I'm Going Places

Books

This Is the Way We Go to School: A Book About Children Around the World by Edith Baer, illus. by Steven Bjorkman (Scholastic, 1990) – A nonfiction book about how children get to school in cultures all over the world, with a map at the end so readers can find all the places described.
School Bus by Donald Crews (Greenwillow, 1986) – A picture book with a very simple story about the one type of transportation you can guarantee, after today, that *all* of your students have experienced!
Gráficas de barras / Bar Graphs by Vijaya Khisty Bodach (Capstone, 2011) – This bilingual introduction to bar graphs begins with a simple definition and progresses in difficulty, with activity suggestions throughout and a glossary, list of websites, and index at the end.

More Lesson Ideas

- Practice making bar graphs! Use the handout from today's field trip or your regular math curriculum. The Common Core Math Standards for Measurement and Data will tell you what kind of graphs/problems students at your grade level should be able to make/solve.
- To extend the discussion of environmental impact, try these lessons:

Title: What's My Carbon Footprint?
Source: New York Transit Museum
Description: While very similar to the "I'm Going Places" activity, this lesson goes one step further to connect types of transportation with the amount of pollution they create, so your students can calculate how many pounds of carbon dioxide come from every trip to school.
http://www.transitmuseumeducation.org/files/go_green/Lesson4_Transit_Museum_Carbon_Footprint.pdf

Title: Walk Across Illinois
Source: State of Illinois
Description: If most of your students walk to school, or show interest in walking more often, you can register your class and log miles toward a total of 190 miles, the distance between the Mississippi River and Lake Michigan. After registering, you'll receive a curriculum guide.
http://www.walkacrossillinois.org/schools.php

Other Links & Resources

Kids Carbon Footprint Calculator, http://www.cooltheworld.com/kidscarboncalculator.php
This online quiz goes through getting to school, watching TV, turning lights on and off, and more. There are dozens of similar calculators on other sites, but this one from England—aside from some British vocabulary that you might need to explain—is more kid-friendly than most.

PBS EekoWorld, http://pbskids.org/eekoworld//parentsteachers/teachers.html
EekoWorld (**E**nvironmental **E**ducation for **K**ids **O**nline) is a game designed for 6- to 9-year-olds learning about the environment. The teachers' site offers lesson plans and ideas for incorporating the game's characters and settings into the classroom. Since the game requires a login, it's also an opportunity to teach about online safety.

Solar Car Craze

Books

My Light by Molly Bang (Blue Sky Press, 2004) – The sun itself narrates this engaging, highly readable explanation of light and energy; scientific topics are explored in detailed endnotes.
Solar Power by Jim Ollhoff (ABDO, 2010) – The volume from the "Future Energy" series covers the history of solar power, the difference between thermal and photovoltaic energy, and the pros and cons of the sun as a power source, in accessible language.
Solar Power by Josepha Sherman (Capstone, 2004) – In addition to the standard features of an informational text (table of contents, index, glossary), this approachable introduction includes instructions for an experiment, "Fast Facts," and a list of books and websites for further reading.

More Lesson Ideas

- Design your own experiments! Research doesn't need to have a predetermined outcome. The Common Core Standards for Writing, "Research to Build and Present Knowledge," will guide your class in exploring questions that even *you* may not know how to answer.
- To extend the discussion of solar power, try these lessons:

Title: Solar Matters 1-2-3
Source: Florida Solar Energy Center
http://energywhiz.com/experiments/solarmatters1-2-3.php

Title: The Sun and Its Energy
Source: The NEED (National Energy Education Development) Project
http://www.need.org/files/curriculum/guides/The%20Sun%20and%20its%20Energy.pdf

Other Links & Resources

U.S. Department of Energy Solar portal, http://energy.gov/science-innovation/energy-sources/renewable-energy/solar
Includes an overview of the government's solar energy initiatives and a list of news stories. Don't miss this inspiring video http://energy.gov/articles/fourth-graders-power-their-classroom-solar-energy that shows how a group of fourth graders in Durham, NC, brought solar power to their classroom!

Energy Whiz Olympics, http://energywhiz.com/energywhiz_olympics/index.php
Sponsored by the Florida Solar Energy Center, this annual event includes Junior Solar Sprint Solar Go-Kart car races, plus a Solar Cook-Off and a variety of other competitions.

U.S. Energy Information Administration kids page, http://www.eia.gov/kids/
In addition to this overview http://www.eia.gov/kids/energy.cfm?page=solar_home-basics of solar energy, explore the "For Teachers" section for virtual field trips, experiments, and more.

Energy 101, http://www.youtube.com/playlist?list=PLACD8E92715335CB2
This playlist from the U.S. Department of Energy compiles 2- to 3-minute videos to add a visual component to learning about solar photovoltaic technology and more.

Transportation Past, Present, Future

Books

If I Built a Car by Chris Van Dusen (Dutton, 2005) – A rhyming story starring a free-thinking boy who designs a futuristic car that travels on land, in the air, and on and under the sea.
Invention by Lionel Bender (DK, 2013) – Like all Eyewitness Books, this volume is filled with visuals to bring the history of invention—from basic tools to complex, modern machines—to life. The pages on the wheel, steam engine, and flight connect most closely to our lesson.
Travel: Historical Etchings by Bobbie Kalman (Crabtree, 1997) – Authentic 19th century images of wagons, trains, carriages, boats, and more provide a glimpse of what transportation looked like for our predecessors. Each full-page image is accompanied by one or two sentences of explanation, and they are copyright free, so you can use them for transparencies or worksheets.

More Lesson Ideas

- Learn from the past, imagine the future! Your students won't start studying history in depth for a few more years, but it's never too early to develop an understanding of how the great inventions of the past have enabled today's innovators to think big.
- To extend the discussion of transportation history and innovation, try these lessons:

Title: How Transportation Transformed America: Going to Market
Source: Library of Congress
http://www.loc.gov/teachers/classroommaterials/lessons/market/index.html

Title: Henry Ford and the Beginnings of the Auto Industry
Source: "You Can Be an Innovator Like Henry Ford" DigiKit from The Henry Ford
http://www.thehenryford.org/education/erb/YouCanBeanInnovatorDigiKit.pdf

Other Links & Resources

America on the Move, http://amhistory.si.edu/onthemove/
This interactive site from the Smithsonian's National Museum of American History features an online exhibition about how transportation changed our country. It also offers interactive games.

Women in Transportation, http://www.fhwa.dot.gov/wit/page1.htm
As part of a U.S. Department of Transportation initiative to inspire young people to explore careers in transportation, this site explores the roles women have played as transportation innovators and trailblazers. The most famous figures, such as Amelia Earhart, are familiar even to young children, but lesser-known women also get their turn in the spotlight here.