

40 Weeks of Math Challenges

Week 40



These visual math challenges have been created to intrigue and inspire your children. They are designed to be hands on, open-ended inquiries, to challenge them to think deeply about the world around them.

This is the last set of challenge cards for 2022!

I hope you enjoyed exploring these ideas with your children! Join us next year for more math fun with our new math investigation pages!

You are welcome to freely print these cards for your family but please respect our creative copyright and link back to the original file on our web page to share with others. Thanks, Jo

Find me on Instagram [@jo_mathinnature](#) and [Nature Study Australia](#)

Number Bases

Definition:

Are the number of unique digits used to represent an amount.
The number base is also known as the RADIX.

110₂ ← Base

Base 2	0
●	1
●●	10
●●●	11
●●●●	100
●●●●●	101
●●●●●●	110

Challenge 40

Base 10

Decimal Number System

Definition:

The most common number system, using the digits

0,1,2,3,4,5,6,7,8,9

1. Explore the decimal system with a abacus.
2. Then have fun learning about all the different number systems with Math is fun...

<https://www.mathsisfun.com/numbers/bases.html>

Write about what you learn in your journal!



Base 2

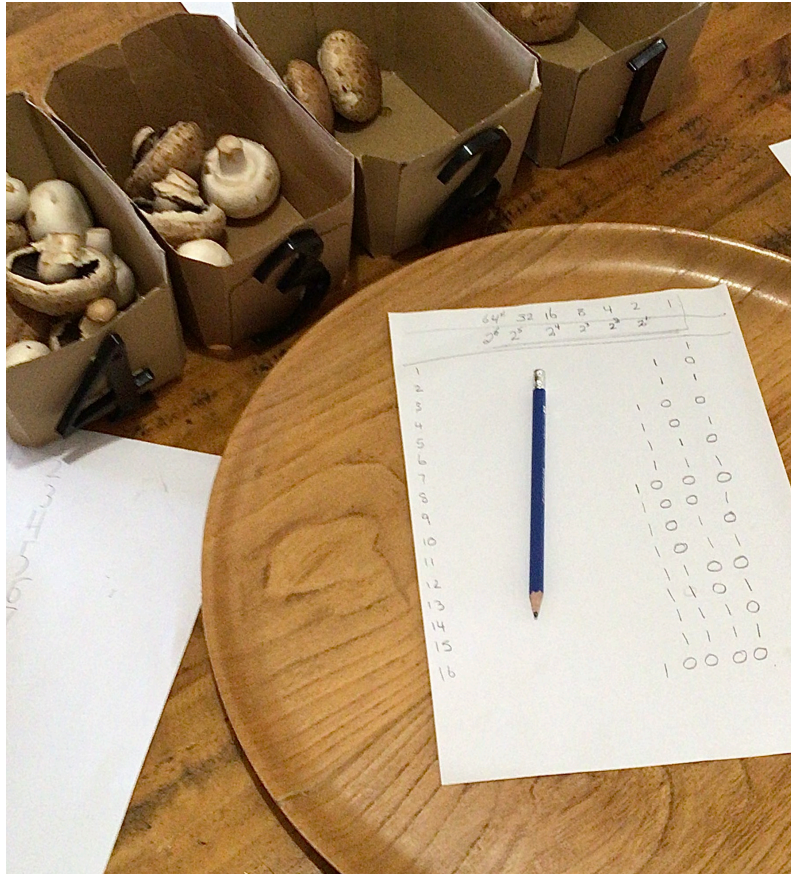
Binary Number System

Definition:

The system used in computers. The only two digits used are 0 and 1.

1. Binary is helpful when using machines as you only need the signals on and off to represent all numbers. We discovered binary with this great activity from Math at Home, you might like to try it...

<http://www.mathematicscentre.com/mathsathome/challenges/mushhunt.htm>



Base 60

Sexagesimal Number System

Definition:

One of the oldest recorded number systems, used by the Babylonians.

Uses digits 0 through 59.

1. The most common use for the sexagesimal number system is telling time.
2. Watch this video

<https://youtu.be/oicqZhioJpg>

Show in your math journals the numbers which divide evenly into 60.

