

Minimum Word Set

How many primitives does a Forth need to get it started?
Surprisingly few, as you can see with Gforth EC, which provides a high-level definition for almost every primitive.

But beware! If you omit too much, you risk circular behaviour (loops).

We need in any case:

| | | |
|----------------|---|----|
| :dodoes | as generalized entry point for all high-level definitions, or Call for primitive-centric implementations. | 1 |
| @ | and | 2 |
| ! | to access the memory. | 3 |
| >R | and | 4 |
| R> | for the return stack, so anything can be moved. | 5 |
| + | or 2* for Artihmetik. And | 6 |
| NAND | as a universal bit instruction. | 7 |
| ?BRANCH | or 0= for branches. And finally | 8 |
| ;S | and | 9 |
| EXECUTE | for execution. | 10 |

Everything else can be defined from these words,
even if it then needs temporary variables:

```
: lit'    r> @ ;  
: cell   lit' [ 2 , ] ; \ oder 4 oder 8 ...  
: tmp1   lit' [ here cell+ , 0 , ] ;  
: dup    tmp1 ! tmp1 @ tmp1 @ ;  
: lit    r> dup cell + >r @ ;
```

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