

KINDERGARTEN		
Forces and Interactions: Pushes and Pulls		Connection to Anti-Idling Proposal
K-PS2-1		
K-PS2-2		
Interdependent Relationships in Ecosystems: Animals, Plants, and Their Environment		Connection to Anti-Idling Proposal
K-LS1-1	Use <u>observations</u> to describe patterns of <u>what plants and animals</u> (including humans) <u>need to survive</u> .	<i>Students will have the opportunity to be involved with :</i> Learning about air as a natural resource, air quality issues, and pollution emitted from vehicles; <u>air quality sampling on-site</u> during status quo conditions; <u>air quality sampling on-site post-implementation</u> of the anti-idling campaign; peer discussion of how air quality affects living things
K-ESS2-2		
K-ESS3-1	Use a <u>model to represent</u> the relationship between the <u>needs of different plants or animals</u> (including humans) and the <u>places they live</u> .	<i>Students will have the opportunity to be involved with :</i> Learning about air as a natural resource, air quality issues, and pollution emitted from vehicles; <u>air quality sampling on-site</u> during status quo conditions; <u>air quality sampling on-site post-implementation</u> of the anti-idling campaign; <u>peer discussion regarding air quality and ecosystem needs, as well as group presentation of results</u>
K-ESS3-3	<u>Communicate solutions</u> that will reduce the <u>impact of humans</u> on the land, water, <u>air</u> , and/or other living things in the <u>local environment</u> .	Same as above but with the addition of a <u>peer discussion on the role of anti-idling in improving air quality</u>
Weather and Climate		Connection to Anti-Idling Proposal
K-PS3-1		
K-PS3-2		
K-ESS2-1		
K-ESS3-2		
FIRST GRADE		
Waves: Light and Sound		Connection to Anti-Idling Proposal
1-PS4-1		
1-PS4-2		
1-PS4-3		
1-PS4-4		
Structure, Function, and Information Processing		Connection to Anti-Idling Proposal
1-LS1-1		
1-LS1-2		
1-LS3-1		
Space Systems: Patterns and Cycles		Connection to Anti-Idling Proposal
1-ESS1-1		
1-ESS1-2		
SECOND GRADE		
Structure and Properties of Matter		Connection to Anti-Idling Proposal
2-PS1-1		
2-PS1-2		
2-PS1-3		
2-PS1-4		
Interdependent Relationships in Ecosystems		Connection to Anti-Idling Proposal
2-LS2-1		
2-LS2-2		
2-LS4-1		
Earth's Systems: Processes that Shape the Earth		Connection to Anti-Idling Proposal
2-ESS1-1		
2-ESS2-1		
2-ESS2-2		
2-ESS2-3		
K-2. Engineering Design		Connection to Anti-Idling Proposal
K-2-ETS1-1		
K-2-ETS1-2		

K-2-ETS1-3	Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.	<p>Students will have the opportunity to be involved with :</p> <p>Learning about air as a natural resource, air quality issues, and pollution emitted from vehicles; <u>air quality sampling</u> on-site during status quo conditions; <u>data gathering and analysis</u> thereof; <u>air quality sampling</u> post-implementation of the anti-idling campaign; <u>determining effectiveness</u> of the measures implemented in the anti-idling campaign; <u>peer reviewing</u> conclusions drawn regarding the effectiveness and suitability of the anti-idling campaign, <u>BUT</u> students would likely need access to the results of other schools' sampling and anti-idling campaigns in order to more fully capture and <u>compare</u> characteristics of unique and creative design solutions.</p>
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THIRD GRADE		
Forces and Interactions		Connection to Anti-Idling Proposal
3-PS2-1		
3-PS2-2		
3-PS2-3		
3-PS2-4		

Interdependent Relationships in Ecosystems		Connection to Anti-Idling Proposal
3-LS2-1		
3-LS4-1		
3-LS4-3		
3-LS4-4	Make a claim about the <u>merit</u> of a solution to a problem caused when the <u>environment changes</u> and the types of plants and animals that live there may change.	<p>Students will have the opportunity to be involved with :</p> <p>Learning about <u>air as a natural resource</u>, air quality issues, and pollution emitted from vehicles; <u>air quality sampling</u> on-site during status quo conditions; <u>data gathering and analysis</u> thereof; <u>air quality sampling on-site post-implementation</u> of the anti-idling campaign; <u>peer reviewing conclusions drawn between the consumption of fossil fuels and impacts on air quality</u>, as well as the effectiveness of the anti-idling campaign <u>in improving air quality</u>; group presentation of findings</p>

Inheritance and Variation of Traits: Life Cycles and Traits		Connection to Anti-Idling Proposal
3-LS1-1		
3-LS3-1		
3-LS3-2		
3-LS4-2		

Weather and Climate		Connection to Anti-Idling Proposal
3-ESS2-1		
3-ESS2-2		
3-ESS3-1		

FOURTH GRADE		
Energy		Connection to Anti-Idling Proposal
4-PS3-1		
4-PS3-2		
4-PS3-3		
4-PS3-4		
4-ESS3-1	Obtain and combine information to describe that <u>energy and fuels are derived from natural resources</u> and their uses <u>affect the environment</u> .	<p>Students will have the opportunity to be involved with :</p> <p><u>Learning about air as a natural resource</u>, air quality issues, and <u>pollution emitted from vehicles</u>; <u>air quality sampling</u> on-site during status quo conditions; <u>data gathering and analysis</u> thereof; <u>air quality sampling on-site post-implementation</u> of the anti-idling campaign; <u>peer reviewing conclusions drawn between the consumption of fossil fuels and impacts on air quality</u>, as well as the effectiveness of the anti-idling campaign <u>in improving air quality</u>; presentation of findings</p>
Waves: Waves and Information		Connection to Anti-Idling Proposal
4-PS4-1		
4-PS4-3		

Structure, Function, and Information Processing		Connection to Anti-Idling Proposal
4-PS4-2		
4-LS1-1		
4-LS1-2		

Earth's Systems: Processes that Shape the Earth		Connection to Anti-Idling Proposal
4-ESS1-1		
4-ESS2-1		
4-ESS2-2		
4-ESS3-3		

FIFTH GRADE		
Structure and Properties of Matter		Connection to Anti-Idling Proposal
5-PS1-1		
5-PS1-2		
5-PS1-3		
5-PS1-4		

Matter and Energy in Organisms and Ecosystems		Connection to Anti-Idling Proposal
5-PS3-1		
5-LS1-1		
5-LS2-1		

Earth's Systems		Connection to Anti-Idling Proposal
5-ESS2-1		
5-ESS2-2		
5-ESS3-1	Obtain and combine information about ways individual communities use science ideas to <u>protect the Earth's resources and environment</u> .	<p>Students will have the opportunity to be involved with :</p> <p>Learning about air as a natural resource, air quality issues, and <u>pollution emitted from vehicles</u>; air quality sampling on-site during status quo conditions; data gathering and analysis thereof; <u>audience engagement</u> regarding air pollution from vehicle emissions; air quality sampling on-site post implementation of the anti-idling campaign; assessing effectiveness of the measures implemented; <u>soliciting feedback on the anti-idling campaign post-implementation</u>; presenting findings on both the <u>effectiveness of the campaign in improving air quality and the suitability of the campaign from the audience perspective</u></p>

Space Systems: Stars and the Solar System		Connection to Anti-Idling Proposal
5-PS2-1		
5-ESS1-1		
5-ESS1-2		

3-5. Engineering Design		Connection to Anti-Idling Proposal
3-5-ETS1-1		
3-5-ETS1-2	Generate and compare multiple solutions to a problem based on how well each is likely to meet the <u>criteria and constraints</u> of the problem.	<p>Students will have the opportunity to be involved with :</p> <p>Learning about air as a natural resource, air quality issues, and pollution emitted from vehicles; air quality sampling on-site during status quo conditions; data gathering and analysis thereof; <u>audience engagement</u> regarding air pollution from vehicle emissions; <u>identifying limitations on the financial resources available for the campaign</u>; <u>determining effectiveness of the measures implemented</u>; <u>identifying caveats of the technology used to take ambient air quality samples</u>; <u>soliciting feedback on the anti-idling campaign post-implementation</u>; <u>peer reviewing</u> conclusions drawn regarding the effectiveness and suitability of the anti-idling campaign; presenting findings and further/<u>alternative recommendations</u>. BUT students would likely need access to the results of other schools' sampling and anti-idling campaigns in order to more fully capture characteristics of unique and creative design solutions.</p>
3-5-ETS1-3		