Environmental Scavenger Hunt

Hunt in your home, school and neighborhood
DEAR ADVENTURER

Embark on the adventure that is the ENVIRONMENTAL SCAVENGER HUNT. Here you will find activities that you can do and invite others to do with you in your home, school and neighborhood. Enjoy the journey, have fun, and be creative with the environmental topics that you are going to encounter. Learn, help, educate and take action!
Hunt in the Neighborhood

Go around your neighborhood and identify how many items you can count in 100 steps.

- Trees
- Bike racks
- Noise pollution
- Vehicles
- Fresh food
- Recycling cans
- Trash cans overflowing
- Clean air hybrid electric bus
- Sidewalks
- Parks
- Smokestacks
- Overflowing sewer

DID YOU KNOW?

A typical car emits 4.6 metric tons of carbon dioxide per year. (USA EPA, 2018)

Air pollution from cars may contribute to over 700 emergency room visits to New York City hospitals per year. (Kheirbek et al, 2016)

On average, the US generates over 4 pounds of trash per person per day, more than any other country. But only about a third of this trash is recycled. (USA EPA, 2018)
Urban trees also help cool the temperature in the city, especially in summer months. This can bring down the energy consumption during summer. Trees and plants provide habitat for insects and birds. But to have a very significant impact from trees in the city environment, you have to have a lot of trees. Therefore, it is important that your city not only have these trees along the sidewalks, but also trees in forest and parks.

**Cigarette Butts**

Seeing cigarette butts on the ground in your community may mean that there's a lot of people who smoke. Of course, you know that cigarette smoke is known to cause cancer in the people who smoke, but did you know that it has also been associated with many negative health effects in children who may be exposed to it from people who smoke. For example, it can trigger symptoms of asthma. Also, guess where cigarette butts end up after they lay on the ground for a while? They are carried in drain water and ultimately end up either in the sewer system, or oceans and beaches.

"Urban trees have more impact on air quality by storing carbon and removing air pollution than they do producing oxygen.”

(Nowak, Crane & Hoeh, 2007)
Why are lightbulbs related to CO2 emissions? If you are asking yourself that question, the answer is through the use of electricity and fossil fuel combustion. The energy used in households comes from burning fossil fuels. When fossil fuels are burned, they released a gas named carbon dioxide, which affects the global temperature balance, human health, and environment. Electricity use is measured in watts. Newer energy-efficient lightbulbs provide the same amount of light and last longer while consuming less electricity. If you cannot switch all the bulbs to LED technology, change them in the areas where you spend more time at home. Also, remember to always turn off the lights before you leave your home!
Hunt in your home

Go around your home and identify which kind of lightbulb technology you use the most.

☐ Living room lamp
☐ Attic lamp
☐ Bedroom lamp
☐ Desk lamp
☐ Ceiling fan lamp
☐ Decorative lamp
☐ Kitchen lamp
☐ Hall lamp
☐ Bathroom lamp
☐ Outdoor lamp

Quantify how many lightbulbs you have in your home by their type of technology.

LED
☐ Total

Fluorescent
☐ Total

Halogen
☐ Total

Incandescent
☐ Total

Guide

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<tr>
<th>Power in watts</th>
<th>Energy in Kilowatt-hours</th>
<th>Electricity cost ($0.12) United States Avg.</th>
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<tbody>
<tr>
<td>10w</td>
<td>0.01</td>
<td>$0.02 per year</td>
</tr>
<tr>
<td>30w</td>
<td>0.03</td>
<td>$0.12 per year</td>
</tr>
<tr>
<td>50w</td>
<td>0.05</td>
<td>$0.20 per year</td>
</tr>
<tr>
<td>75w</td>
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<td>$0.20 per year</td>
</tr>
<tr>
<td>100w</td>
<td>0.10</td>
<td>$0.22 per year</td>
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</table>

Calculate it yourself

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<thead>
<tr>
<th>Power in watts</th>
<th>Energy in Kilowatt-hours</th>
<th>Electricity cost</th>
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Rate the lightbulbs from low to high by their power of watts. Which is the type of technology that needs less power electricity?

Did you know?

“Electricity use is measured in watts. Newer energy-efficient lightbulbs such as LED produce the same amount of light while using less electricity and reducing CO2 emissions” (Gan, Sapar, Mun & Chong, 2013)
ONE OF THE BEST WAYS TO STOP OR REDUCE ENVIRONMENTAL ISSUES IS TO BE ABLE TO IDENTIFY IN YOUR SURROUNDINGS THOSE THINGS AND BEHAVIORS THAT ARE CONTRIBUTING TO THE PROBLEM. WE BELIEVE THAT LITTLE ACTIONS CAN RESULT IN BIG SOLUTIONS.

GET INVOLVED

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Talk
Talk with your family, friends, neighbors, and teachers about what you learned about environmental concerns and talk about ideas that can help your home, school, or neighborhood.

ACT
Challenge yourself to make activities that help the environment. You can plant a tree, do a recycling campaign at your school or neighborhood, or make compost at your home.

SHARE
Share with others what are you doing and ask them to join!
Hunt in your school

Be proactive in your school and do activities that can help with the reduction of environmental issues and improve your health. Invite your friends and teachers to be part of the movement to create awareness about how little actions can positively impact your health and environment.

- Get involved with your school’s garden
- Take the bus
- Ride a bike to school
- Recycle plastic
- Help with composting
- Recycle carton
- Reduce the use of plastic water bottles
- Turn off the lights before you go to school
- Do physical activities

Did you know?

If you bike you emit 4-5 times less carbon dioxide per kilometer than by driving a typical car.

Waste can end up in landfills or seas. It is best to choose items that don’t have a lot of packaging, and reduce your use of things that you only use once, like water bottles, shopping bags, or straws. It is better to recycle everything you can.

Pollution
REFERENCES


Map Shapefiles:

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