## NUMBERS!

<u>Abundant numbers:</u> A number that is smaller than the sum of its proper divisors.

12 – sum of proper divisors = 1+2+3+4+6=16

12 is smaller than 16

Can you find 5 more abundant numbers?

As long as worms are abundant, I don't really care! <u>Proper divisors:</u> All positive divisors of a number, except the number itself.

Positive divisors of 18 are: 1,2,3,6,9,18

So the proper divisors are: 1,2,3,6,9.

<u>Deficient Numbers</u>: A number that is larger than the sum of its proper divisors. 14 – sum of proper divisors = 1+2+7=10 14 is larger than 10 Can you find 5 more deficient numbers?



<u>Perfect Numbers:</u> A number that is equal to the sum of its proper divisors.

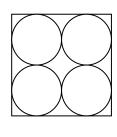
6 – sum of proper divisors = 1+2+3 =6 Find the next perfect number.

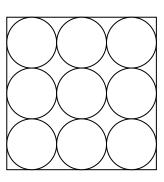


I reckon I'm the only perfect thing on this page!

<u>Figurate Numbers:</u> numbers that can be represented in a geometric shape, including square, triangular and pentagonal numbers.

**Square Numbers:** 





What are the next 7 square numbers?

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