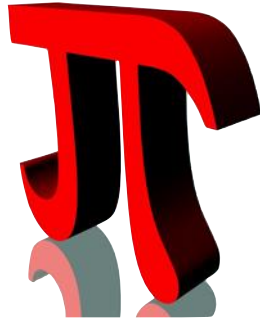


Activities to Celebrate Pi Day



Pi Day is a great excuse to engage children in fun math challenges and enrich their understanding of the concept of Pi

Furthermore, it's a way to introduce them to the American culture!

In the U.S.A., a lot of schools celebrate the Pi Day and mix mathematics and other subjects in many different projects.

Pi Day is observed on March 14 at exactly 1:59 PM (because $\pi \approx 3.14159265359...$ and so on).

Here are fun and exciting activities that can include investigations of the value of Pi, special Pi projects and parties with pizza or other kinds of "Pi."

But what is pi?

Pi (π) is a mathematical constant, the ratio of a circle's circumference to its diameter. Commonly approximated as 3.14159, 'Pi' is an irrational number with infinite decimal digits—it just keeps going and going and going!

Here are some fun ways to celebrate Pi Day with your students!

1. Make a Pi Collage



At school, you can work on Michael Albert. He is a New York pop artist who made many series of pi collages, including one with over 777 digits of pi.

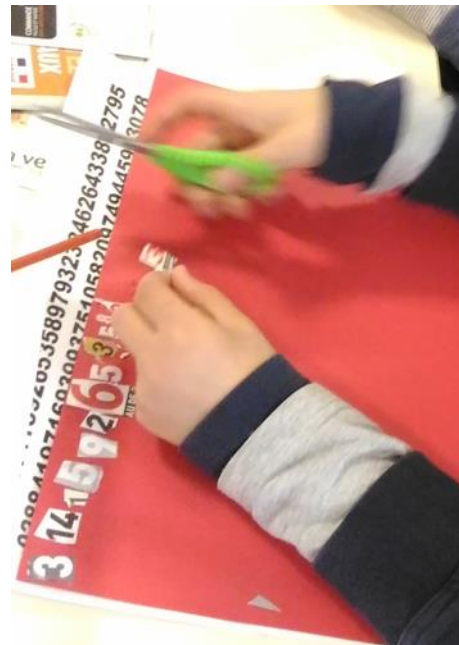
It helps students to understand how long an irrational number is.

SUPPLIES:

- Assorted magazines, newspapers to cut up
- Glue
- Scissors

STEPS:

- Scour magazines and newspapers to find all of the numbers for Pi
- See how many digits you can find .
- Cut and paste to create a custom pi collage .



*Collaboration CM2/CP,
Ecole Anatole France -La Bruyère
Fâches Thumesnil*

2. Run a Measurement Race



Circles are all around us. Let's get them the attention that they deserve. This activity is an opportunity for students to do quick math and have some measurement fun too. They can pay attention to the circles all around them while enjoying this measurement race.

SUPPLIES:

- Soft measuring tape (1 per participant)
- Assorted circular objects (pizzas, cups, wheels, balls, etc.)
- List of all the objects for each participant

STEPS:

- Lay out all the objects
- Each participant can run and measure the circumference and the diameter of each object, writing it down next to the objects name on the list.
- Divide the circumference by the diameter and write the result



- BONUS CHALLENGE: The participant closest to pi (3,1416) wins!

*Activité menée en CMI
Ecole Anatole France La Bruyère
Fâches Thumesnil*

3. Have a Pi Day Bake-Off

Example: Various Pi Pies



Pi digits shaped shortbread



A- Bake a Pi pie!

SUPPLIES:

Baking materials for your favourite pie

STEPS:

- Pick out a recipe
- Follow the recipe and bake the pie or the shortbread
- Decorate the pie with numbers (3.14), equations ($\pi = C/d$) or symbols (π).
- You can organize a Pi pie contest: Two scores count: the Pi theme and the Pie taste.

B-Bake some Pi digits shortbreads

SUPPLIES:

Baking materials for your favourite pie or shortbread

STEPS:

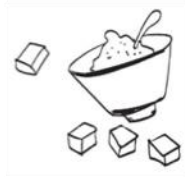
- Pick out a recipe and give it to each group
- Students have to order ingredients from the « store »
- They follow the recipe and then they shape the dough into numbers.
- Organize an American breakfast and enjoy the meal!



*Shortbread workshop (in English) and
American/Canadian breakfast
Ecole Anatole France -La Bruyère
Fâches Thumesnil*

Shortbread

100 gr



200 gr



300 gr



Mix all ingredients by hand

Knead the dough well with both hands

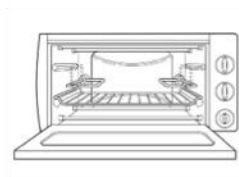
Flatten the dough by hand



Cut numbers with a cookie cutter



Put in the oven 25 min at 180 °



*Document élaboré par les enseignantes de l'école
primaire Anatole France -La Bruyère (Fâches
Thumesnil)*

4- Make a Pi Bracelet or Necklace



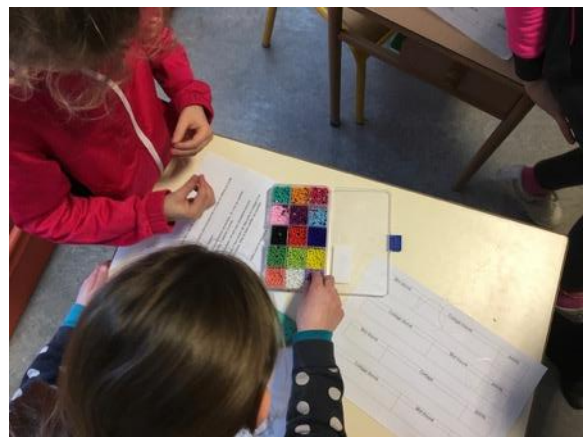
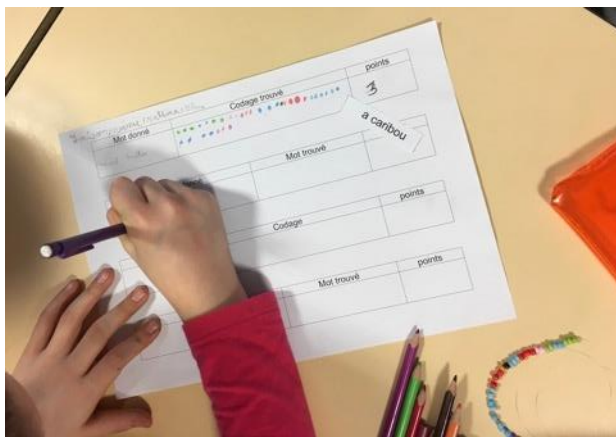
Learn to code (and decode) and create some pi bracelets to memorize pi digits (or to create a secret message)

SUPPLIES:

- Different colours of beads, Pipe cleaners, thread or string
- A pen and a pad of paper

STEPS:

- Write out as many Pi digits as you can and colour code each number.
- Grab different colours of beads and begin to string them onto the thread or a pipe cleaner you select to make your bracelet.
- Start to place the beads onto the thread in order of Pi's number sequence and the colours you've selected for each digit.
- Tie up the thread and wear your new accessory.
- Use it to memorize the digits of Pi!



Codage : une lettre = une combinaison de perles			
A	two green pearls	N	two pink pearls
B	one orange pearl	O	two red pearls
C	one purple pearl	P	three green pearls
D	one brown pearl	Q	three orange pearls
E	two blue pearls	R	three purple pearls
F	one brown pearl	S	three brown pearls
G	one pink pearl	T	three blue pearls
H	one red pearl	U	three red pearls
I	one green pearl	V	three pink pearls
J	one blue pearl	W	one yellow pearl
K	two orange pearls	X	three grey pearls
L	two purple pearls	Y	three black pearls
M	two brown pearls	Z	three white pearls
espace	one black pearl		

*Pour aller plus loin: codage /
décodage de mots en relation avec la
culture canadienne*

*Groupes mixtes CP-CM1
Ecole Anatole France-La Bruyère
Fâches Thumesnil*

5- Sing a song to memorize pi digits!

Memorize Pi digits while singing faster and faster « The Pi Song »

With the youngest, learn the english numbers from one to ten by singing the « numbers song » and playing with your fingers.

Organize a contest:

With the oldest: Who has memorized the most pi digits?

With the youngest: Who can read in English the most pi digits?

SUPPLIES:

- The pi song mp3 & lyrics
- Ten little fingers mp3 & lyrics

*Mp3 files, lyrics and flash cards available via this link:

<https://1drv.ms/u/s!Aq63klRvqK3OhVWx92Oy9dX3Zyow?e=xKT7HJ>

STEPS:

- Learn the song by back building (learn the last syllables from the last sentence, then the last sentence and so on..)



Comptines et jeux de doigts pour apprendre les chiffres de 1 à 10 en anglais

Elèves de CP et CM1, école Anatole France La Bruyère



Où quand les CP vont plus loin que les CM1 pour nommer en anglais les décimales de pi...

Memorize Pi digits by singing!



They said : « Would you like some pie? » 

I said « Yes I would » 

I forgot they majored in maths, 

I would undo it if I could! 

They said:

(three point) (one four) (one five) nine

3.14 15 9

(two six) (five three) (five eight) nine

26 53 58 9

(seven/nine) three (two three) (eight four)

79 3 23 84

(six two) (six four) three three.

62 64 3 3

(les parenthèses valent pour un temps)

6- Host a pi word challenge

Word challenges are always a hit with children. Here's a fun way to enhance and test children's vocabulary and help them learn new words as well

SUPPLIES:

Pencil and pen for each participant OR Scrabble board game letters

STEPS:

Challenge children to write down as many words they can think of that include the word "pi" (pizza, pineapple, picture, pie, etc.).



Non exhaustive list:

*1st syllable:

pizza, picture, piano, PI, pie, pirate, pig, pink, pineapple, pine, pin, pickle, picnic, pillow, pilot, pilgrim, spider, spinach, pipe, pill, pistol, pigeon pistacchio

*2nd syllable:

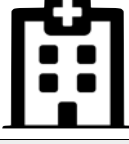
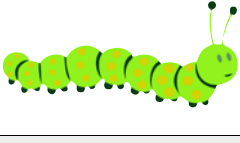
happiness, Jupiter, champion, hospital, tropical, camping, shopping, vampire, scorpion, pupil

*3rd syllable

porcupine, caterpillar, olympics

You can use the following grid to make a « pi word scavenger ». Students could play by team at school and with their family at home!

Complete those pi words (the more, the best!)

				
PI _ _ _	PI _ _ _ _	PI _ _ _	PI _	PI _ _ _ _
				
PI _	PI _ _	PI _ _ _ _ _ _	PI _ _	PI _
				
PI _ _ _ _	PI _ - _ _ _	PI _ _ _ _	PI _ _ _	PI _ _ _ _ _
				
_ PI _ _ _	_ PI _ _ _ _	PI _ _	PI _ _	PI _ _ _ _
				
PI _ _ _ _	PI _ _ _ _ _ _ _	_ _ PI _ _ _ _	_ _ PI _ _ _	_ _ _ _ PI _
				
_ _ _ PI _ _	_ _ _ PI _	_ _ _ PI _	_ _ _ _ PI _	_ _ _ PI _
				
_ _ _ _ PI _	_ _ PI _	_ _ _ _ PI _ _ _	_ _ _ _ PI _	*

*Find a bonus word and draw it!

7- Walk, Run, Jog, or Cycle 3.14 Miles



All that calculating can leave you antsy. Grab some friends and get moving! Hold a fundraising event involving 3.14 miles (or km if you wish) and donate the money to charity.

*It may be an opportunity to compare two different measuring systems and convert distances (miles vs km)

8- Make a Pi scavenger hunt

For each digit of pi, divide your participants into groups and have them take photos of their found objects rather than bringing back actual items (with a tablet for example).

Set a time limit and specify where they're allowed to roam, then disclose your pi scavenger hunt objects.

*For the following digits of pi (3.1415926), here's an example of objects you might hunt for in a school environment:

- 3 scientific calculators
- 1 high heeled shoe
- 4 rulers
- 1 handshake with a teacher
- 5 different leaves
- 9 cents
- 2 balloons
- 6 mechanical pencils...

*Whatever you choose, help your students by providing a grid with the pictures of the hunt objects!

9- Make a human representation of pi digits



The longest human representation of pi digits consists of 1,182 participants, and was achieved by The Sultan's School (Oman), in Seeb, Oman, on 14 March 2018.

Try to make a chain involving every students of the school. You can even invite families to improve the length



Come to the nerd side. We
have Pi...

Have fun with your students and enjoy mathematics!