

CSS Cheat Sheet

1. Basic CSS Syntax

Structure

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

Example

```
p {  
  color: blue;  
  font-size: 16px;  
}
```

2. Selectors

Basic Selectors

- **Element Selector:** `p { ... }`
- **Class Selector:** `.classname { ... }`
- **ID Selector:** `#idname { ... }`
- **Universal Selector:** `* { ... }`

Combinators

- **Descendant Combinator:** `div p { ... }`
- **Child Combinator:** `div > p { ... }`
- **Adjacent Sibling Combinator:** `h1 + p { ... }`
- **General Sibling Combinator:** `h1 ~ p { ... }`

Attribute Selectors

- **Attribute Exists:** `[attr] { ... }`
- **Attribute Equals:** `[attr="value"] { ... }`

- **Attribute Contains:** `[attr*="value"] { ... }`
- **Attribute Starts With:** `[attr^="value"] { ... }`
- **Attribute Ends With:** `[attr\$="value"] { ... }`

Pseudo-classes

- **Hover:** `:hover { ... }`
- **Active:** `:active { ... }`
- **Focus:** `:focus { ... }`
- **First Child:** `:first-child { ... }`
- **Last Child:** `:last-child { ... }`
- **Nth Child:** `:nth-child(n) { ... }`

Pseudo-elements

- **First Line:** `::first-line { ... }`
 - **First Letter:** `::first-letter { ... }`
 - **Before:** `::before { ... }`
 - **After:** `::after { ... }`
-

3. Box Model

Properties

- **Width:** `width: 200px;`
- **Height:** `height: 100px;`
- **Padding:** `padding: 10px;`
- **Margin:** `margin: 20px;`
- **Border:** `border: 1px solid black;`

Box Sizing

- **Content-box:** `box-sizing: content-box;`
- **Border-box:** `box-sizing: border-box;`

Example

```
div {
  width: 200px;
  height: 100px;
  padding: 10px;
  margin: 20px;
  border: 1px solid black;
  box-sizing: border-box;
}
```

4. Typography

Font Properties

- **Font Family:** `font-family: Arial, sans-serif;`
- **Font Size:** `font-size: 16px;`
- **Font Weight:** `font-weight: bold;`
- **Font Style:** `font-style: italic;`
- **Line Height:** `line-height: 1.5;`

Text Properties

- **Color:** `color: #333;`
- **Text Align:** `text-align: center;`
- **Text Decoration:** `text-decoration: underline;`
- **Text Transform:** `text-transform: uppercase;`

Example

```
p {
  font-family: Arial, sans-serif;
  font-size: 16px;
  font-weight: bold;
  color: #333;
  text-align: center;
  text-decoration: underline;
}
```

5. Layout and Positioning

Positioning

- **Static:** `position: static;`
- **Relative:** `position: relative;`
- **Absolute:** `position: absolute;`
- **Fixed:** `position: fixed;`
- **Sticky:** `position: sticky;`

Display

- **Block:** `display: block;`
- **Inline:** `display: inline;`
- **Inline-block:** `display: inline-block;`
- **None:** `display: none;`

Float

- **Left:** `float: left;`
- **Right:** `float: right;`
- **Clear:** `clear: both;`

Example

```
div {  
    position: relative;  
    display: inline-block;  
    float: left;  
}
```

6. Flexbox

Flex Container

- **Display:** `display: flex;`
- **Flex Direction:** `flex-direction: row;`
- **Justify Content:** `justify-content: center;`

- **Align Items:** `align-items: center;`
- **Flex Wrap:** `flex-wrap: wrap;`

Flex Items

- **Flex Grow:** `flex-grow: 1;`
- **Flex Shrink:** `flex-shrink: 1;`
- **Flex Basis:** `flex-basis: auto;`
- **Order:** `order: 2;`

Example

```
.container {
  display: flex;
  flex-direction: row;
  justify-content: center;
  align-items: center;
}

.item {
  flex-grow: 1;
  order: 2;
}
```

7. Grid Layout

Grid Container

- **Display:** `display: grid;`
- **Grid Template Columns:** `grid-template-columns: 1fr 1fr;`
- **Grid Template Rows:** `grid-template-rows: 100px 100px;`
- **Gap:** `gap: 10px;`

Grid Items

- **Grid Column:** `grid-column: 1 / 3;`
- **Grid Row:** `grid-row: 1 / 2;`
- **Grid Area:** `grid-area: header;`

Example

```
.container {
  display: grid;
  grid-template-columns: 1fr 1fr;
  grid-template-rows: 100px 100px;
  gap: 10px;
}

.item {
  grid-column: 1 / 3;
  grid-row: 1 / 2;
}
```

8. Backgrounds and Borders

Background Properties

- **Background Color:** `background-color: #f0f0f0;`
- **Background Image:** `background-image: url('image.jpg');`
- **Background Position:** `background-position: center;`
- **Background Repeat:** `background-repeat: no-repeat;`
- **Background Size:** `background-size: cover;`

Border Properties

- **Border Width:** `border-width: 2px;`
- **Border Style:** `border-style: solid;`
- **Border Color:** `border-color: #333;`
- **Border Radius:** `border-radius: 5px;`

Example

```
div {
  background-color: #f0f0f0;
  background-image: url('image.jpg');
  background-position: center;
  background-repeat: no-repeat;
  background-size: cover;
  border: 2px solid #333;
  border-radius: 5px;
}
```

9. Transitions and Animations

Transitions

- **Transition Property:** ``transition-property: all;``
- **Transition Duration:** ``transition-duration: 0.5s;``
- **Transition Timing Function:** ``transition-timing-function: ease;``
- **Transition Delay:** ``transition-delay: 0.2s;``

Animations

- **Animation Name:** ``animation-name: myAnimation;``
- **Animation Duration:** ``animation-duration: 2s;``
- **Animation Timing Function:** ``animation-timing-function: ease-in-out;``
- **Animation Delay:** ``animation-delay: 1s;``
- **Animation Iteration Count:** ``animation-iteration-count: infinite;``

Example

```
div {
  transition: all 0.5s ease 0.2s;
  animation: myAnimation 2s ease-in-out 1s infinite;
}

@keyframes myAnimation {
  0% { opacity: 0; }
  100% { opacity: 1; }
}
```

10. Media Queries

Basic Syntax

```
@media (max-width: 600px) {
  /* CSS rules here */
}
```

Common Breakpoints

- **Mobile:** ``@media (max-width: 600px) { ... }``
- **Tablet:** ``@media (min-width: 601px) and (max-width: 1024px) { ... }``
- **Desktop:** ``@media (min-width: 1025px) { ... }``

Example

```
@media (max-width: 600px) {  
  body {  
    font-size: 14px;  
  }  
}
```

11. Pseudo-classes and Pseudo-elements

Pseudo-classes

- **Hover:** ``:hover { ... }``
- **Active:** ``:active { ... }``
- **Focus:** ``:focus { ... }``
- **First Child:** ``:first-child { ... }``
- **Last Child:** ``:last-child { ... }``
- **Nth Child:** ``:nth-child(n) { ... }``

Pseudo-elements

- **First Line:** ``::first-line { ... }``
- **First Letter:** ``::first-letter { ... }``
- **Before:** ``::before { ... }``
- **After:** ``::after { ... }``

Example

```
a:hover {  
  color: red;  
}  
  
p::first-line {
```



```
    font-weight: bold;
}
```

12. CSS Variables

Declaration

```
:root {
  --primary-color: #333;
}
```

Usage

```
body {
  color: var(--primary-color);
}
```

Example

```
:root {
  --primary-color: #333;
  --font-size: 16px;
}

body {
  color: var(--primary-color);
  font-size: var(--font-size);
}
```

13. Tips and Tricks

Shorthand Properties

- **Margin and Padding:** ``margin: 10px 20px 10px 20px;``
- **Border:** ``border: 1px solid black;``
- **Background:** ``background: #f0f0f0 url('image.jpg') no-repeat center/cover;``

Reset Styles

```
* {
  margin: 0;
```

```
padding: 0;
box-sizing: border-box;
}
```

Responsive Images

```
img {
  max-width: 100%;
  height: auto;
}
```

Centering Elements

- **Text:** `text-align: center;`
- **Block:** `margin: 0 auto;`
- **Flexbox:** `display: flex; justify-content: center; align-items: center;`

Example

```
.center {
  display: flex;
  justify-content: center;
  align-items: center;
  height: 100vh;
}
```

This cheat sheet provides a comprehensive overview of essential CSS concepts, properties, and techniques. Use it as a quick reference to enhance your CSS skills and create stunning web designs.

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