: Physics

Curriculum Connections

Biology:

- Integrating the impact Co₂ and fossil fuels has on ecosystems and how humans interact. How are humans and idling involved in the whole system thinking approach?
- How poor air quality may impact human and animal systems

Chemistry:

- Analyzing the chemical compound of Co₂ and other pollutants from car exhaust

Physics:

- Connecting oil production and energy to the environment, society and economy
- Discussion of the natural greenhouse effect and enhanced greenhouse effect

Grade 9: B1.1, B2.3, B2.4, B3.5, C1.2, C3.4, E1.

Grade 10: B3.4, C1.2, D2.1, D2.2

Health & Physical Education (PPL10)

Curriculum Strands

Strand A: Active Living

Strand B: Movement Competence: Skills, Concepts, Strategies

Strand C: Healthy Living

Specific Curriculum Connections

Connecting personal choices to air pollution such as idling that may impact human health.
Grades 9 & 10: C1, C3

ADDITIONAL RESOURCES

[Ontario's Environmental Education](#)

This resource holds tips and tricks on how to implement Environmental Education in the classroom. Additional resources can be found for Educators to use in the classroom such as lesson plans, campaign themes and other information.

[Idle-Free Aurora](#)

Visit the Town website for more information on idling, bylaws, policies and next steps. Additionally, you can take the idling quiz!

[Resources 4 rethinking: No Idling at School](#)

This source focuses at the Elementary/Intermediate levels and provides connections to curriculum units, themes and pedagogical approaches.

[Citizens Environment Alliance](#)

This website holds lesson plans that incorporate anti-idling from grades 4-12 in various subjects.

[Natural Resources Canada](#)

The NRC houses important facts and information regarding idling. Although the tool-kit provides a great summary, if you are interested in learning more and gathering new facts/data for your classroom this is a good start.

[Clean Air Partnership Idle-Free Campaign Report](#)

This tool-kit has other activities and quizzes for teachers to use in the classroom. It includes a true or false quiz, skit examples, alongside mathematical equations.