PI Day Math Challenge

Try the following Math Activities for Prizes during our PI Day Challenges on Friday March 16<sup>th</sup>, 2018

- 1. Go to <u>http://www.piday.org/</u> and find out as much as you can about  $\pi$  --- write down 3 places where  $\pi$  is used in mathematics. Extra bonus if you can explain how  $\pi$  was discovered.
- 2. Here is a neat video that shows the relationship between  $\pi$  and area of a circle. <u>https://youtu.be/YokKp3pwVFc</u> drop in at the office to explain the video.
- Here is a great website from NASA about how π is used at NASA. <u>https://www.jpl.nasa.gov/edu/nasapidaychallenge/</u> see if you can solve the Pi in the sky challenge
- 4. And here is a question students can bring to the office for prizes

## No Business Like Snow Business

The snow is deep and it's perfect snow fort weather. You've decided to build a wall 1.5 m high, 9 m long and 30 cm deep. You find that, by packing snow into your trusty plastic bin, you can make cubic 'snow bricks' which have dimensions 30 cm by 30 cm by 30 cm.

- a) How many bricks will you need to build the wall?
- b) Suppose you had a bin in the shape of a rectangular prism that was 60 cm long by 30 cm wide by 15 cm high. How many rectangular prism bricks would you need to build a wall with the same dimensions?
- c) In the end, you decide to use a 2 : 1 ratio of rectangular bricks to cubic bricks. How many cubic bricks will you need?

Happy  $\pi$  Day!