Enable Grid

display: grid;

display: inline-grid;

Grid Units

fr	Fraction of available space
px	Fixed size
%	Relative to grid container
auto	Size to content
min-content	Smallest possible
max-content	Largest possible
minmax(a, b)	Flexible range

Define Columns & Rows

grid-template-columns: 200px 1fr 2fr;

grid-template-rows: auto 1fr auto;

Common Column/Row Patterns

repeat(3, 1fr)

repeat(auto-fill, minmax(250px, 1fr))

repeat(auto-fit, minmax(250px, 1fr))

Common Layout Recipes

Equal Columns

grid-template-columns: repeat(3, 1fr);

Responsive Cards

grid-template-columns: repeat(auto-fit, minmax(250px, 1fr));

Sticky Footer

grid-template-rows: auto 1fr auto;

Alignment

Align Tracks

justify-content: start | center | end | space-between | space-around | space-evenly;

align-content: start | center | end | stretch;

Align Items

justify-items: start | center | end | stretch;

align-items: start | center | end | stretch;

Alignment (Individual Item)

justify-self: start | center | end | stretch;

align-self: start | center | end | stretch;

Line Numbers & Keywords

grid-column: 1 / -1;   /* Full Width */

grid-row: auto;

Subgrid (When Supported)

grid-template-columns: subgrid;

grid-template-rows: subgrid;

Named Grid Areas

.header { grid-area: header; }

.sidebar { grid-area: sidebar; }

.main { grid-area: main; }

.footer { grid-area: footer; }

grid-template-areas:
"header header"
"sidebar main"
"footer footer";

Explicit Placement (Items)

grid-column: 1 / 3;

grid-row: 2 / 4;

grid-area: row-start / col-start / row-end / col-end;

Auto Placement

grid-auto-flow: row;

grid-auto-flow: column;

grid-auto-flow: dense;

grid-auto-rows: 200px;

grid-auto-columns: 1fr;

Debugging Tips

`outline: 1px solid red;` on grid + items

`grid-c olumn: 1 / -1` is your "nuke it full width" button

If it is stretching weirdly, check `align- it ems` first

If it is not wrapping, you probably want `aut o-fit` or `auto-fill`

Grid defines structure first. Items adapt.