Introducing Binary Numbers

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Computers work best when things are on or off. Computers have only two numerals, zero and one. *(Poor computers!)*

We call numbers with only zero and one **binary numbers**. The "bi" in binary means *two,* like the two wheels on a **bi**cycle. We call each place a *bit*, short for **bi**nary digi**t**.
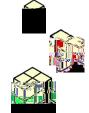
Binary numbers also have places, but they're *times two* places.

Ones place: One stands alone and starts every system of numbers

Twos place: Two times one

Fours place: Two times two

Eights place: Two times four

What's next? _____

Each place is two times the one before it. We say this is a **base two** number system because we multiply by two to get to the next place.

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Exercises

Write your age in years _____

Put your binary cards on the desk, with "one" on the right, then two, four, eight, and sixteen.
Turn cards over