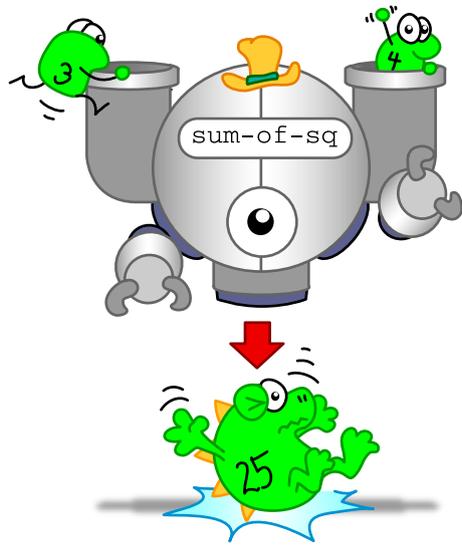# Blocks as Data

Most blocks take in data as arguments and output data.
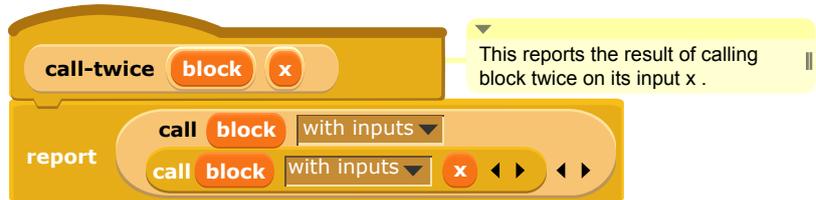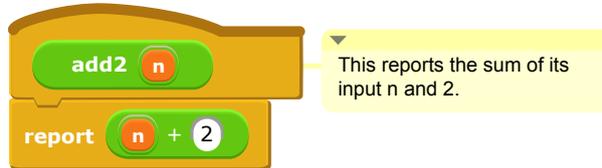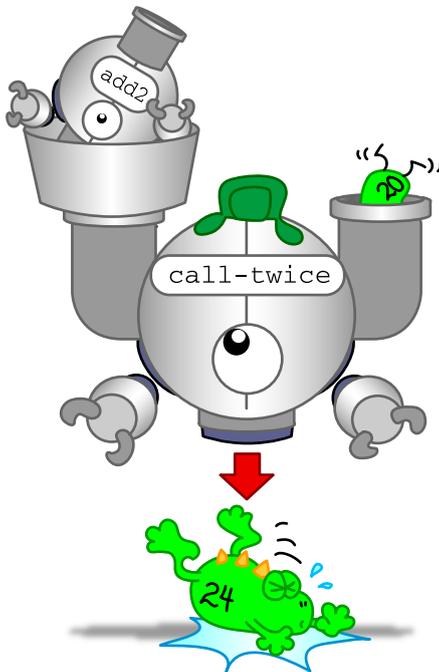
In the block editor:

sum-of-sq `x` `y`

report (`x` * `x`) + (`y` * `y`)

Now call the block...

sum-of-sq `3` `4`   25

But BYOB is great because it's easy to pass <u>blocks</u> as arguments, just like any other data!

add2 `n`

report `n` + `2`

This reports the sum of its input n and 2.

call-twice `block` `x`

report call `block` with inputs ▾
call `block` with inputs ▾ `x` ◄ ► ◄ ►

This reports the result of calling block twice on its input x .

There are two ways of passing the **add2** block in as an argument:

call-twice `add2` ◯   `20`   24

call-twice the `add2` ◯ block   `20`   24

Drag the block toward the input slot. A white halo will appear. Release the mouse if you don't want the grey border. Otherwise, keep dragging the block even closer toward the input slot until a grey border appears and then release the mouse button.

Also, blocks can output new blocks!

make-linear `a` `b`

report the (`a` * `x` + `b` * `y`) block.
Input names: `x` `y` ◄ ►

call **make-linear** `5` `2` with inputs ▾ `1` `7` ◄ ►   19