

## STEAMing into Ringwood Public Library

**S**cience

**T**echnology

**E**ngineering

**A**rts

**M**athematics

### What's happening this month at the library...

Sat., May 4 and May 18: Anime Club

Mon., May 20: Code Speaker **Class Full!**

Fri., May 24: Sphero Robots

Sat., June 1: NASA Ambassador

[See our full schedule here.](#)

*Call the library to register!*

**RINGWOOD  
PROUD TO BE  
STIGMA-FREE**

## May is Mental Health Month

- The Friends of the Library will be hosting an author visit with Courtney Carbone who wrote the *Dealings with Feelings* children's series on Saturday, May 11. See the flyer [here](#). Register for the event [here](#).
- Find books about mental health at [Hoopla Digital](#).
- Ringwood is proud to be Stigma-Free: See [Ringwood Health Department's Webpage](#) or [Ringwood Health Department's Facebook](#) page for more information.
- The 2019 documentary *Bedlam*, by Kenneth Paul Rosenberg of Upper East Films, presents the story of mental illness in this country.

## Measles Outbreak!



According to the CDC, cases of measles across the United States have reached their highest level since being declared eliminated nearly 20 years ago. The outbreaks are linked to travelers who brought measles back from abroad and to populations who have not been vaccinated.

Vaccinations help keep populations as a whole healthy. If most of the people in a population are vaccinated, then those who cannot be vaccinated also have a lower risk of contracting the disease. This is referred to as herd immunity by scientists.

Learn more about the importance of vaccinations in our society at [Science News for Students](#).

Do you know what happened in Promontory Point, Utah in May 1869?

Come into our STEAM area this month to find out!



### There's an app for that...

**Waze:** Gives you directions, alerts you to traffic and police hazards, and finds you cheap gas.

**iNaturalist:** For nature lovers and citizen scientists. Contribute to a growing database of wildlife and learn about local flora and fauna.

If you have questions or suggestions for RPL's STEAM Newsletter, email [caldwell@ringwoodlibrary.org](mailto:caldwell@ringwoodlibrary.org).

# That's Cold!

A popular theatrical element used in shows to create an eerie atmosphere, similar to fog, is produced from dry ice. But, what is dry ice? It is a solid that occurs when carbon dioxide (CO<sub>2</sub>) freezes. This happens at -108°F. The fog that results from exposing dry ice to room temperature is the CO<sub>2</sub> going through a process known as sublimation (where the matter changes directly from a solid to a gas, without first becoming liquid.)

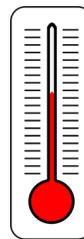


The two most common units of measurement for temperature are Celsius (or Centigrade) and Fahrenheit. Celsius is part of the metric system and is the easiest to understand: water(H<sub>2</sub>O) freezes at 0°C and boils at 100°C.

Did you know that there is a temperature known as Absolute Zero? This is theoretically the lowest possible temperature in the universe. Absolute Zero is part of the Kelvin scale of measuring temperature.

Here are some comparisons of the scales for you to ponder:

	Kelvin	Fahrenheit	Celsius
Absolute Zero	0	-459	-273
CO <sub>2</sub> freezes	195	-108	-78
Ave winter in Antarctica	233	-40	-40
H <sub>2</sub> O freezes	273	32	0
H <sub>2</sub> O boils	373	212	100



Hate it when something's measured in a scale you're not familiar with? Here are some handy equations to help you convert between Fahrenheit and Celsius:

$$^{\circ}\text{C} = \frac{5}{9} (^{\circ}\text{F} - 32)$$
$$^{\circ}\text{F} = \frac{9}{5} ^{\circ}\text{C} + 32$$

So, if your friend tells you it's 72°C outside today, would you believe him? Why or why not?

Go to our [STEAM Webpage](#) to see the conversion and more about systems of measurement.

## Enjoy photography?

May is a good month to photograph nature. Check out the Loaded Landscapes website for Spring photography ideas:

<https://loadedlandscapes.com/spring-photography-projects/>



Cherry Blossoms by Jeff Kubina

**Coming this summer:** Ringwood Library's Summertime Reading theme is *Universe of Stories!*



2019 is the 50th Anniversary of the first moon landing, so it's a perfect time to celebrate the stories behind our knowledge of the universe.

Ringwood's own NASA Ambassador, Mike Green, will be giving a series of talks about the Mercury, Gemini and Apollo space missions. Mark your calendars for June 1, July 20, October 5, and December 7.