

**S.T.L.P.**

**Student Technology  
Leadership Program using  
digital products for online  
judging competition.**

# Infographics

What are they?

**Information graphics** or **infographics** are visual representations of information, data or knowledge. These graphics are used where complex information needs to be explained quickly and clearly, such as in signs, maps, journalism, technical writing, and education. They are also used extensively as tools by computer scientists, mathematicians, and statisticians to ease the process of developing and communicating conceptual information.

# AN INFOGRAPHIC IS

DATA



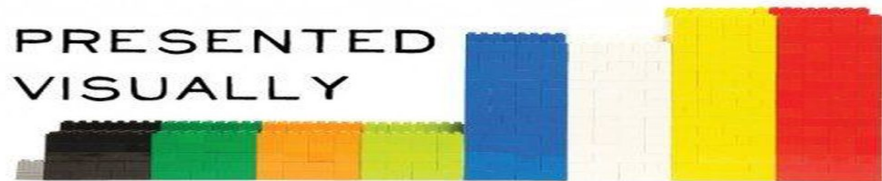
SORTED



ARRANGED



PRESENTED  
VISUALLY



PHOTOGRAPHY BY BRANDON ROSSEN PHOTOGRAPHY [WWW.BRANDONROSSEN.COM](http://WWW.BRANDONROSSEN.COM) @BRANDONROSSEN



# SCREEN TIME vs LEAN TIME

Do you know how much entertainment screen time kids get? Time in front of a screen is time kids aren't active. See how much screen time kids of different ages get and tips for healthier activities.

AGE  
GROUP >

8-10

11-14

15-18

CHILDREN AGES 8-10 SPEND ABOUT

## 6 hours a day

IN FRONT OF A SCREEN USING  
ENTERTAINMENT MEDIA

NEARLY  
**4**  
OF THESE ARE  
SPENT WATCHING  
TELEVISION



INSTEAD THEY COULD...



Play a game of basketball

AND STILL HAVE TIME TO...

walk the dog



and...

dance to their favorite songs



and...

jump rope



and...

ride their bike



How can  
parents help?



**1** Ensure kids have 1 hour of physical activity each day.

**2** Limit kids' total screen time to no more than 1-2 hours per day.

**3** Remove TV sets from your child's bedroom.

**4** Encourage other types of fun that include both physical and social activities, like joining a sports team or club.



# SODIUM MYTHS and FACTS for Kids



## SCIENCE SUPPORTS REDUCING CHILDREN'S SODIUM INTAKES

The science is clear... our kids eat more sodium than what is safe and recommended.<sup>1,2</sup> Schools can play an important role in helping our kids get and stay healthy. As part of the effort to bring sodium to moderate levels for our kids, the U.S. Department of Agriculture (USDA) established sodium limits for school meals, which are being carried out in three gradual phases until the 2022-2023 school year.<sup>3</sup>



### MYTH #1 vs FACT!

The only health issues associated with too much sodium are problems like high blood pressure and heart disease – problems for adults, not kids.

Science strongly supports the link between less sodium intake and healthier lives – even in children and teens.<sup>4</sup>

For example, kids who eat high sodium diets are about 35% more likely to have elevated blood pressure than kids who eat lower sodium diets.<sup>5</sup> And, the rate of high blood pressure is increasing in American children.<sup>6</sup> In addition to heart health, sodium impacts bone, brain, stomach, and kidney health.<sup>7</sup>



### MYTH #2 vs FACT!

Scientific evidence to support a decrease in sodium for school meals is inconclusive.

There has been a lot of noise about some sodium studies, leading to confusion and helping efforts to undermine nutrition standards for school meals.

A large body of scientific research indicates that lowering sodium intake lowers blood pressure in adults and children.<sup>8</sup>



### MYTH #3 vs FACT!

It is impossible for schools to meet USDA's sodium limits.

More than 99% of schools are successfully meeting the updated meal standards.<sup>9</sup> Some schools are already meeting the USDA's 2017 targets.<sup>10</sup> Many companies already offer foods that meet the target limits set by the USDA.<sup>10</sup>

A variety of methods exist that can help reduce sodium in foods<sup>11</sup>, and modelling suggests that some newly developed ingredients could make a big impact.<sup>12</sup>



### MYTH #4 vs FACT!

Kids won't like the taste of foods lower in sodium and, as a result, will eat less of these foods, robbing them of the beneficial nutrients they provide.

Replacing nutrient-poor, high-sodium foods with healthier foods could improve overall consumption of other beneficial nutrients.

Gradually lowering the sodium content in foods can decrease kids' (and adults') taste for salty food over time.<sup>13</sup>



To find out more about the Healthy, Hunger-Free Kids Act, visit: [heart.org/schoolmeals](http://heart.org/schoolmeals)  
To find out more about sodium reduction, visit: [heart.org/sodium](http://heart.org/sodium)

1 Institute of Medicine (IOM). 2004. Dietary Reference Intakes for Water, Potassium, Sodium, Chloride, and Sulfate. Washington, DC: The National Academies Press. 2 U.S. Department of Agriculture, Agricultural Research Service. 2012 Nutrient Intakes from Food: Mean Amounts Consumed per Individual, by Gender and Age, What We Eat in America, NHANES 2009-2010. Available: <http://www.ars.usda.gov/bobers/herg>. 3 USDA. Final Rule "Nutrition Standards in the National School Lunch and School Breakfast Programs (1/26/12)". Accessed online 8/14/15 at: <http://www.fns.usda.gov/sites/default/files/sodium.pdf> 4 Appel et al. Reducing Sodium Intake in Children: A Public Health Investment. *Journal of Clinical Hypertension*. 2015; 1-6. 5 Rowner et al. Childhood blood pressure trends and risk factors for high blood pressure. *The American Heart Association. Circulation*. 2011; 123(10):1130-43. 6 Whellan et al. Further evidence supporting the American Heart Association sodium reduction recommendations. *Circulation*. 2012; 126(28):2889-2900. 7 Appel et al. The importance of population-wide sodium reduction as a means to prevent cardiovascular disease and stroke: A call to action from the American Heart Association. *Circulation*. 2011; 123(10):1130-43. 8 Lloyd-Jones et al. Defining and Setting National Goals for Cardiovascular Health Promotion and Disease Reduction: The American Heart Association's Strategic Imped Goal through 2020 and Beyond. *Circulation*. 2010 Feb 23; 121(8):588-613. 9 Appel et al. The importance of population-wide sodium reduction as a means to prevent cardiovascular disease and stroke: A call to action from the American Heart Association. *Circulation*. 2011; 123(10):1130-43. 10 National Alliance for Nutrition and Activity. Mission: Possible Companies Can Meet USDA's New Sodium Limits for School Meals. Accessed online 8/14/2014. <http://heart.org/news/press/2014/08/14/11> 11 Arner et al. Stakeholder discussion to reduce population-wide sodium intake and decrease sodium in the food supply: A conference report from the American Heart Association sodium conference 2013 planning group. *Circulation*. 2014. 12 Agarwal et al. Sodium Intake Status in United States and Potential Reduction Modeling: an NHANES 2007-2010 analysis. *Food Science and Nutrition*. 2015. DOI: 10.1002/fsn3.248 13 IOM. 2010. Strategies to Reduce Sodium Intake in the United States. Washington, DC: The National Academies Press. 682617. AMERICAN HEART ASSOCIATION 147258998



# April 22nd is Earth Day

Here are some things you can do to make our planet a better place to live.

Here are some things you can do to help plants and wildlife.

- Do not disturb the natural habitats of plants and animals. Do not pick wildflowers or gather critters for pets. ➔



- Talk to people at home or to your teacher about planting a garden to attract butterflies and birds. These gardens provide habitats to replace those taken away by buildings, streets, and parking lots. ➔

- Pet waste has bacteria that can threaten fish and wildlife. Clean up after your dog so its waste can't drain into lakes, rivers, and streams during a rainstorm. ➔



**Reduce**  
the amount of garbage you make.

**Reuse**  
things instead of throwing them out.

**Recycle**  
paper, plastic, glass, and aluminum.



- Fix something that's broken instead of throwing it away.
- When you buy something, carry it home without a bag or take your own bag to the store.
- Avoid using throw-away forks and cups.
- Refill empty bottles of water instead of buying new ones.

- Use both sides of every sheet of paper. Save scrap paper for recycling.
- Buy and use things that are made to last.
- Buy goods that require less wrapping and packaging.
- Reuse empty jars as holders for things like pencils and pens.

- Instead of throwing out food waste and grass clippings, use them to make compost, which turns into new soil.
- Separate trash so you can recycle paper, glass, aluminum cans, and plastic.
- Take old cell phones and other electronic equipment to a recycling center.

## Your Part

There are many ways to reduce your carbon footprint. One way is to use less energy. Another is to consume food items that require less energy during the production process.

- Compact Fluorescent Lights, or CFLs, use 75 percent less energy than standard bulbs. Plus, they last longer. Talk with adults in your home about choosing CFLs instead of standard bulbs.



- Help move furniture away from radiators, so heat goes into a room and is not absorbed by the furniture.



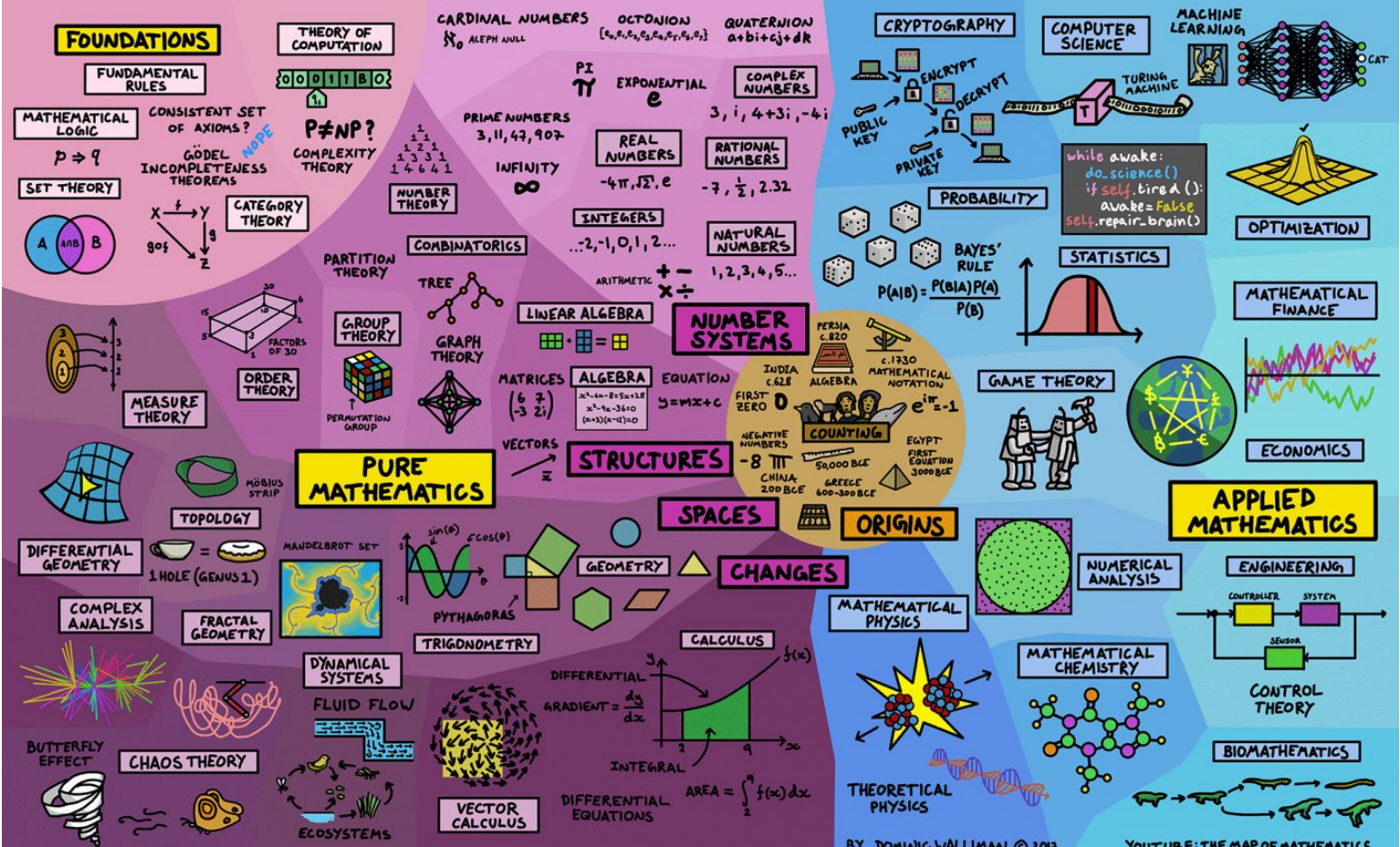
- Homes should not be kept freezing in summer and boiling in winter. Ask adults to keep the indoor temperature at 75°F in summer and 68°F in winter.

- To cut down on pollution linked to shipping and packaging food, plant a vegetable garden. Talk with adults who buy your food about choosing food that is grown locally (within 100 miles of home).

- Processed foods, which are frozen, canned, or packaged, carry a big carbon footprint. Eating fresh food reduces your carbon footprint. Whenever possible, choose baked potatoes instead of potato chips. Eat an apple instead of applesauce.



# THE MAP OF MATHEMATICS





# HOW A BOTTLE IS RECYCLED

**GOOD JOB!** You tossed that plastic bottle into the recycling bin rather than straight into the trash. But do you know what will happen to that bottle now?



## COLLECTION

- 1** Bottles and other recyclable materials are picked up from homes, schools, and businesses and taken to a recycling facility.

## NEXT APPLICATIONS

- 5** The flakes can be spun into a very fine, threadlike material in a process similar to how cotton candy is made. Companies use those "threads" to make a wide variety of items, including carpets, clothing, or filling for jackets and quilts. Depending on the type of plastic, they can also be made into new (well, sort of new!) plastic bottles.

## SORTING

- 2** Bottles and containers are sorted based on what they're made of and sometimes what color they are. The items then go through a machine that shreds them.

**4.43**  
pounds

Amount of trash the average person produces in a single day



**34.1%**

Percentage of trash that's recycled



## MELTING

- 3** The shreds are washed to remove any impurities, pieces of labels or leftover contents. They are then dried and melted.

## FLAKING

- 4** The melted plastic is processed into flakes, which can be made into a wide variety of plastic products.

# The Life Cycle



The life span of an adult butterfly or moth is amazingly short. A few adults live as long as 18 months, while most last no more than two weeks. Each of them, though, goes through the biggest change known to nature. Their metamorphosis from a caterpillar into an adult is a miracle to behold!

All butterflies and moths start off as eggs. Some of the tiniest eggs are smaller than a millimeter, and almost all are yellow or green. Female butterflies tend to lay eggs on plants that their caterpillars will find tasty. Some eggs hatch in a few days, while others take months.

The first thing a caterpillar (or larva) does when it hatches is eat—and eat and eat. It often eats its own eggshell and then begins to eat the plant it was laid on. Caterpillars must molt, or shed their skin, in order to grow. Most do this four or five times over a period that lasts at least two weeks.

In one day, a caterpillar can eat many times its weight in food. Most of the food is stored as fat for later stages of life, such as the metamorphosis from caterpillar to adult. During that time, the butterfly or moth can't eat.

A fully grown caterpillar finds a safe place to pupate (change into a pupa, or chrysalis). Some caterpillars spin cocoons of silken threads in which they pupate.

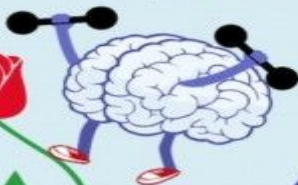
Inside, the creature is undergoing amazing chemical changes, and gradually the adult butterfly or moth emerges.

When metamorphosis is complete, the adult butterfly or moth breaks out of its pupa shell or cocoon. Its wings and body are still soft, so it pumps blood into its newly formed wings. Within about half an hour, the exoskeleton hardens and the wings become rigid. The new adult's task is to find a mate.

# THE BENEFITS OF READING BOOKS

„A book is like a garden carried in the pocket.”  
(Chinese Proverb)

exercises your brain



**i** provides knowledge and information

books are a good topic of conversation

reduces stress, puts you in a better mood



better writing skills

great and free entertainment



improves concentration and focus

enriches the language and vocabulary

turtledove  
decadence  
confused  
procrastinate  
Katha  
ambivalence  
confabulation  
hermeneutics  
alliance

develops creativity



books pose questions to stimulate further reflection



good for memory

books are a window to the world

increases your ability to empathize with others



introduces to the unknown fantasy world

from our **All the Presidents' Birthdays** infographic



# February Birthdays



February

6

Rr  
1911

Ronald Reagan was born in Tampico, Illinois in an apartment above a bakery. Young Ronald became a lifeguard in nearby Dixon, reportedly saving a number of lives.



Birth year



Birthday



William Henry Harrison was born on his family's Berkeley Plantation in Virginia. His father, Benjamin Harrison V, signed the Declaration of Independence.



February

9

Whh  
1773

February  
12  
Al  
1809

Abraham Lincoln was born in a log cabin on the rural frontier in Hodgenville, KY. The Lincoln family moved to southern Indiana when Abraham was seven years old.



February

22

GW  
1732



George Washington was born in Pope's Creek, VA. At the time, the Julian old style calendar was used, making his original birth date February 11th.



[periodicpresidents.com](http://periodicpresidents.com)

*We study history, periodically.*

I can create something that shows what I am learning.

I.B.3. INQUIRE: CREATE

I can find and examine information from a variety of sources.

IV.A.2. CURATE: THINK

I can use information ethically and obey copyright as I communicate with websites, social media or blogs.

IV.C.2. CURATE: SHARE

Critical Vocabulary:

Infographic, visual representation, knowledge,  
data,

# Task to complete:

You will be creating an infographic poster using your chromebook and google slides presentation.

Resources: information from this year's classes, World Book Online, Brainpop, Autodraw illustrations

The infographics that meet the criteria for the S.T.L.P. , Student Technology Leadership Program, competition will be entered into the online Kentucky contest.

<https://stlp.education.ky.gov/wp-content/uploads/2016/09/STLP-Infographic-Product-Rubric.pdf>

Digital Products:

Task: to create an original photo product

Rubric

[https://stlp.education.ky.gov/wp-content/uploads/2017/12/STLP-DPOJ\\_Original\\_Photo\\_Rubric.pdf](https://stlp.education.ky.gov/wp-content/uploads/2017/12/STLP-DPOJ_Original_Photo_Rubric.pdf)



# ePublishing Product- Recycle Team

Rubric

[https://stlp.education.ky.gov/wp-content/uploads/2017/12/STLP-DPOJ\\_Original\\_Photo\\_Rubric.pdf](https://stlp.education.ky.gov/wp-content/uploads/2017/12/STLP-DPOJ_Original_Photo_Rubric.pdf)

# Digital Art Product option -creating own design

Digital Art Rubric

<http://stlp.education.ky.gov/wp-content/uploads/2015/12/STLP-DPOJ-Digital-Art-Rubric.pdf>

Student Sample

<http://eisstlp.weebly.com/>

# S.T.L.P. website for the DPOJ Digital Product Online Judging

<https://stlp.education.ky.gov/dpoj/>