LEARNBITCOIN.COM

Bitcoin Units Cheat Sheet

Bitcoin is divisible to 8 decimal places. Here's every unit between BTC and the satoshi, and how they relate. Pin this somewhere; you'll stop doing decimal math in your head.

Symbol	Name	Value (BTC)	Satoshis	Power of 10	Common use
BTC	Bitcoin	`1`	`100,000,000`	`10^0`	Standard, wallets, exchanges
dBTC	Deci-bitcoin	`0.1`	`10,000,000`	`10^-1`	Rare in practice
cBTC	Centi-bitcoin	`0.01`	`1,000,000`	`10^-2`	Rare in practice
mBTC	Milli-bitcoin	`0.001`	`100,000`	`10^-3`	European exchanges, some wallets
Finney	Finney	`0.0001`	`10,000`	`10^-4`	Honors Hal Finney; historical
-	Ten-thousandths	`0.00001`	`1,000`	`10^-5`	Unnamed; rare
μBTC / bit	Micro-bitcoin	`0.000001`	`100`	`10^-6`	BIP 176; rare in practice
-	Hundred-millionths	`0.0000001`	`10`	`10^-7`	Unnamed; rare
sat	Satoshi	`0.00000001`	`1`	`10^-8`	Lightning, on-chain, day-to-day

Quick reference

```
1 BTC = 100,000,000 sats
1 mBTC = 100,000 sats
1 bit (μBTC) = 100 sats
1 sat = 0.00000001 BTC
```

Lightning denominates in millisats: 1 sat = 1,000 msat. Millisats don't exist on the base chain; they're only meaningful inside Lightning channels.

What matters in practice

BTC for amounts you'd think of in dollars or euros - savings, purchases, prices.

sats for amounts that are small or precise - Lightning, fees, tips, on-chain dust limits.

Everything else (mBTC, bits, Finney) exists, but you'll rarely see it outside of European exchanges or BIP discussions. Recognize them; don't feel pressure to think in them.

> **Why 100,000,000?** Satoshi chose 8 decimal places because that gave Bitcoin enough divisibility to handle small transactions even if 1 BTC became extremely valuable. At $1M per BTC, 1 sat is 1¢ - so the unit floor still works for everyday payments. The fixed precision is a feature, not an oversight.

Bitcoin only. No bullshit. Have fun.