

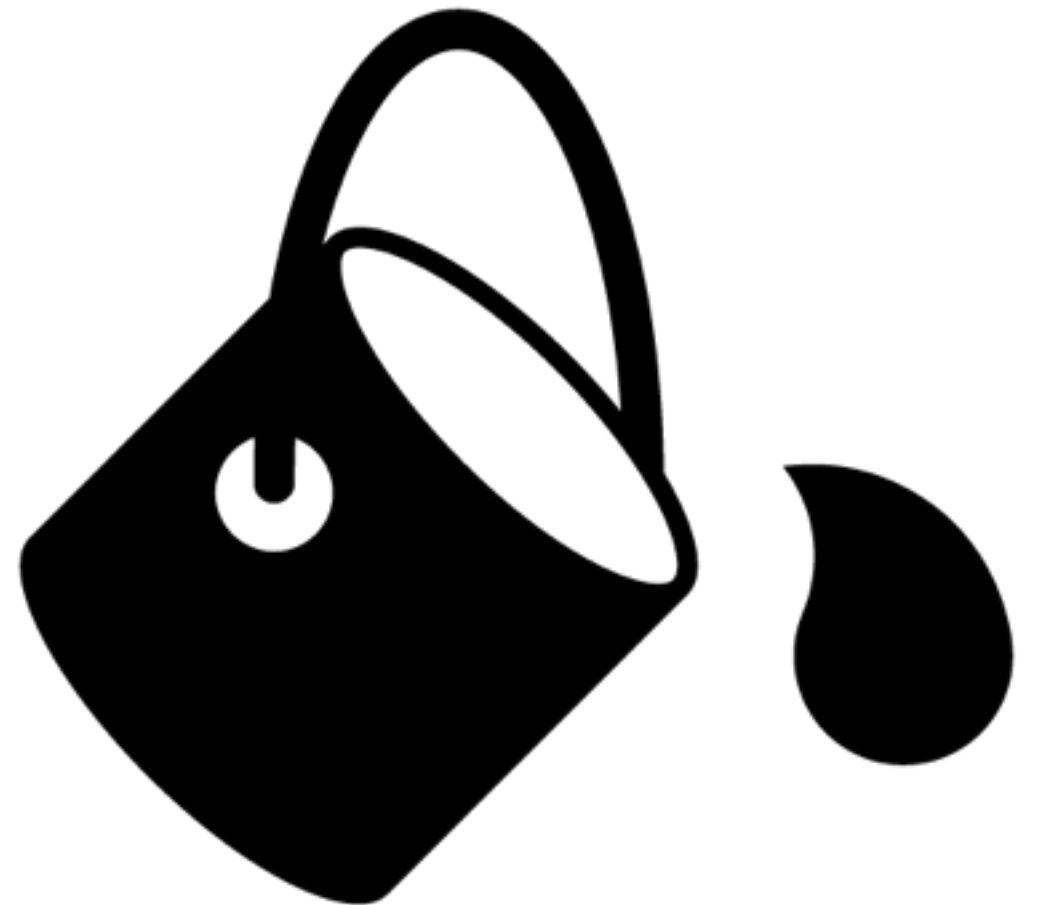
# Review (and show & tell)



# This week

- Styling backgrounds
- Using id and class attributes with CSS
- CSS box model
- Resetting default browser styles
- CSS abbreviations

# Styling backgrounds



# CSS background color

```
body {  
    background-color: #eeeeee;  
}
```

- **Background colors** can be applied to the whole page or to any individual element
- Uses the same syntax as applying colors to text

# CSS background image

```
body {  
  background-image: url("../img/kitten.png");  
}
```

- **Background images** can be applied to the whole page or to any individual element
- Can be added on top of **background-color**

**Let's try adding some  
background colors and  
background images.**

**“My background color is on *all* my paragraphs and I just want it on the first paragraph.”**

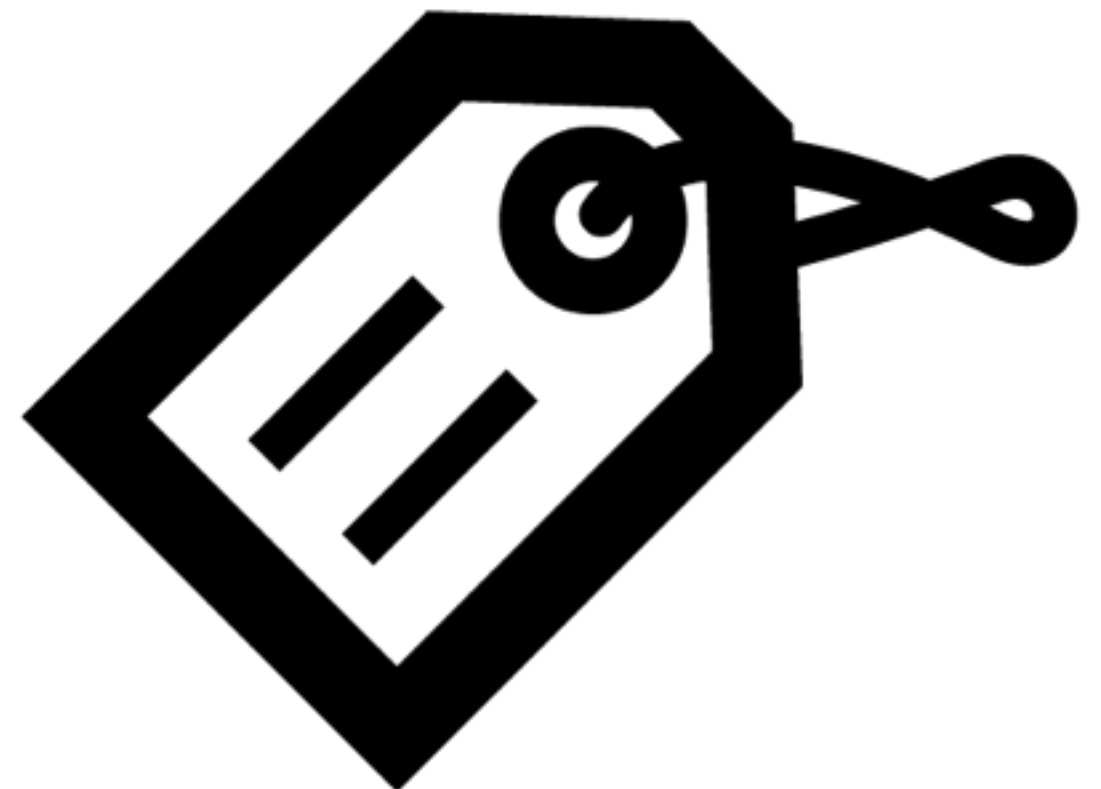
**“My background image is *repeating forever* and giving me a migraine.”**

**“*I cannot see my entire kitten.*”**

**These are all extremely valid and important concerns that we will address.**



# Using ids and classes with CSS



# Remember elements?

- HTML elements have **tags**

```
<h1>Here's my page title!</h1>
```

```
<p>Here's a paragraph of text.</p>
```

- Those tags can be called as **CSS selectors**

```
h1 { color: #333333; }
```

```
p { font-size: 2em; }
```

# Remember attributes?

- HTML elements can have **attributes** that provide more information

```
<a href="index.html">Here's a link to  
the homepage</a>
```

# class attributes

- Can be applied to **multiple elements**

```
<h1 class="highlight">Here's my title!</h1>
```

```
<p class="highlight">Here's a paragraph.</p>
```

- Can be **used in CSS** to style elements

```
.highlight { color: #ff0000; }
```

# id attributes

- Can be applied to **individual elements**

```
<h1 id="title">Here's my title!</h1>
```

```
<p id="intro">Here's an intro paragraph.</p>
```

- Can be **used in CSS** to style elements

```
#title { color: #ff0000; }
```

```
#intro { font-size: 1.5em; }
```

# Many classes, only one id

- An element can have **both an id and a class**

```
<h1 id="foo" class="bar">A Title</h1>
```

- An element can have **more than one class**

```

```

- An element can **only have one id**

# class and id specificity

- An element with an **id** is more specific than...
- An element with a **class**, which is more specific than...
- An element with **neither** an **id** nor a **class**

# Using `id` for anchor links

- Since `id` attributes are unique, they can be used to “jump” to a part of a page

```
<a href="#intro-section">This link goes  
to the element on the page with the id  
"intro-section".</a>
```

```
<div id="intro-section">  
  <p>Here is the section that the link  
  goes to.</p>  
</div>
```



**Let's try out `id` and `class`, and  
add a “`jump`” link to one of our  
pages.**

# Remember `<div>` and `<span>`?

- `<div>` is a generic block-level element
- `<span>` is a generic inline element
- `<div>` and `<span>` are meant for **when there is no other appropriate element**

```
<div>
```

```
<p>Here are a couple of paragraphs wrapped in a div.</p>
```

```
<p>This paragraph has an inline
```

```
<span>span element</span> as well.</p>
```

```
</div>
```

# Remember descendant selectors?

- **Descendant selectors** can be used to style specific child elements

```
/* styles all p elements */  
p { font-size: 2em; }
```

```
/* styles all em in p */  
p em {  
    font-size: 2.5em;  
    font-style: italic;  
}
```

# Putting things together

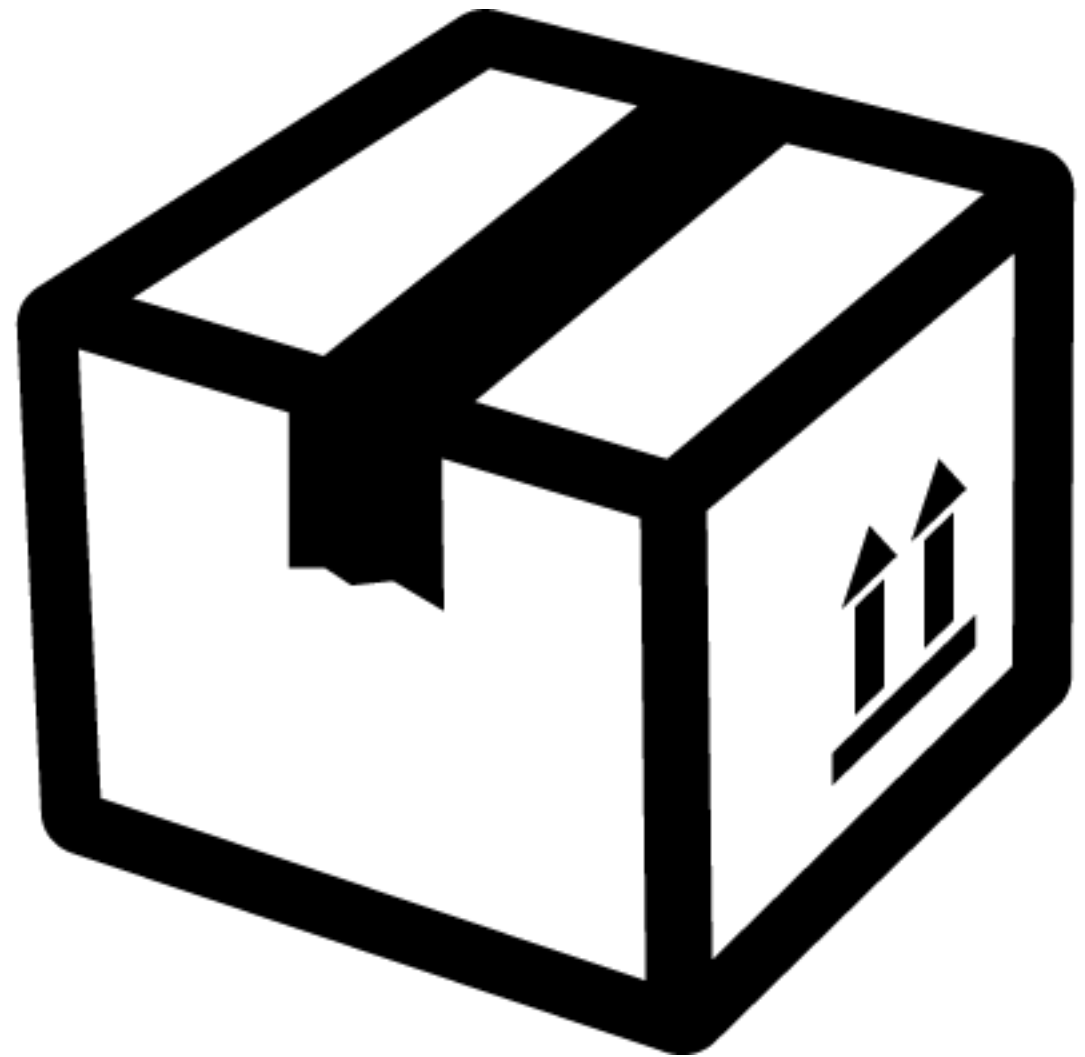
- Using **ids** and **classes**, **spans** and **divs**, and **descendants** together is powerful

```
<div id="main" class="home-theme">  
  <h1>Welcome to my site!</h1>  
  <p id="intro">Here is a paragraph.</p>  
  <p>Here is another paragraph.</p>  
</div>
```

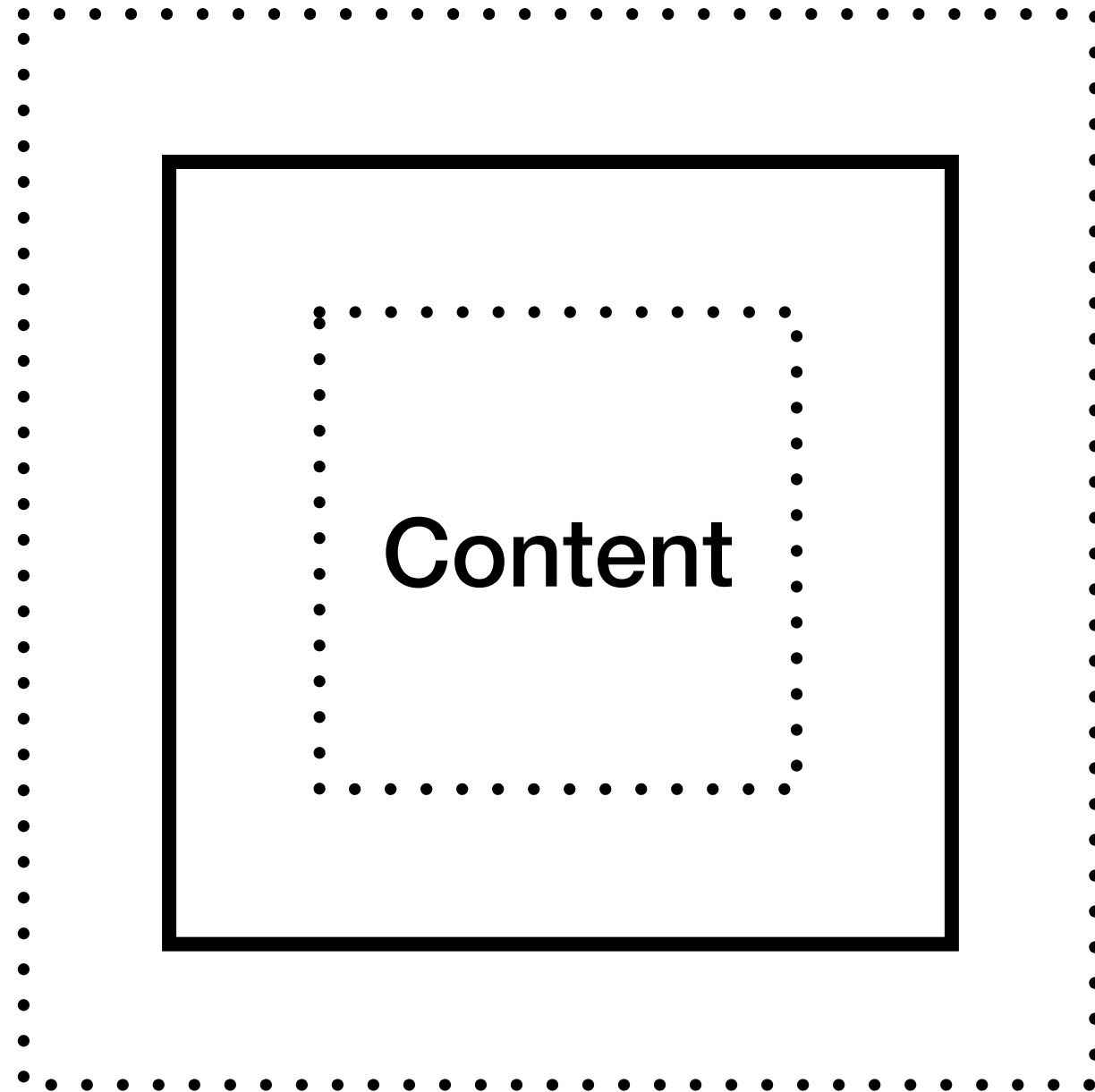
```
#main h1 { color: #ff0000; }  
.home-theme #intro { color: #cc0000; }
```

**Let's try out mixing `id` and  
`class` with generic containers  
and descendants.**

# CSS box model



# It's actually (kind of) a box!



# CSS box model components

- **Content** that defines the default width and height of an element's "box"
- A **border** that goes around the edge of the box
- A **margin** that adds space outside border
- **Padding** that adds spaces between the content and border



# Content

- Determines the default **width** and **height** of the element's "box"
- Defaults can be overridden with CSS

```
div {  
  width: 100px;  
  height: 100px;  
}
```

# Border

- Go **around the edge of the element's box**, on all sides or just specific sides
- **Default width** is 0 for most elements
- Borders can have any **width, color,** and **border style**

```
border-width: 2px;  
border-style: dotted;  
border-color: #ff0000;  
border-bottom-width: 4px;
```

# Margin

- **Outside** the border, on all sides or just specific sides
- Creates **space between elements**
- Size can be specified with CSS

```
margin: 10px;
```

```
margin-right: 20px;
```

# Padding

- Creates **space between content and border**, on all sides or just specific sides
- Size can be specified with CSS

```
padding: 10px;  
padding-bottom: 40px;
```

# Margin vs. padding

- **Padding** makes space between the content and the border for **readability**
- **Margins** make spaces between neighbors for **layout**
- **Backgrounds fill content and padding**
- **Borders and margins do not show backgrounds**

# Example 1

- No padding
- No border
- No margin

'Change lobsters again!' yelled the Gryphon at the top of its voice.

'Back to land again, and that's all the first figure,' said the Mock Turtle, suddenly dropping his voice; and the two creatures, who had been jumping about like mad things all this time, sat down again very sadly and quietly, and looked at Alice.

'Change lobsters again!' yelled the Gryphon at the top of its voice.

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# Example 2

- No padding
- 5px border
- No margin

'Change lobsters again!' yelled the Gryphon at the top of its voice. 'Back to land again, and that's all the first figure,' said the Mock Turtle, suddenly dropping his voice; and the two creatures, who had been jumping about like mad things all this time, sat down again very sadly and quietly, and looked at Alice.

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# Example 3

- 10px padding
- 5px border
- No margin

'Change lobsters again!' yelled the Gryphon at the top of its voice. 'Back to land again, and that's all the first figure,' said the Mock Turtle, suddenly dropping his voice; and the two creatures, who had been jumping about like mad things all this time, sat down again very sadly and quietly, and looked at Alice.

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# Example 4

- 10px padding
- 5px border
- 5px margin

'Change lobsters again!' yelled the Gryphon at the top of its voice. 'Back to land again, and that's all the first figure,' said the Mock Turtle, suddenly dropping his voice; and the two creatures, who had been jumping about like mad things all this time, sat down again very sadly and quietly, and looked at Alice.

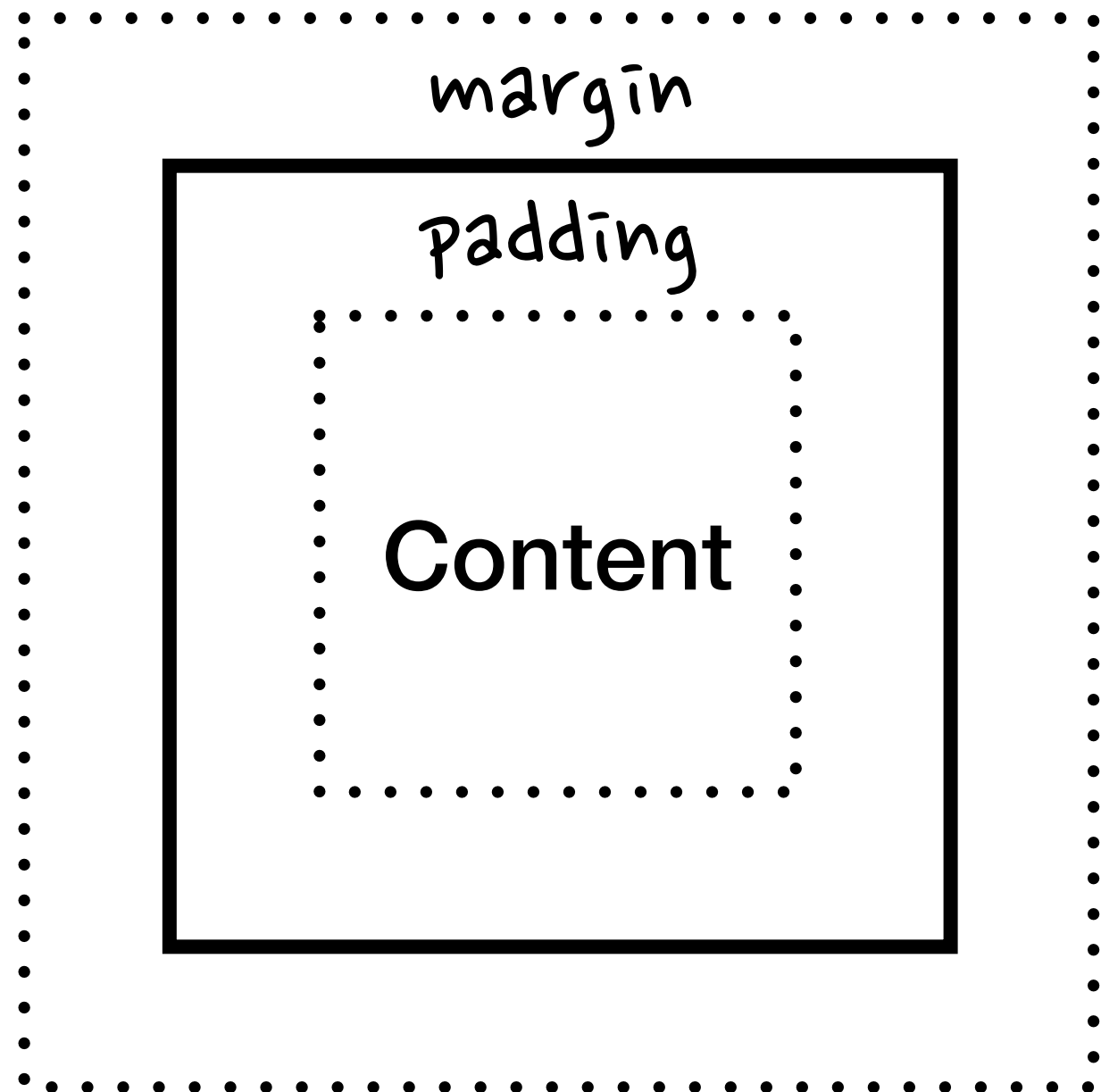
'Change lobsters again!' yelled the Gryphon at the top of its voice. 'Back to land again, and that's all the first figure,' said the Mock Turtle, suddenly dropping his voice; and the two creatures, who had been jumping about like mad things all this time, sat down again very sadly and quietly, and looked at Alice.

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# Box model math

**Content**  
**+ Padding**  
**+ Border**  
**= Visible Size**  
  
**+ Margin**  
**= Screen Size**



**How does the box model affect  
block and inline elements?**

# Tossing out browser default styles



# Browser defaults can be a pain

- Every browser has **slightly different default styles**
- Different types of elements get **different amounts of padding and margin**
- Let's check it out with the Web Inspector

# A blank slate

- **Reset styles** strip out browser defaults and **let us make our own defaults**
- We'll use Eric Meyer's: <http://meyerweb.com/eric/tools/css/reset/>

# **Adding resets to our stylesheet**

- 1. Copy the reset CSS**
- 2. Paste the CSS into the very top of your style.css file**
- 3. Save your style.css file and look at the results!**

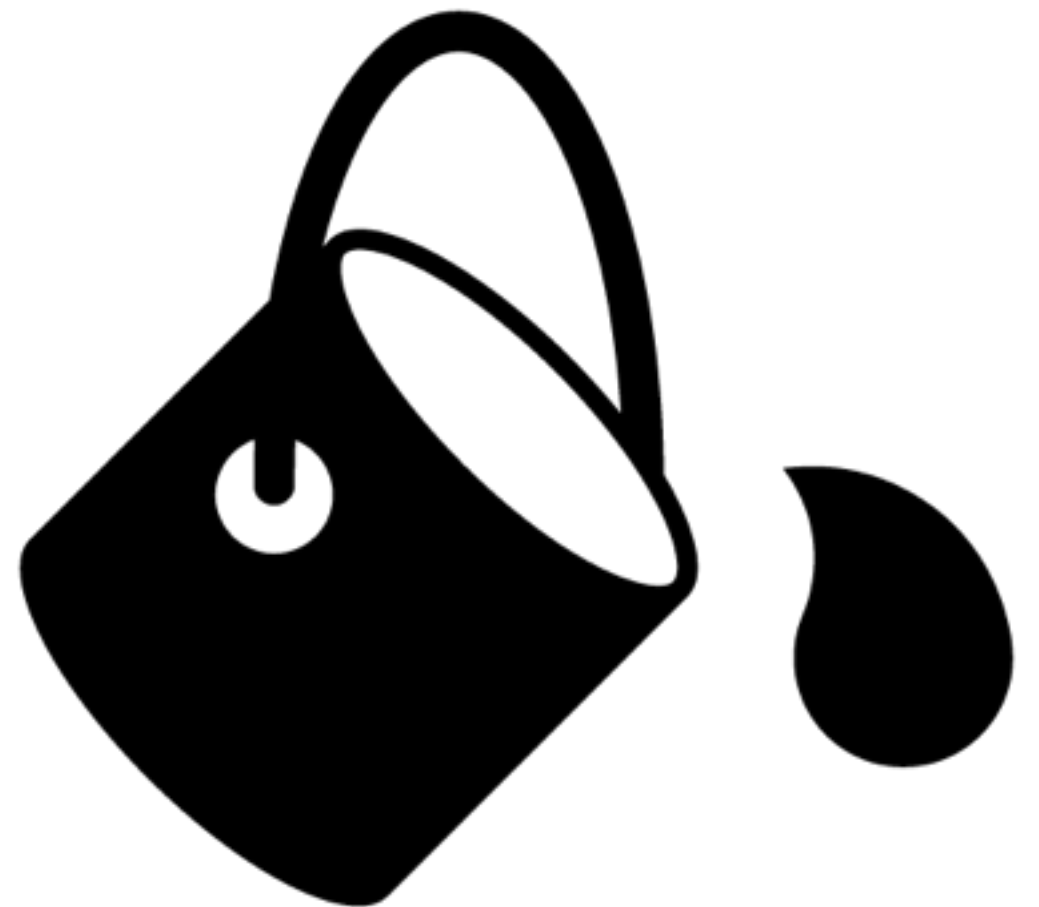
**Hmm.**

**We might need to  
tweak some things.**





# Revisiting styling backgrounds



# Background images and the box

- By default, `background-image` **repeats and fills** the content and padding of an element, starting in the **top left**
- CSS can be used to:
  - Prevent repeating
  - Repeat in a specific direction
  - Display in a certain place

# Positioning background images

```
background-repeat: repeat-x; /* horizontal only */  
background-repeat: repeat-y; /* vertical only */  
background-repeat: no-repeat; /* displays once */
```

```
background-position: top right;  
background-position: center center;  
background-position: 20px 10px;  
/* 20px from the top (x-axis) */  
/* 10px from the left (y-axis) */
```

# More background images

- Combine your content size, padding, etc. with your background to create different effects, show all or some of your background image, etc.

```
/* to show all of a 140px by 240px image as a background */  
width: 100px;  
height: 200px;  
padding: 20px;  
background: url("img.png") no-repeat;
```

**“Hold on. You’ve got more than one rule in that last line of CSS. *Can I be typing less?*”**

# CSS abbr.



# Hex colors

```
color: #333333;  
background-color: #aa0099;
```

*/\* becomes \*/*

```
color: #333;  
background-color: #a09;
```

# Backgrounds

```
background-color: #fff;  
background-image: url("img.png");  
background-repeat: no-repeat;  
background-position: top left;
```

*/\* becomes \*/*

```
background: #fff url("img.png") no-repeat  
top left;
```



# TRBL (top, right, bottom, left)

- Margins and padding go **clockwise**

```
margin-top: 5px;  
margin-right: 10px;  
margin-bottom: 0;  
margin-left: 2em;
```

*/\* becomes \*/*

```
margin: 5px 10px 0 2em;
```

# Too much TRBL?

- If your **top and bottom** are the same and **your left and right** are the same, you can simplify even more

```
padding-top: 5px;  
padding-right: 10px;  
padding-bottom: 5px;  
padding-left: 10px;
```

*/\* becomes \*/*

```
padding: 5px 10px;
```

# Borders

```
border-width: 4px;  
border-style: dotted;  
border-color: #a00;
```

*/\* becomes \*/*

```
border: 4px dotted #a00;
```

- Also works for **border-left**, etc.

# Fonts

- Order matters and some properties are required

- font

- font-size

- font-family

```
font-style: italic;
font-variant: small-cap;
font-weight: bold;
font-size: 1em;
line-height: 1.5em;
font-family: Helvetica, Arial, sans-serif;
```

```
/* becomes */
```

```
font: italic small-caps bold 1em/1.5em
Arial, Helvetica, sans-serif;
```

# For next time

- **Add browser reset styles to your project's stylesheet and tidy up the results**
- **Use the box model, backgrounds, ids, and classes to group related content and give your pages more style**
- ***HTML and CSS*: read ch. 13-15**

# Next time

- New HTML5 container elements
- Inline-block elements
- Multi-column and grid layouts
- Other positioning stuff
- CSS pseudo-classes
- HTML data tables

# Questions?

- Visit <http://dpersing.github.io/svc>
  - Class slides
  - Code examples from class
  - Additional general and class-specific resources
- Email me at [dep@dpersing.com](mailto:dep@dpersing.com)