# AUTO-FLOW & PLACEMENT DIRECTION

How Grid Decides What Goes Where
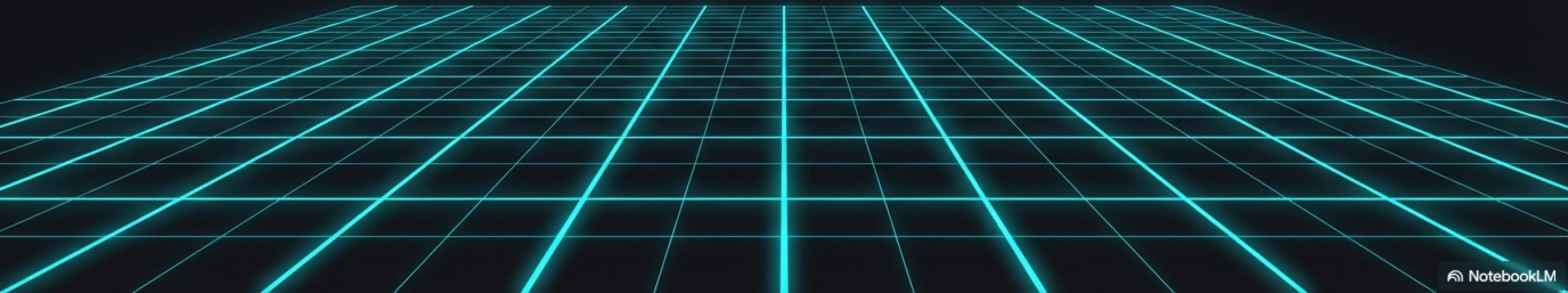
Grid places items when you don't.

Unplaced Items

Auto-Placed

When you don't explicitly place grid items, Grid follows a set of rules to place them for you. This is **auto-placement.** This is the rulebook Grid uses to fill the grid.

THE DEFAULT: `row` FLOW

```
grid-auto-flow: row;
```
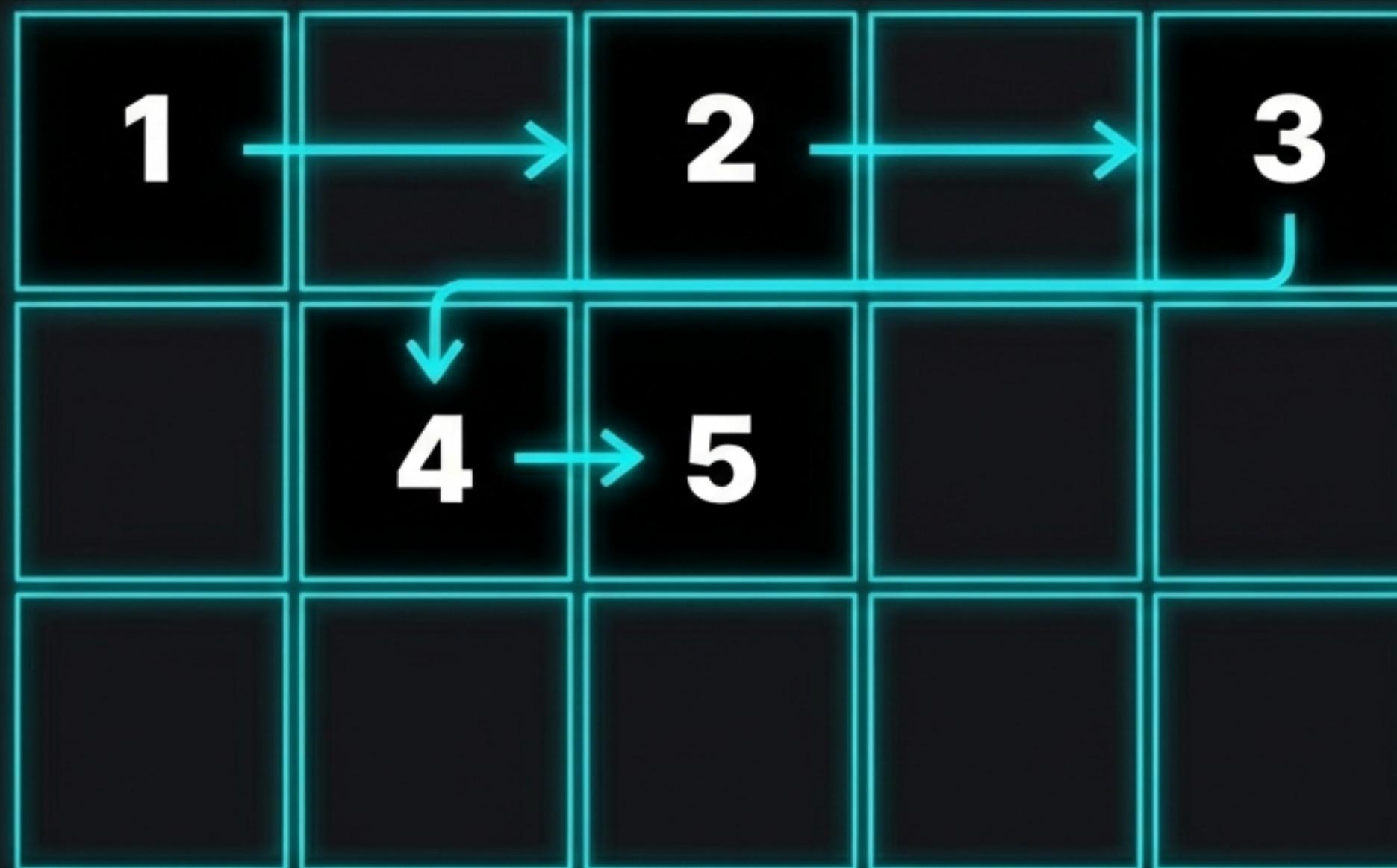

This is the default behavior. Grid fills rows from left to right, then creates new rows as needed. It feels familiar—but it's still Grid, not Flexbox.

COLUMN FLOW CHANGES EVERYTHING

```
grid-auto-flow: column;
```
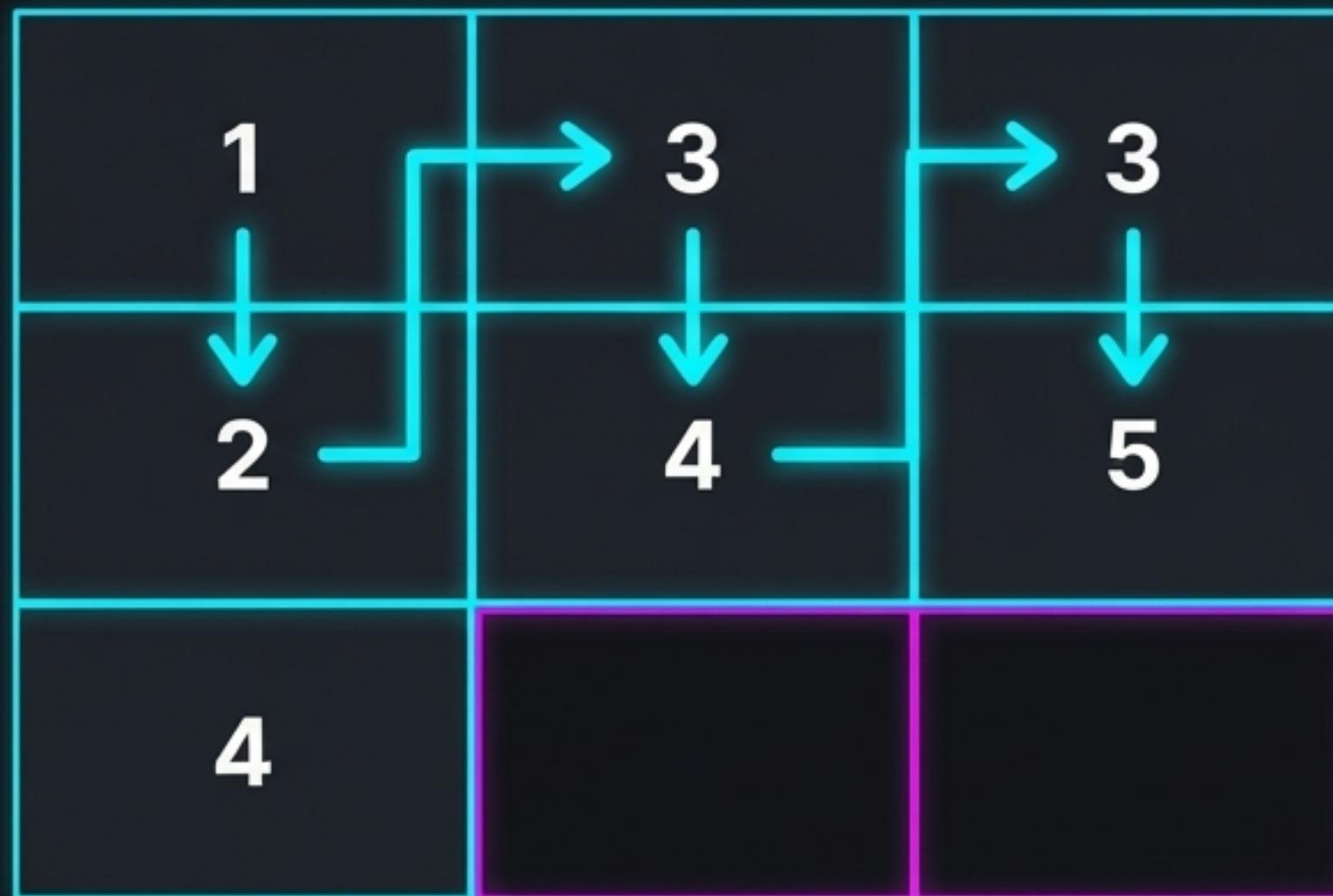

Now Grid fills each column from top to bottom, then creates new columns.

Same items. Same grid. Very different outcome.

THE PACKING ALGORITHM: `dense`

```
grid-auto-flow: row dense;
```

Without `dense`
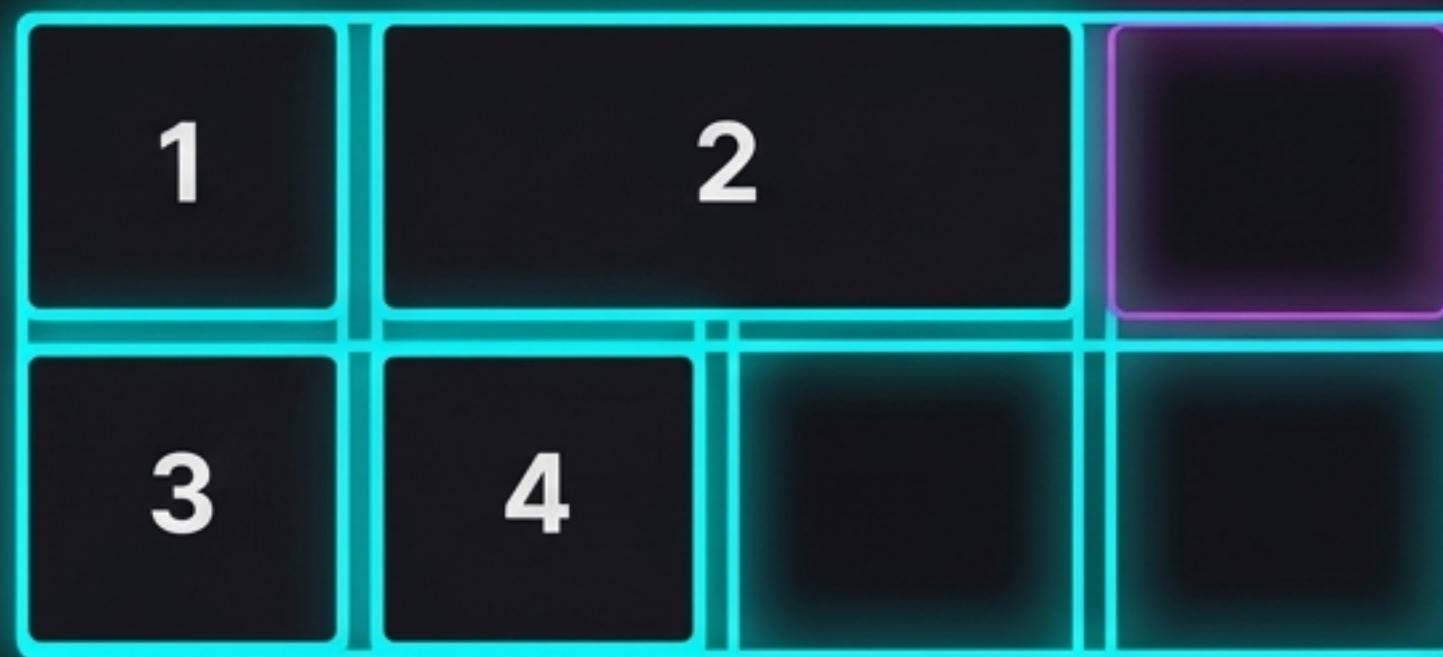

With `dense`

`dense` tells Grid to backfill gaps when possible. This can reduce empty space but may also make the layout order differ from the DOM order.

Auto-placement is predictable.
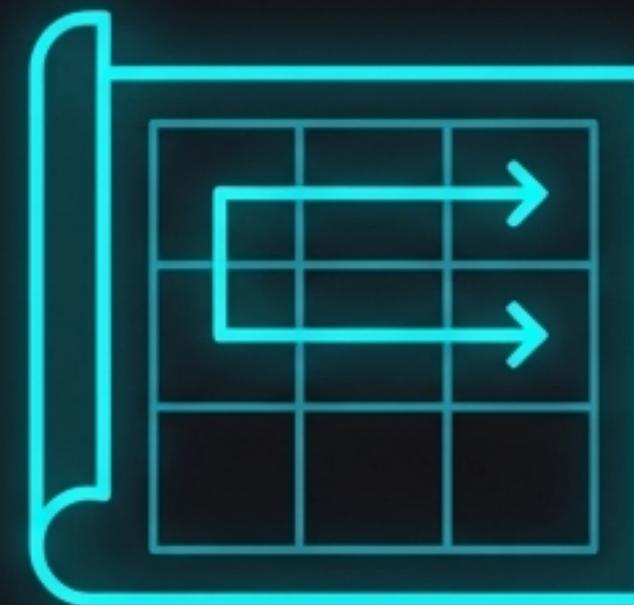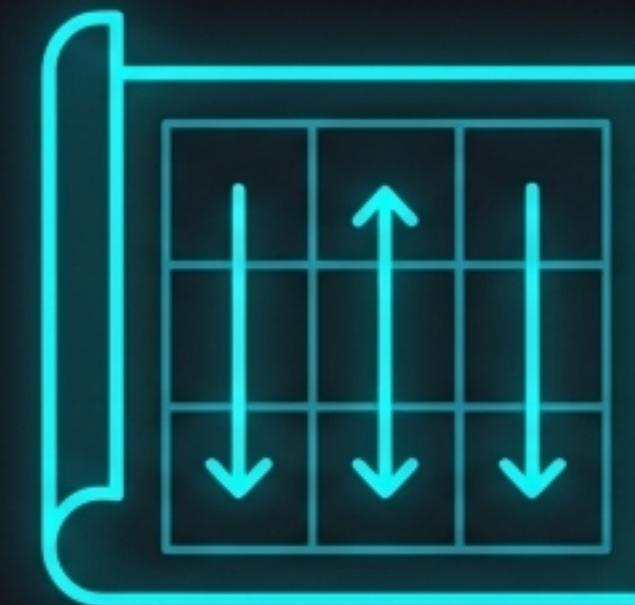
(`row`)   (`column`)   (`dense`)

Once you know the flow direction (`row` or `column`) and the packing algorithm (`dense`), you know exactly what Grid will do.

Control the flow—
or Grid will.

p.s., keep learning!