

**Miami-Dade County Public Schools
Department of Secondary English Language Arts**

**DISTRICT WRITING PRE-TEST
ASSESSMENT**

**7TH GRADE
INFORMATIVE/EXPLANATORY
PROMPT**

NAME: _____

TEACHER: _____ **PER:** _____

SOURCE 1

The 10 best ideas for sustainable city living in 2017.

Smart Magazine
Gesa Steeger, 01/10/2018

1 Pedestrian-powered electricity



A leisurely, extended walk tends to generate new ideas and perspectives. Now, it can also produce energy: This year, British clean-tech start-up PaveGen installed a 10-square-meter stretch of connected pavement right in the heart of London. The intelligent slabs turn the kinetic energy of pedestrians' steps into electricity – and the generated power lights the walkers' way by feeding nearby street lights.

PaveGen's innovative pavement tiles produce electricity. Photo: PaveGen

2 Artificial trees to scrub the air



Many metropolises lack green spaces. As a result, the cities' air quality also declines. The CityTree by Berlin start-up Green City Solutions aims to change all this: Their stylized, functional tree might resemble an electronic billboard, but there is a decisive difference – its surface is covered in thick, green moss that filters dust and other pollutants from the air. The best thing about this novel artificial greenery – a single CityTree can do the air-scrubbing work of

up to 275 real trees.

Powerful mock tree: the CityTree. Photo: Green City Solutions

3 Always on track with Loud Steps



Life can be tough for the vision- and hearing-impaired – especially in the unfamiliar surroundings of a new city. This is where the Loud Steps app comes in: Thanks to features like step-by-step navigation or a sign language call center, confusing spaces like airports or shopping malls no longer pose insurmountable challenges.

Loud Steps makes the city more accessible for the visually and hearing impaired. Photo: Boni Global

4 Tasty and healthy shared dinners with Foodisch



Anyone who loves food and cooking should make a beeline for the Foodisch website. Its US creator Simo Azzaoui designed the online portal to connect potential hosts and guests. In October 2016, he exported the idea to Berlin, called it Foodisch, and took the whole scheme online in December. Find out here how fun a balmy summer night with Foodisch can be in our feature on the scheme's Berlin Prinzessinengärten pop-up.

Get cooking together with Foodisch. Photo: Tim Adler

5 Get fit in – and with – nature



Rows upon rows of clunky machines and loud, pumping music: Most gyms are less than inspiring places. Biofit challenges this notion with a training concept that combines fitness and nature-inspired elements. Last year, Biofit's founder Matt Morley even received the New Concept Awards at the renowned FIBO Global Fitness Fair for his revolutionary idea. The only caveat: To date, the close-to-nature gym experience is only available in Calgary, Canada.

Based on nature. Biofit's gym concept. Photo: Danilo Moroni for Biofit

6 Tiles against climate change



Large parts of the Netherlands are located below sea-level. So, it shouldn't come as a great surprise that the seabound nation keeps coming up with new products and ideas designed to counter the causes and effects of climate change. Take Rain(a)way, a system of paving stones for rain water drainage created by Dutch designer Fien Decker. The slabs are designed to slot seamlessly (and elegantly) into the fabric of urban infrastructure. And the result not only saves resources, but also looks surprisingly great.

Designer tiles for better drainage: Rain(a)way. Photo: Rain(a)way

7 Brilliant bollards



Bollards are firm fixtures on streets and pavements, engineered to direct traffic flow and improve overall safety. Yet according to the Spanish designers at Teratoma Productions, their untapped potential also suggests plenty of other everyday uses. Uses like Plug a Seat, an aluminum attachment that transforms regular bollards into temporary street furniture ranging from benches and chairs to clever tables.

Plug a Seat: unique street furniture from Madrid. Photo: Teratoma Productions

8 Food for the environment



Whenever you throw out uneaten food, you not only produce waste, but also additional CO₂. Finnish start-up ResQClub tackled this challenge – with an online platform for restaurants and delis that helps these outlets to offer surplus food at a reduced price. At the time of writing, the platform has already sold almost 300,000 meals, saving almost a million kg of CO₂.

Order what doesn't sell: ResQClub. Photo: ResQClub

9 Fuel up at lamp posts



The future of mobility is electric – but the charging infrastructure still leaves a lot to be desired. Berlin-based start-up Ubitricity has an ingenious solution: It not only transforms regular street lights into mobile charging spots, but also lets the charging cable double as a power meter and communications module.

An easy way for charging your electric vehicle: Ubitricity. Photo: Ubitricity

10 Cleaning up urban travel



Traversing the city in a fast, sustainable way that's fun? At smart, this comes as standard. With its smart fortwo electric drive two-seater, the four-seater smart for four electric drive, and the open-top smart cabrio electric drive, the brand is the world's only car manufacturer to offer electric versions of its entire model range.

The smart electric drive model range is perfect for city cruising. Photo: Daimler AG

SOURCE 2

How are cities around the world tackling air pollution?

More cycling, better public transport and car bans - cities from Delhi to Zurich are using a range of initiatives to lower traffic pollution and improve health

The Guardian
John Vidal

Tue 17 May 2016 10.59 EDT Last modified on Fri 11 May 2018 08.10 EDT

11 Paris

Paris bans cars in many historic central districts at weekends, imposes odd-even bans on vehicles, makes public transport free during major pollution events and encourages car- and

bike-sharing programmes. A long section of the Right Bank of the river Seine is now car-free and a monthly ban on cars has come into force along the Champs-Élysées.

12 The Netherlands

Politicians want to ban the sale of all petrol and diesel cars from 2025, allowing only electric or hydrogen vehicles. The proposed new law would allow anyone who already owns a petrol or diesel car to continue using it. Most cities encourage bicycle use.

13 Freiburg

Freiburg in Germany has 500km of bike routes, tramways, and a cheap and efficient public transport system. One suburb, Vauban, forbids people to park near their homes and makes car-owners pay €18,000 for a space on the edge of town. In return for living without a car, people are offered cheaper housing, free public transport, and plentiful bicycle spaces.

14 Copenhagen

Copenhagen prioritizes bikes over cars and now has more cycles than people. Large parts of the Danish capital have been closed to vehicles for decades and the city plans to become carbon neutral by 2025.

15 Helsinki

The Finnish capital plans to drastically reduce the number of cars on its streets by investing heavily in better public transport, imposing higher parking fees, encouraging bikes and walking and converting inner city ring roads into residential and walking areas. The idea is to make the city's public transport so good that no one will want a car by 2050.

16 Zurich

Zurich has capped the number of parking spaces in the city, only allows a certain number of cars into the city at any one time, and is building more car-free areas, plazas, tram lines and pedestrianised streets. The result has been a dramatic reduction in traffic jams, and less pollution.

17 Bangalore

The Indian city is converting its 6,000 buses to compressed natural gas and discouraging the car. So far, says the city, it has reduced traffic pollution by about 20% in a few years and one in four people who used to travel by car now use public transport.

The Carbon Footprint of Daily Activities

By [Stephanie Pappas](#) April 21, 2011 [Planet Earth](#)



Earth

(Image: © NASA Goddard Space Flight Center Image by Reto Stöckli (land surface, shallow water, clouds). Enhancements by Robert Simmon (ocean color, compositing, 3D globes, animation). Data and technical support: MODIS Land Group; MODIS Science Data Support Team; MO)

- 18 The average U.S. household pumps 49 metric tons of carbon into the atmosphere each year, according to the CoolClimate Network, a University of California, Berkeley consortium that has developed carbon footprint calculators for homes and businesses. What are you doing to create all that carbon? We ran the numbers on some everyday activities.
- 19 **Driving to work**
Let's say you commute 30 miles round-trip to work, which was about average in 2003, according to the U.S. Department of Transportation. That's about 7,800 commuting miles each year. And if you drive a car that gets 22 miles to the gallon every weekday, your annual carbon footprint from commuting is **4.3 metric tons**. If you want to shrink that estimate, [try carpooling](#) three times a week. You'll save 0.85 tons of carbon — and \$323 dollars in fuel and vehicle depreciation costs — per year.
- 20 **Chowing down on steak**
If you're eating 444 calories a day of red meat (the equivalent of about one 8-ounce steak sirloin), your annual meat-related carbon footprint is **0.8 metric tons** of carbon dioxide. Try switching things up with poultry, eggs, or even better, vegetables. Your carbon footprint will barely register.
- 21 **Going on a shopping spree**
Splurging on \$100 of clothes each month will set you back **0.5 metric tons** of carbon dioxide per year. Throw in a \$1,000 furniture purchase once a year and you're up to **almost a ton**. You sure you need that new sofa?
- 22 **Flying to grandma's house**
You live in California, but you've got to spend Christmas at Grandma's back in Boston. That's about a 5,000-mile round trip, making your carbon footprint from this airplane trip alone **2.23 tons of CO₂**.
We're not suggesting you deprive Nana of your company, but taking your trips close to home can give you big carbon savings: Every 1,000 miles you don't fly saves 0.45 tons of CO₂.
- 23 **Throwing clothes in the dryer**
Drying one load of laundry a week puts **0.1 metric tons** of CO₂ into the atmosphere. Hang 'em outside and save yourself \$11 in electricity costs while you're at it.
- 24 **Working out**

Gym rats, beware: Running on a treadmill for 30 minutes three times a week will boost your carbon footprint by **0.07 metric tons** per year. Take it outside and watch that number plummet to zero.

SOURCE 4

Renewable energy

Source: *explainthatstuff.com*

by [Chris Woodford](#). Last updated: August 27, 2018.

- 25 Running low on fuel? Just zip to the gas station and fill up your tank. The only trouble is, you won't be able to do that forever because Earth itself is running low on fuel. Most of the energy we use comes from fossil fuels like oil, gas, and coal, which are gradually running out. Not only that, using these fuels produces [air pollution](#) and carbon dioxide—the gas most responsible for [global warming](#). If we want to carry on living our lives in much the same way, we need to switch to cleaner, greener fuel supplies—**renewable energy**, as it's known.

What is renewable energy?

- 26 Broadly speaking, the world's **energy resources** (all the [energy](#) we have available to use) fall into two types called fossil fuels and renewable energy:
- **Fossil fuels** are things like oil, gas, coal, and peat, formed over hundreds of millions of years when plants and sea creatures rot away, fossilize, and get buried under the ground, then squeezed and cooked by Earth's inner pressure and heat. Fossil fuels supply about 80–90 percent of the world's energy.
 - **Renewable energy** means energy made from the wind, ocean waves, solar power, biomass (plants grown especially for energy), and so on. It's called renewable because, in theory, it will never run out. Renewable sources currently supply about 10–20 percent of the world's energy.

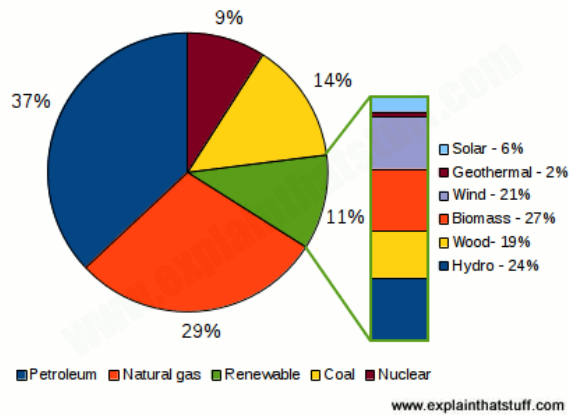


Chart: Percentage of total US energy supplied by different fossil fuels and renewables in 2017.
Source: Office of Coal, Nuclear, Electric and Alternate Fuels, [Energy Information Administration](#), US Department of Energy. Data published April 2018.

- 27 Different countries get their energy from different fuels. In the Middle East, there's more reliance on oil, as you'd expect, while in Asia, coal is more important.
- 28 In the United States, the breakdown looks like this. From the pie chart, you can see that about 80% of US energy still comes from fossil fuels (down from 84% in 2008 and virtually unchanged since 2014), while the remainder comes from renewables and nuclear. Wind and solar provide just over a quarter of US renewable energy and are steadily increasing in importance: solar now provides 6 percent of total US renewable energy (up from 4 percent in 2014), while wind provides 21 percent (up from 18 percent in 2014). Renewables have increased from 7% to 11% of the total since 2008, which is a much bigger increase than it might sound.

Writing Prompt

Write an explanatory essay to inform the people in your community about what they can do to lessen their impact on the environment. Your essay must be based on ideas and information that can be found in the passage set.

Manage your time carefully so that you can

- read the passages;
- plan your response;
- write your response; and
- revise and edit your response.

Be sure to

- use evidence from multiple sources; and
- avoid overly relying on one source.

Your response should be in the form of a multi-paragraph essay. Write your response in the space provided.