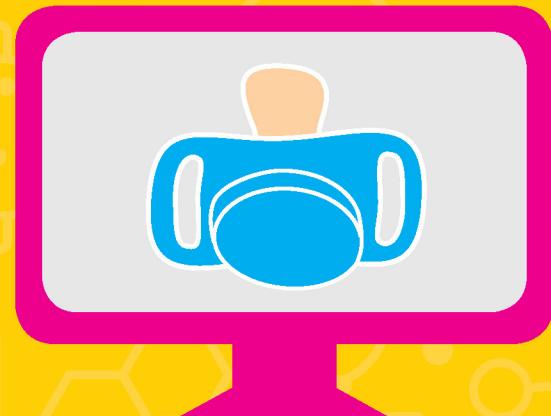
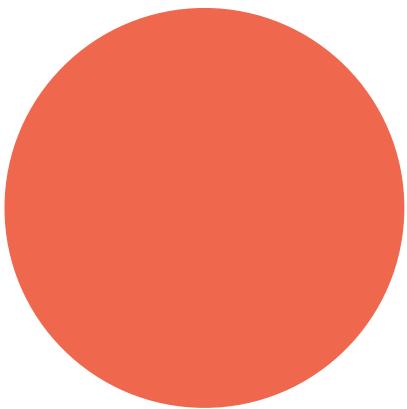


QUANTUM COMPUTING

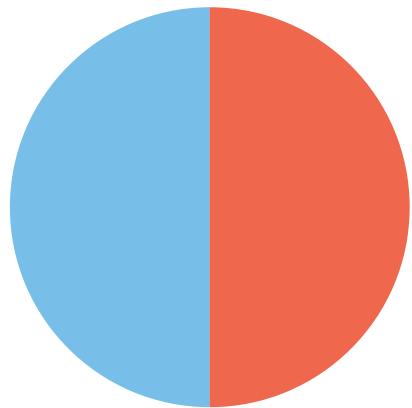
for babies



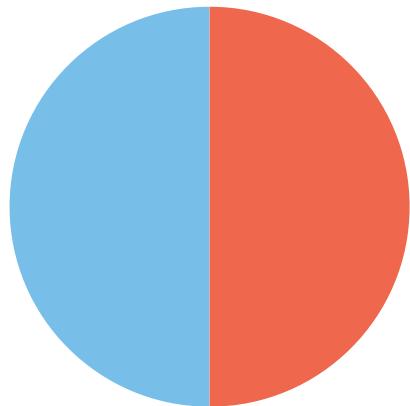
Chris Ferrie and whurley



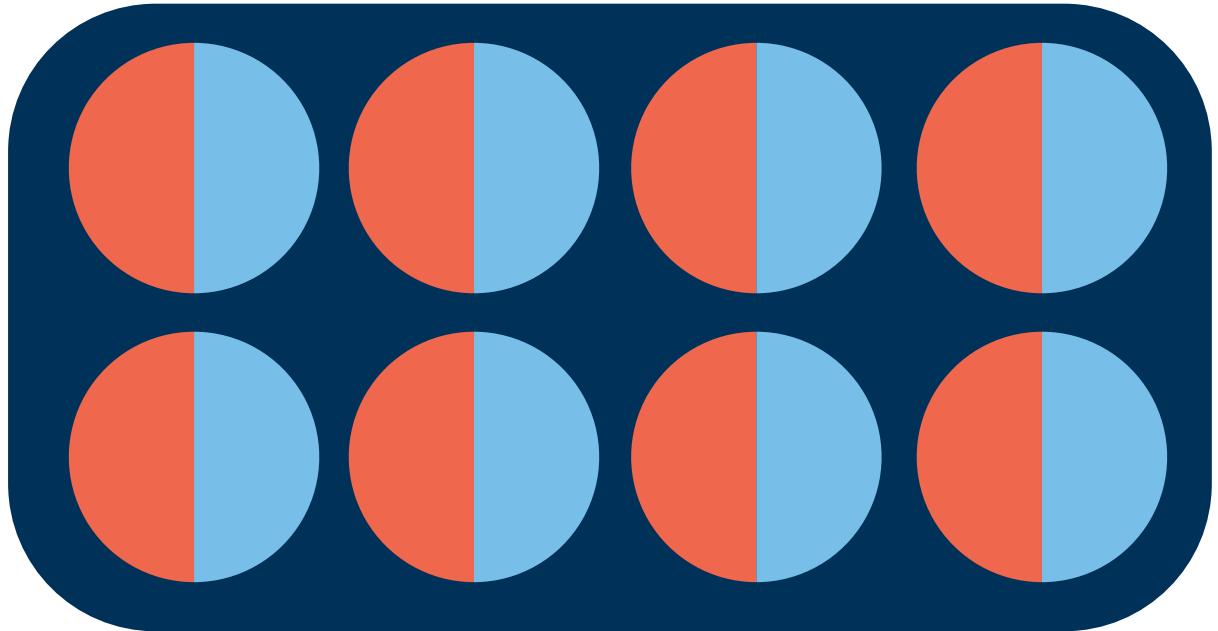
This is a ball.



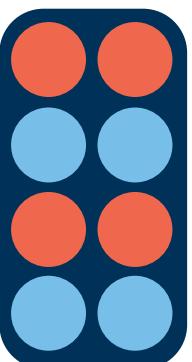
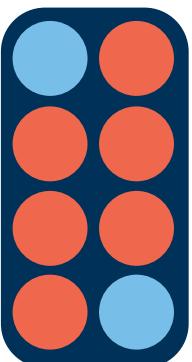
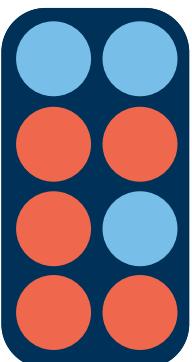
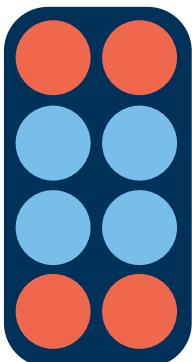
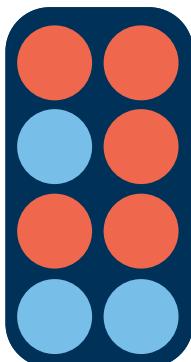
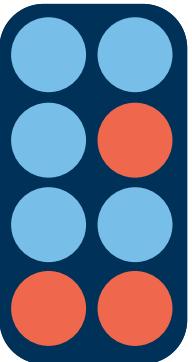
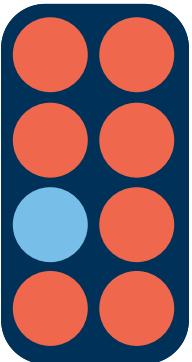
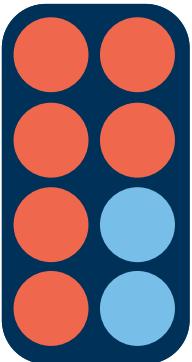
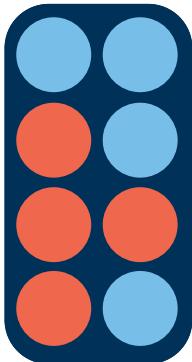
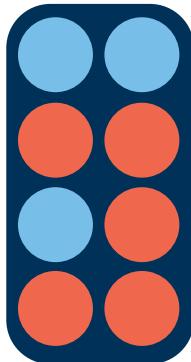
It can be red or blue.



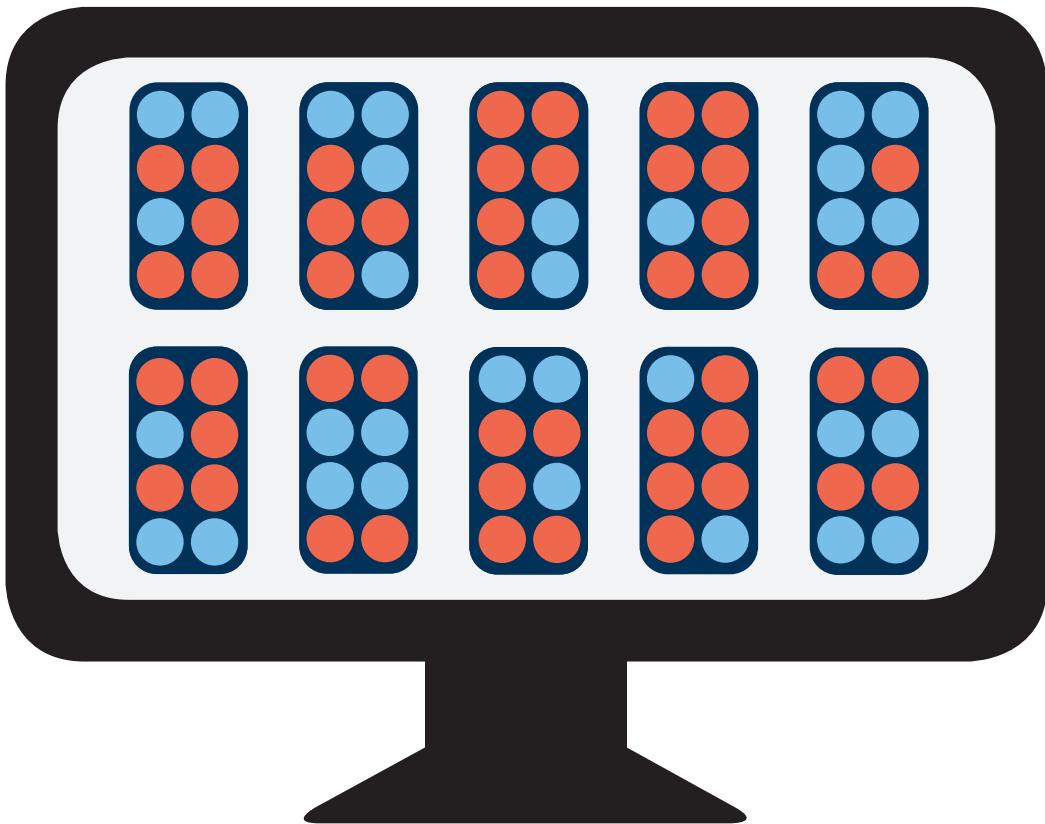
It is one bit of information.



Eight bits make a byte.

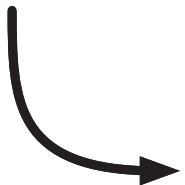


Many bytes make data.

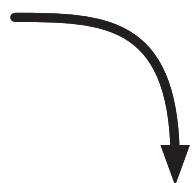


Data lives in a computer.

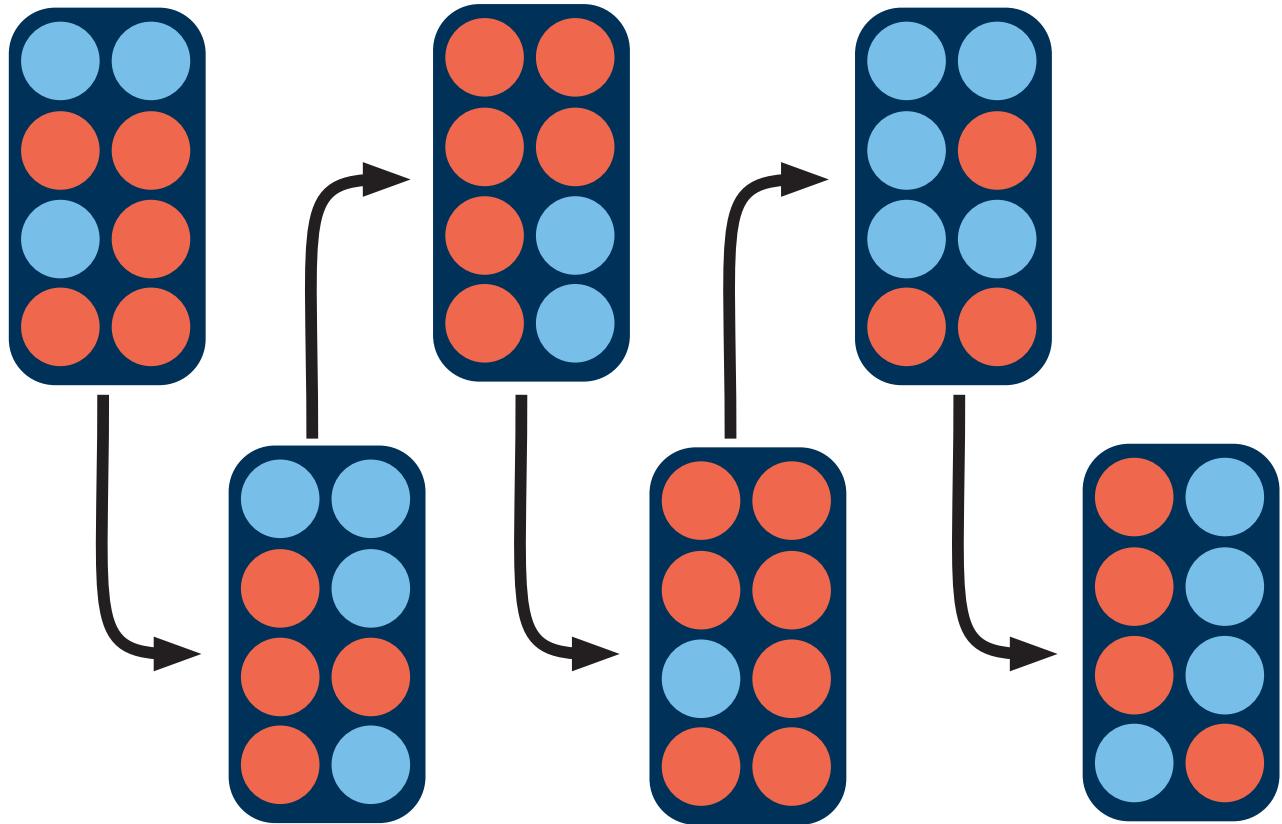
Problem



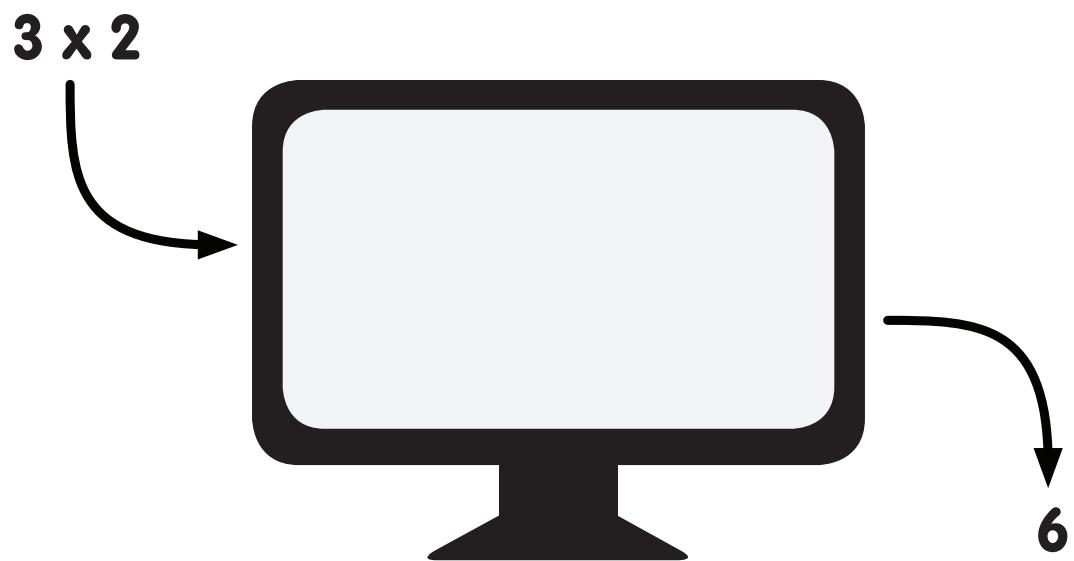
Solution



Computers are useful. They solve problems.



Problems are solved by changing data.

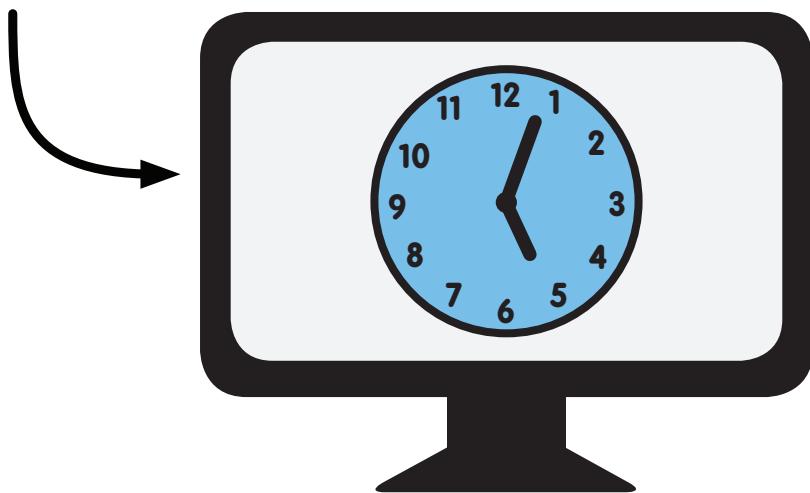


Some problems are easy.



Some problems are hard.

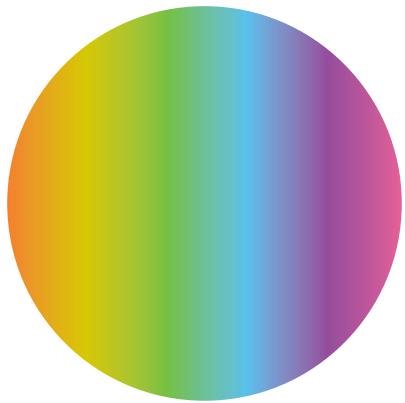
8,777,379,184,573 = ?



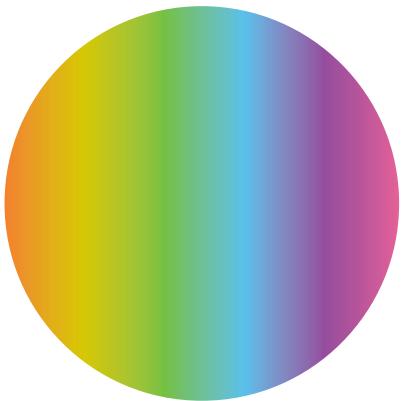
**Some problems are too hard
for a computer using bits.**



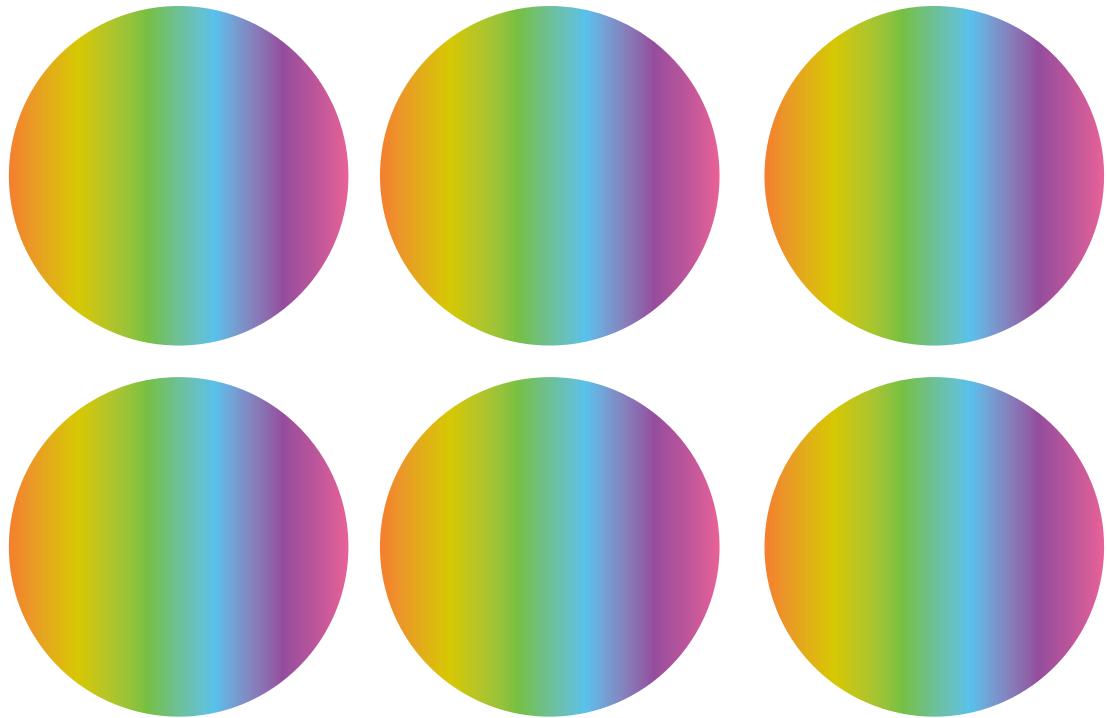
But wait! What is this down here?



It's a quantum bit. A qubit!



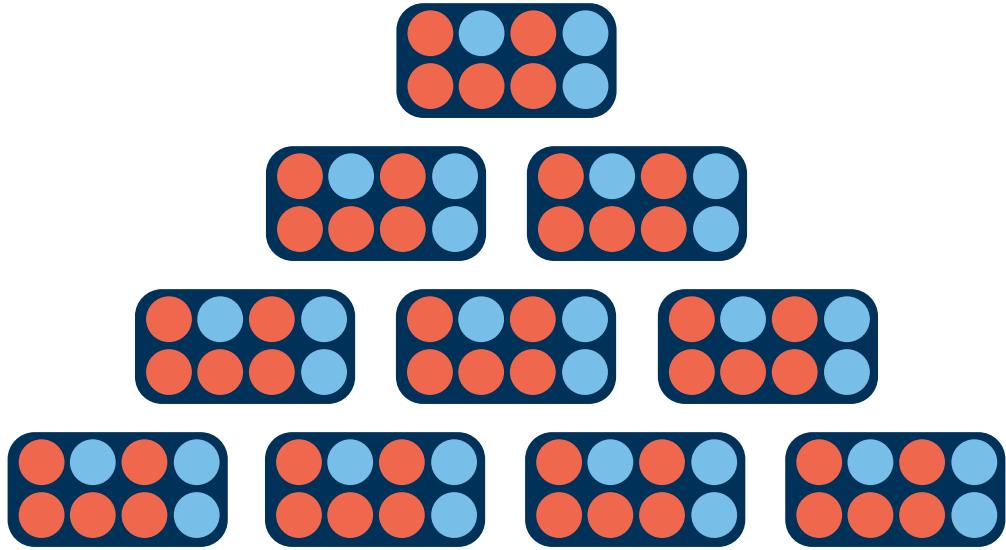
It can be red or blue or anything at all.



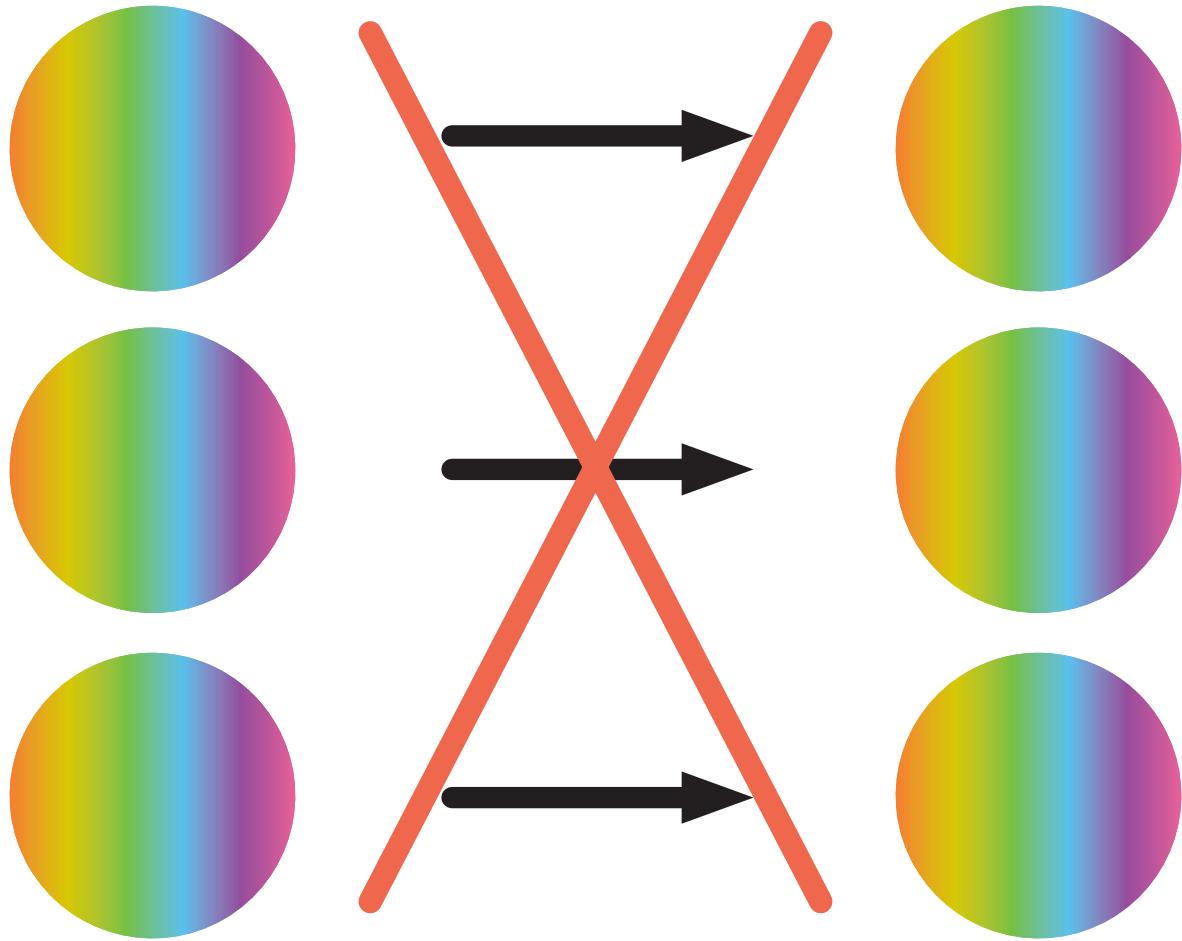
Many qubits make quantum data.



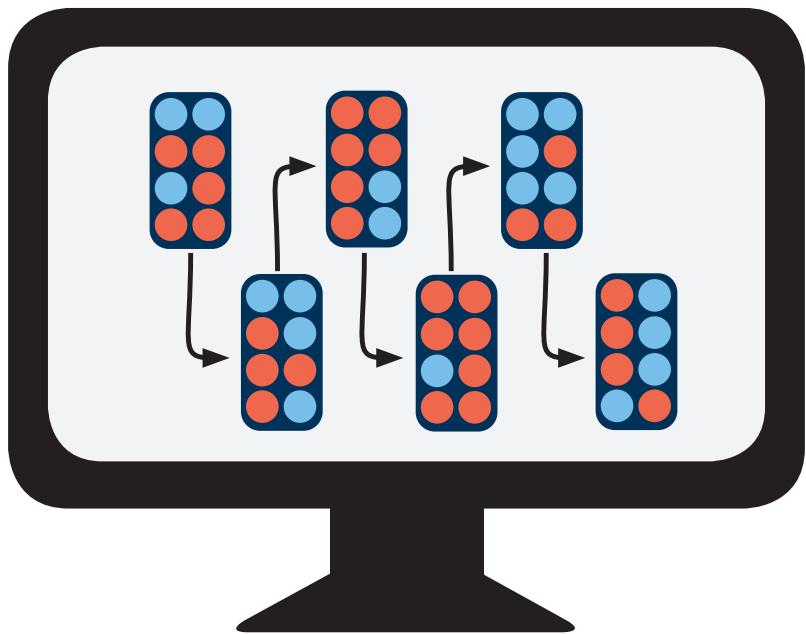
Quantum data lives in a quantum computer.



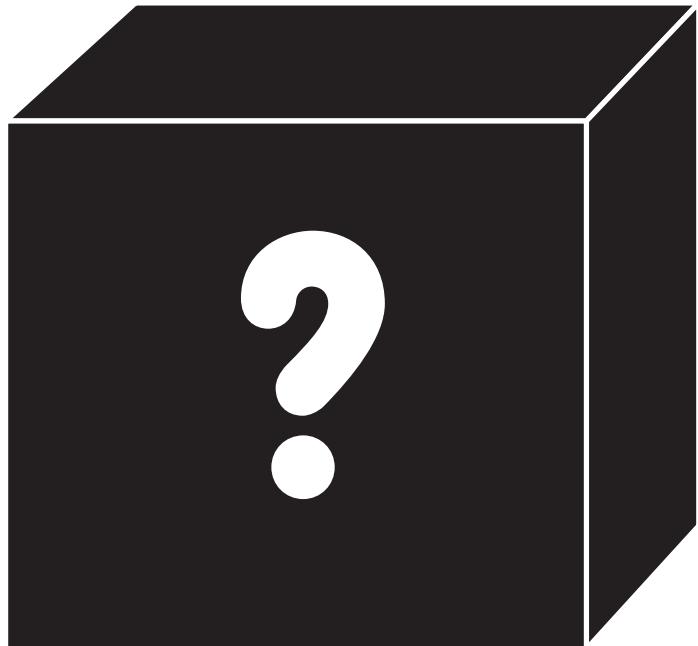
Data can be copied.



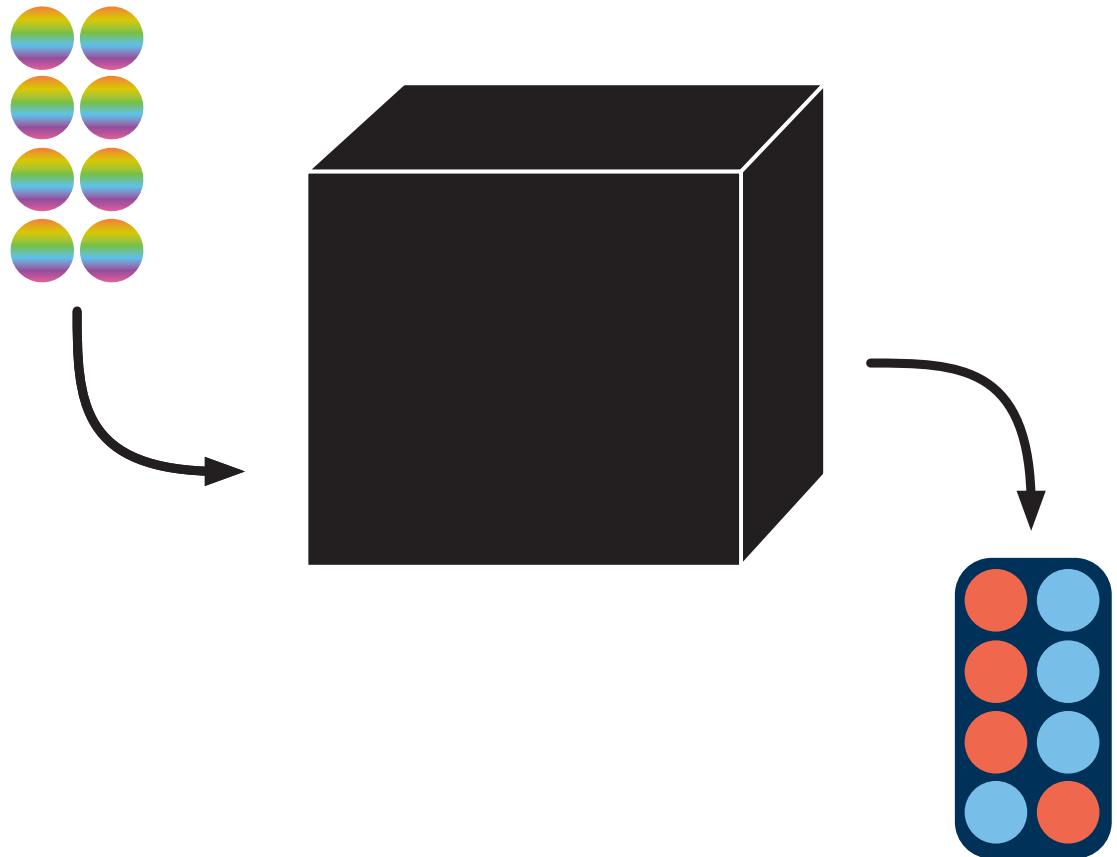
Quantum data cannot be copied.



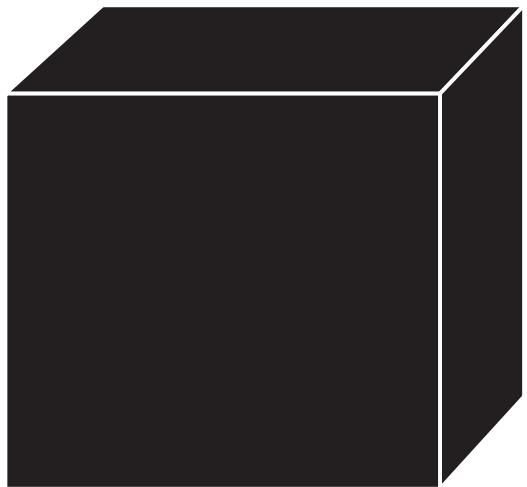
We can watch a computer at work.



**But we cannot watch
a quantum computer at work.**

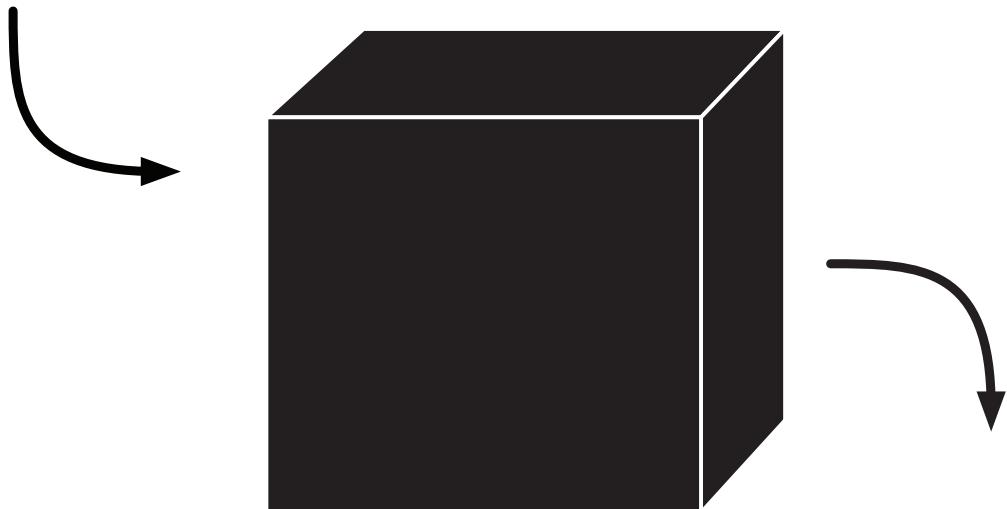


We can only see the answer it gives.



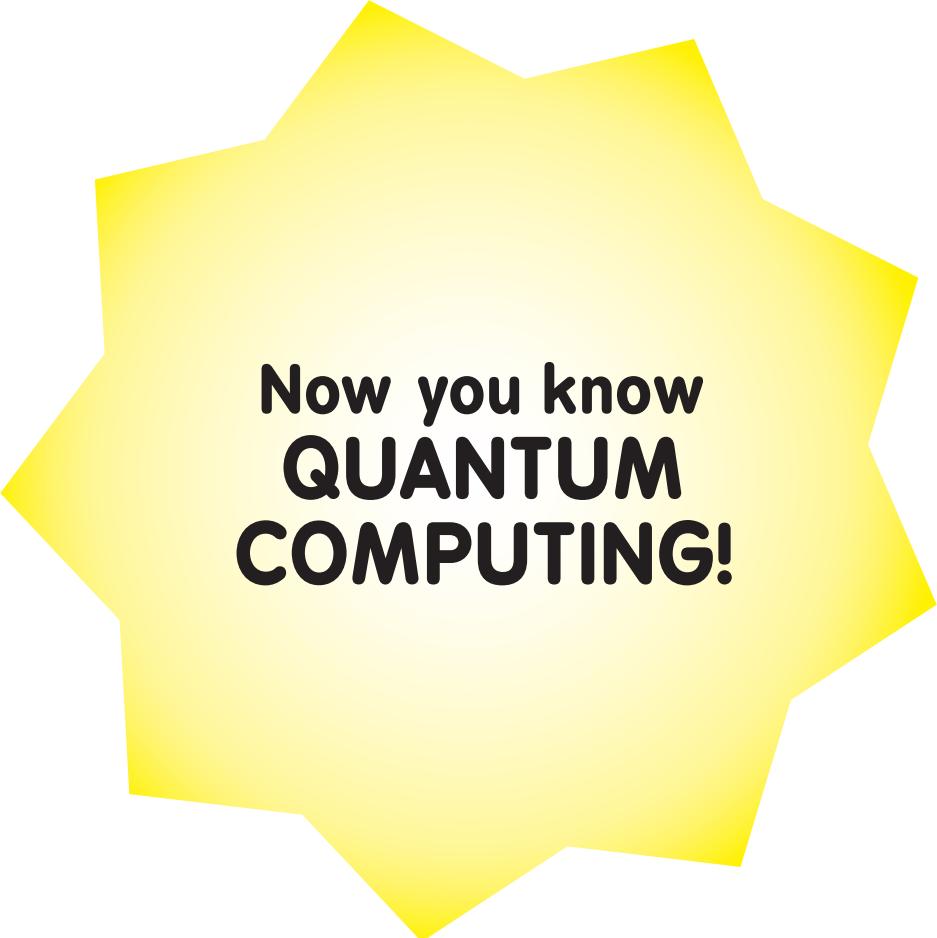
So why do we want a quantum computer?

8,777,379,184,573 = ?



$5,026,183 \times 1,746,331$

**Because quantum computers
can solve hard problems!**



Now you know
**QUANTUM
COMPUTING!**

Simple explanations of complex ideas FOR YOUR FUTURE GENIUS!



*It only takes
a small spark to
ignite a child's mind.*

Chris Ferrie is a physicist, mathematician, and father of four budding young scientists. He believes it is never too early to introduce small children to big ideas!

whurley is a scientist, entrepreneur, and father of three amazing boys. He believes all children are scientists at heart and the key to our future.

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