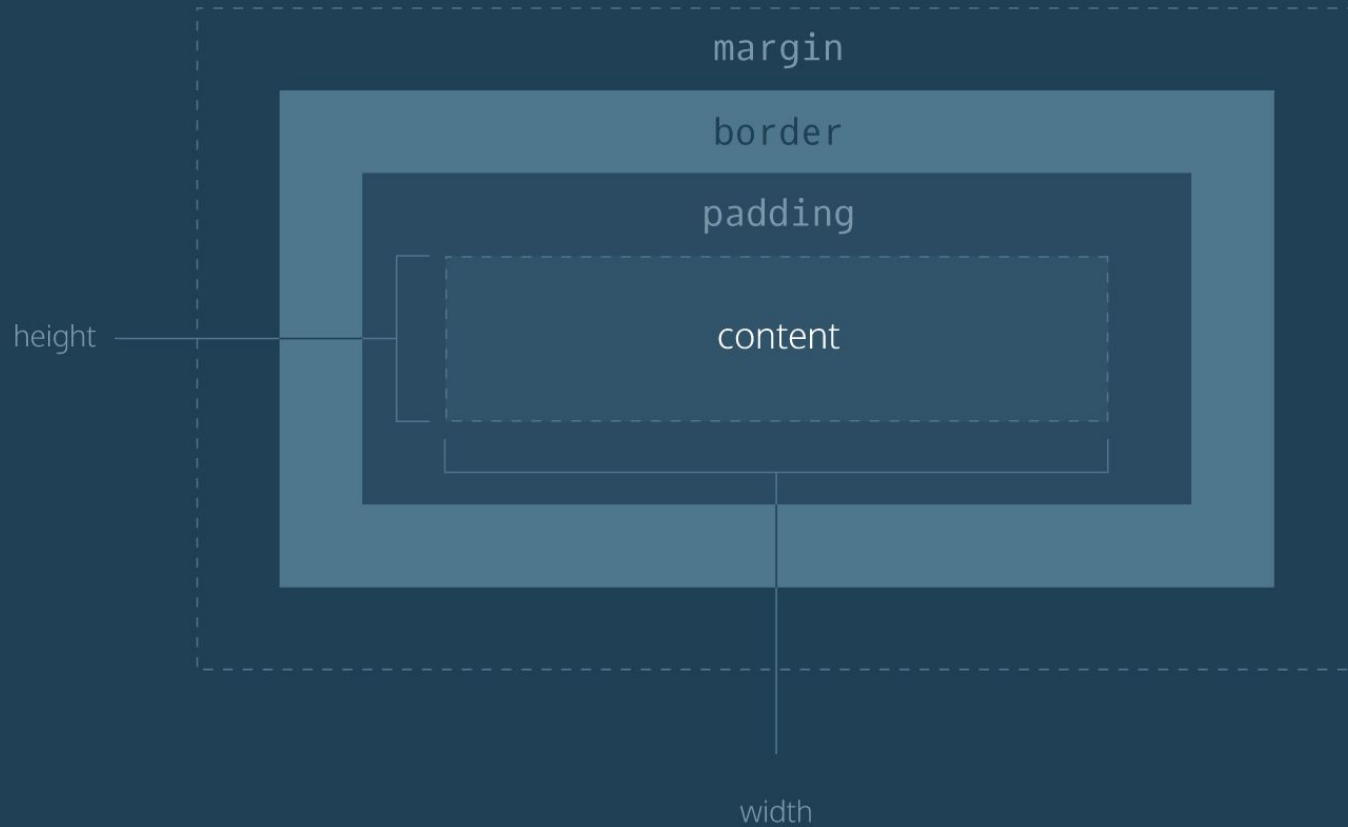




Box Model



The Box Model





Intro to the Box Model

Browsers load HTML elements with default position values. This often leads to an unexpected and unwanted user experience, while limiting the views you can create.

All elements on a web page are interpreted by the browser as "living" inside of a box. This is what is meant by the **box model**.

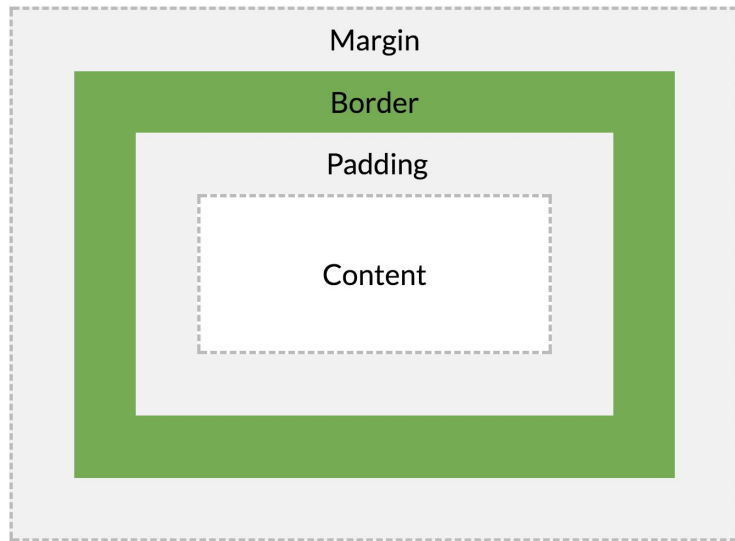
For example, when you change the background color of an element, you change the background color of its entire box.

Intro to the Box Model



We are interested in the following aspects of the box model:

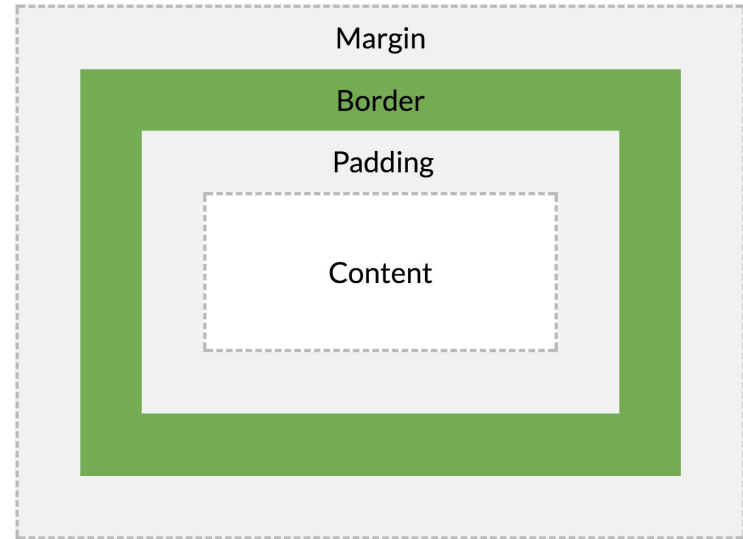
1. The **content** of an element's box.
2. The **borders** of an element's box.
3. The **padding**s of an element's box.
4. The **margins** of an element's box.



Box Model dimensions



We control the box's dimensions with the CSS properties **width** and **height**

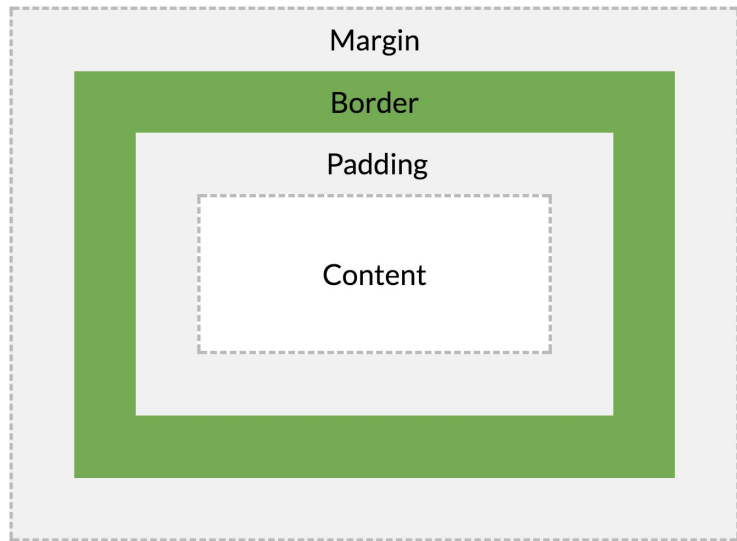


Box Model content



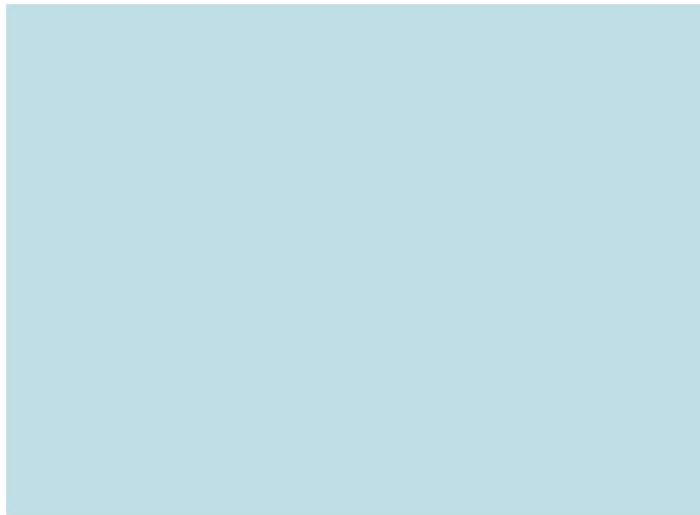
The **content** area is where text and images appear.

If we want to put space between content and the border that surrounds the element, we use the **padding** property.



Box Model content

```
div {  
  height: 200px;  
  width: 50%;  
  background-color: powderblue;  
}
```

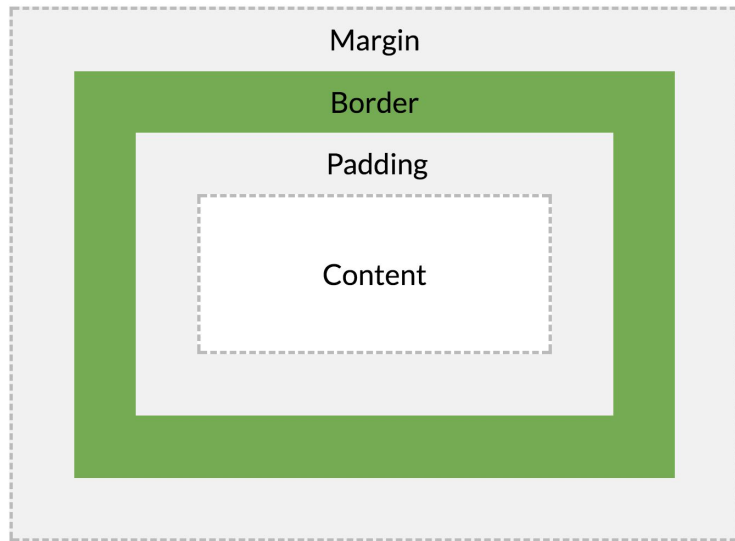


Box Model content, padding



The **content** area is where text and images appear.

If we want to put space between content and the border that surrounds the element, we use the **padding** property.



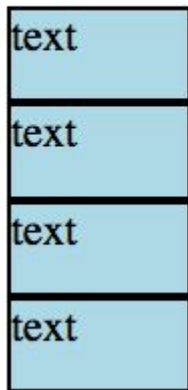
Box Model padding

```
div {  
  border: 1px solid black;  
  background-color: lightblue;  
  padding: 30px;  
}
```

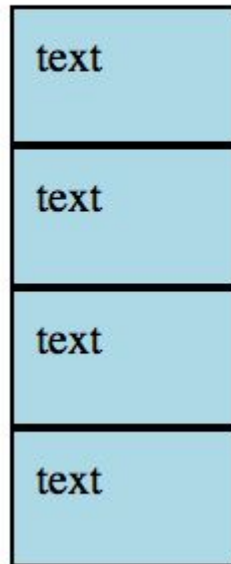
This div element has padding of 30 pixels.

Box Model padding

no padding



10px padding

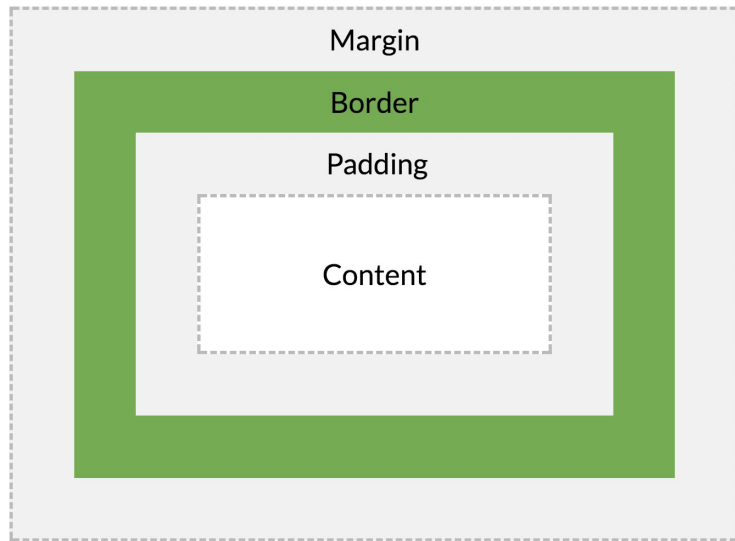


Box Model border

The **border** property is used to put outlines around content.

By default, elements do not have a border defined.

'border' is a CSS property that doesn't get inherited through cascades.



Box Model border



With the **border**, we need to give it three things:

1. Line thickness
2. Style of line (e.g., dotted or solid)
3. Color

```
#one { border: 1px solid red; }  
#two { border: 3px dotted blue; }  
#three { border: 10px solid #FF00AA; }
```

Hi, I'm a div

Hi, I'm a div

Hi, I'm a div

Box Model border

The CSS `border` properties allow you to specify the style, width, and color of an element's border.

We have the `border-style` property for creating dashed and dotted lines.

We have `border-radius` for creating rounded borders.

I have borders on all sides.

I have a red bottom border

I have rounded borders.

I have a blue left border.

Box Model border

Stuff we can do with border:

1. Set a border on all sides, or just one side.
2. Set borders of different thickness (*e.g., 2 pixels thick*)
3. Set the color for the border - this can also be transparent
4. Set different line styles (*e.g., dashed or dotted lines*)
5. Make rounded/curved borders

I have borders on all sides.

I have a red bottom border

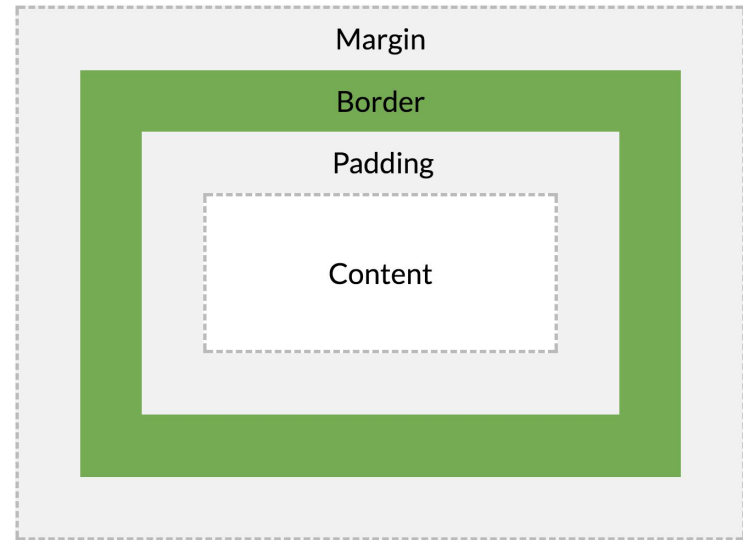
I have rounded borders.

I have a blue left border.

Box Model margin



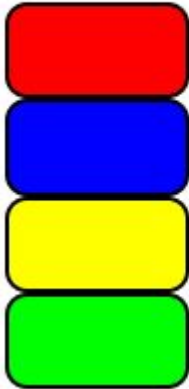
The **margin** property is used to space between an element's border and the next element.



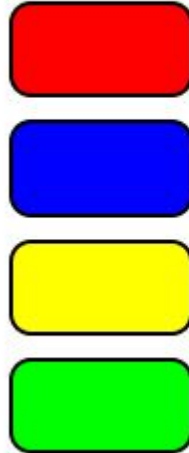
Box Model margin

The **margin** property is used to space between an element's border and the next element.

no margin



10px margin



Box Model margin vs. padding



Some people get margin and padding confused.

margin = space OUTSIDE an element

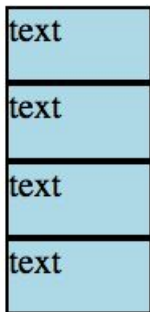
padding = space INSIDE an element

Box Model margin vs. padding

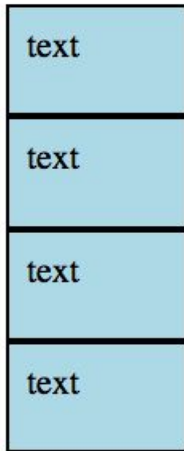


padding = space INSIDE an element

no padding



10px padding

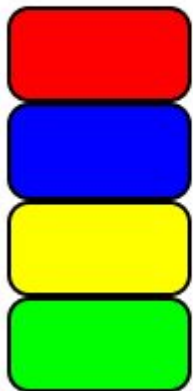


Box Model margin vs. padding

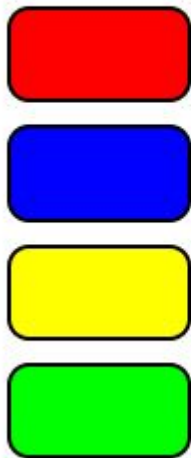


margin = space OUTSIDE an element

no margin



10px margin





Practice

Download [6.1-box-model.zip](#)

Once you get your buttons working,
Submit a screenshot to Canvas for [participation](#)

