

CSS Cheat Sheet

This CSS cheat sheet contains the most commonly used CSS properties, selectors, and concepts. It's a great quick reference for basic styling.

1. CSS Syntax

```
selector {  
  property: value;  
}
```

- **Selector:** The HTML element(s) to apply the styles to.
 - **Property:** The CSS property to change (e.g., color, font-size).
 - **Value:** The value to apply to the property.
-

2. Selectors

Selector	Description
*	Selects all elements
element	Selects all instances of a specific element (div, p)
.class	Selects all elements with the specified class
#id	Selects the element with the specified ID
element, element	Selects multiple elements
element element	Selects all child elements inside a parent
element > element	Selects direct child elements
element + element	Selects the adjacent sibling
element ~ element	Selects all siblings after an element
[attribute]	Selects elements with an attribute
[attribute=value]	Selects elements with a specific attribute value

Example:

```
/* Select all paragraphs */
```

```
p {  
  color: blue;
```

```

}

/* Select element with id "header" */
#header {
    background-color: lightgrey;
}

/* Select element with class "highlight" */
.highlight {
    font-weight: bold;
}

```

3. Colors

- **Named Colors:** red, blue, green, etc.
- **Hexadecimal:** #FF5733
- **RGB:** rgb(255, 87, 51)
- **RGBA** (with transparency): rgba(255, 87, 51, 0.5)
- **HSL:** hsl(12, 100%, 50%)
- **HSLA** (with transparency): hsla(12, 100%, 50%, 0.5)

Example:

```

p {
    color: #FF5733; /* Hex color */
    background-color: rgb(0, 0, 0); /* RGB color */
    opacity: 0.8; /* Transparency */
}

```

4. Text & Fonts

Property	Description
color	Text color
font-size	Size of the text (px, em, rem, %)
font-family	Font style (Arial, Times New Roman, etc.)
font-weight	Thickness of text (bold, normal, 100-900)
font-style	Italic or normal text
text-align	Alignment of text (left, center, right)
text-decoration	Underline, overline, line-through
text-transform	Uppercase, lowercase, capitalize
letter-spacing	Space between letters
line-height	Space between lines of text

Example:

```
h1 {  
  font-family: 'Arial', sans-serif;  
  font-size: 24px;  
  font-weight: bold;  
  text-align: center;  
  text-transform: uppercase;  
}
```

5. Box Model

Every HTML element is treated as a box. The box model consists of:

- **Content:** The actual content.
- **Padding:** Space between the content and the border.
- **Border:** The edge around the padding.
- **Margin:** Space outside the border.

Property	Description
margin	Space outside the element
padding	Space inside the element
border	Border around the element
width	Width of the content
height	Height of the content

Example:

```
div {  
  width: 200px;  
  height: 100px;  
  padding: 20px;  
  margin: 30px;  
  border: 2px solid black;  
}
```

6. Backgrounds

Property	Description
background-color	Background color
background-image	Image as background
background-repeat	Repeat or no-repeat the background image
background-position	Position of the background (center, top, bottom)

Property	Description
background-size	Size of the background (cover, contain)

Example:

```
body {
  background-color: #f4f4f4;
  background-image: url('background.jpg');
  background-size: cover;
  background-position: center;
}
```

7. Display & Positioning

Property	Description
display	Type of rendering box (block, inline, flex, none)
position	Position of element (static, relative, absolute, fixed, sticky)
top, right, bottom, left	Offset for positioned elements
z-index	Stacking order (higher numbers on top)
float	Float element (left, right)
clear	Prevent floating

Example:

```
/* Flexbox layout */
.container {
  display: flex;
  justify-content: space-between;
}

.fixed-header {
  position: fixed;
  top: 0;
  width: 100%;
}
```

8. Flexbox

Property	Description
display: flex	Defines a flex container
justify-content	Aligns items horizontally (flex-start, center, space-between)
align-items	Aligns items vertically (flex-start, center, stretch)
flex-direction	Defines direction (row, column)
flex-wrap	Controls wrapping (nowrap, wrap)
flex	Defines how a flex item will grow or shrink

Example:

```
.container {
  display: flex;
  justify-content: space-around;
  align-items: center;
}

.item {
  flex: 1;
  padding: 10px;
}
```

9. Grid Layout

Property	Description
display: grid	Defines a grid container
grid-template-columns	Defines columns in a grid
grid-template-rows	Defines rows in a grid
grid-gap	Space between grid items
grid-column	How many columns an item spans
grid-row	How many rows an item spans

Example:

```
.container {
  display: grid;
  grid-template-columns: repeat(3, 1fr);
  grid-gap: 20px;
}

.item {
  grid-column: span 2;
}
```

10. CSS Units

Unit	Description
px	Pixels (absolute unit)
%	Percentage (relative to parent element)
em	Relative to the parent element's font size
rem	Relative to the root element's font size
vh	Viewport height (1vh = 1% of viewport height)
vw	Viewport width (1vw = 1% of viewport width)

11. Pseudo-Classes & Pseudo-Elements

Pseudo-Class	Description
:hover	When the user hovers over an element
:focus	When the element is focused
:nth-child(n)	Selects the nth child
:first-child	Selects the first child
:last-child	Selects the last child

Pseudo-Element	Description
::before	Adds content before an element
::after	Adds content after an element

Example:

```
a:hover {
  color: red;
}

p::before {
  content: "Note: ";
  font-weight: bold;
}
```

12. Transitions & Animations

- **Transitions:** Smoothly change property values.

```
div {
  transition: all 0.3s ease-in-out;
}

div:hover {
  transform: scale(1.2);
}
```

```
}
```

- **Animations:** Create keyframe-based animations.

```
@keyframes example {  
  from {background-color: red;}  
  to {background-color: yellow;}  
}  
  
div {  
  animation: example 5s infinite;  
}
```

This cheat sheet provides an overview of the most important CSS concepts, properties, and techniques. It's a handy reference while you're styling web pages!