

# CSS: Flexbox

Lesson Time: 60 Minutes

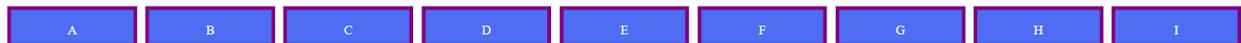
**Use Flexbox to create responsive layouts.**

CSS Flexbox is will be our go-to method of creating responsive layout quickly and easily. To turn on flexbox, we use **display:flex**

```
<div class='myflexbox'>
  <div>A</div>
  <div>B</div>
  <div>C</div>
  <div>D</div>
  <div>E</div>
  <div>F</div>
  <div>G</div>
  <div>H</div>
  <div>I</div>
</div>
```

```
1 .myflexbox{
2   display:flex;
3   flex-direction: row;
4 }
```

## Flexbox



In flexbox, our elements grow and shrink in relationship to each other. They fill up the entire parent flex element.

Here's a simple 3-column layout with flexbox.

```
<div class='flexbox2'>
  <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit,
  <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit,
  <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit,
</div>
```

```
.flexbox2{
  display:flex;
  flex-direction: row;
}

.flexbox2 p{
  width: 32vw;
  margin: 5px;
  box-sizing: border-box;
  background-color: #250217;
  text-align: center;
  color: black;
  padding: 1%;
}
```

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The **width: 32vw** tells CSS the element should be 32% of the viewport browser window, and flexbox evenly lays them out.

If we have more elements than horizontal screen space, we can use **flex-wrap: wrap** to distribute them evenly in rows.

Flexbox

a	b	c
d	e	f
g	h	i

```
.myflexbox{
  display:flex;
  flex-direction: row;
  flex-wrap: wrap;
}
```

A simple 2-column layout with a sidebar.

```
.....<div class='flexbox3'>
.....<section>Sidebar
.....<ul>
.....<li>Item 1</li>
.....<li>Item 2</li>
.....</ul>
.....</section>
.....<article>Lorem ipsum dolor sit amet, consectetur
.....</div>
```

```
.flexbox3 section{
  max-width: 25%;
  flex:3;
  background-color: #95, 99, 75);
  color: #white;
  text-align: left;
  margin-right: .5%;
  font-size: 1.5em;
}

.flexbox3 article{
  max-width: 75%;
  flex:9;
  background-color: #212, 154, 88);
  padding: 1%;
  color: #black;
}

.flexbox3 section ul{
  list-style: none;
}
```

Sidebar

Item 1  
Item 2

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

In the example above, we specify a **max-width** the elements can not grow beyond, along with a **flex** value. Section has a flex value of 3. It may take up to 3/12 of the screen space, but no more than 25%.

The Article has a flex value of 9. It make take up 9/12 of the screen space, but no more than 75%.

When working with flexbox, divide the flexbox into 12 equal units. Setting an element to flex: 2 means it can be take up to 2 of the 12 units.

When studying CSS, seeing examples is one of the best ways to learn. In the Additional resources below, we are linking to many flexbox layout examples. Spent time looking over these and looking up the additional flex-box properties such as **flex-start**

Key Terms	display:flex , max-width, flex,
Lesson Files	5_3_flexbox_example1.html and css 5_3_flexbox.html and css
Additional Resources	MDN Flexbox <a href="https://developer.mozilla.org/en-US/docs/Learn/CSS/CSS_layout/Flexbox">https://developer.mozilla.org/en-US/docs/Learn/CSS/CSS_layout/Flexbox</a>  Quackit Flexbox examples <a href="https://www.quackit.com/css/flexbox/examples/">https://www.quackit.com/css/flexbox/examples/</a>
Further Learning	