

```
.hedgehog {  
  background-image: url(backyard.jpg);  
  color: #ffff99;  
  height: 6in;  
  width: 12in;  
}
```

```
.tube {  
  color: #996600;  
  height: 3in;  
  width: 12in;  
  position: fixed;  
}
```



CSS

Cascading Style Sheets

What is CSS?

- **Cascading Style Sheets**
- CSS is responsible for styling the look of your website
 - Remember your HTML document?
 - Remember how it looked boring?
 - You can use CSS to add color, fonts, borders, and more!



Basic Syntax

- Example:

```
bedroom {  
  wallpaper: blue;  
  carpet: wool shag;  
}
```

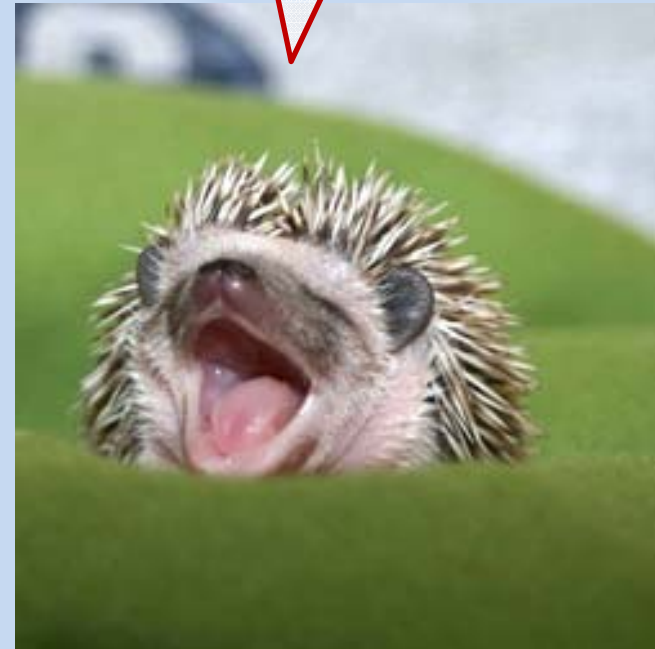
selector

properties

values

- So you have the thing you want to style (bedroom) followed by a list of **properties** and the **value** for that property
 - {This list must be between 2 curly braces}
 - Don't forget to put a semicolon at the end;

Syntax is like grammar. If you don't have the right syntax, the computer won't understand you.



Using CSS in HTML docs

- The elements you want to style are the elements of HTML
- For example, to turn all paragraphs' text green:

```
p {  
  color: green;  
}
```
- Note that when you use an element, you remove “<” and “>”
 - “<p>” becomes “p”, and “<body>” becomes “body”, and “<blockquote>” becomes “blockquote”

Practice!

- How do you think you would implement it to make all your text blue?
 - Hint, the element you'll want to style is <body>

- The answer:

```
body {  
  color: blue;  
}
```



How do I put it into HTML?

- Put the CSS in the head area, between <head> and </head>

```
<head>  
<title>Cats of the World</title>
```

```
<style type = "text/css">  
  body {  
    color: blue;  
  }  
</style>
```

```
</head>
```

- Put the CSS above into your CATS! file from earlier

More CSS Syntax

- You can put in instructions for multiple elements by simply adding another block of code for the second element under the first

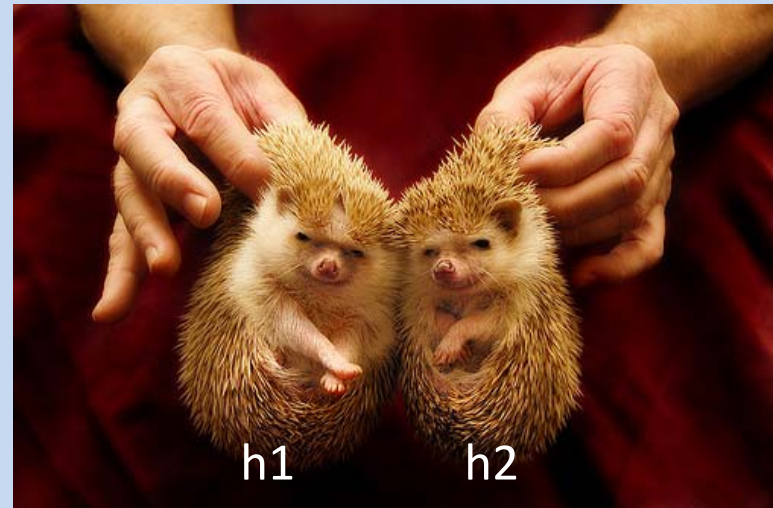
```
h1{  
  color: deeppink;  
  background-color: black;  
}  
h2{  
  color: deeppink;  
  background-color: black;  
}
```

- You can style more than 2 elements and add more than 2 attributes; you can have as many or as few as you want!

Combining Elements

- If you have multiple elements that share the same styles, then you can combine them
 - For example, remember how h1 and h2 have the same styles?

```
h1, h2 {  
  color: deeppink;  
  background-color: black;  
}
```



Selecting in CSS

- An important part in styling is learning how to select elements
 - For example

```
p {  
  color: green;  
}
```
 - “p” is called a **selector**; it selects the thing you want to style
- What if you want to select only one paragraph?
 - You’ll need to learn to use **classes**

Back to HTML: Classes

- So far we've only used the different types of elements as selectors. If you want different things of the same element types to have different styles, use classes
- Classes categorize certain elements

```
<p class="printerCat">  
    Printer Cat needs a hug.  
</p>
```

```
<bird class="owl">
```



```
</bird>
```

Back to CSS: Styling Your Classes

- Only the paragraphs with the class printerCat will have the printerCat styles

```
p.printerCat {  
  color: purple;  
}
```
- More than one paragraph can have the same class, as long as you put `class="printerCat"` in the tag
- What if you want a h1 element and a p element to have the class printerCat?
 - Don't specify element type but keep the dot.

```
.printerCat {  
  color: purple;  
}
```

Practice 2!

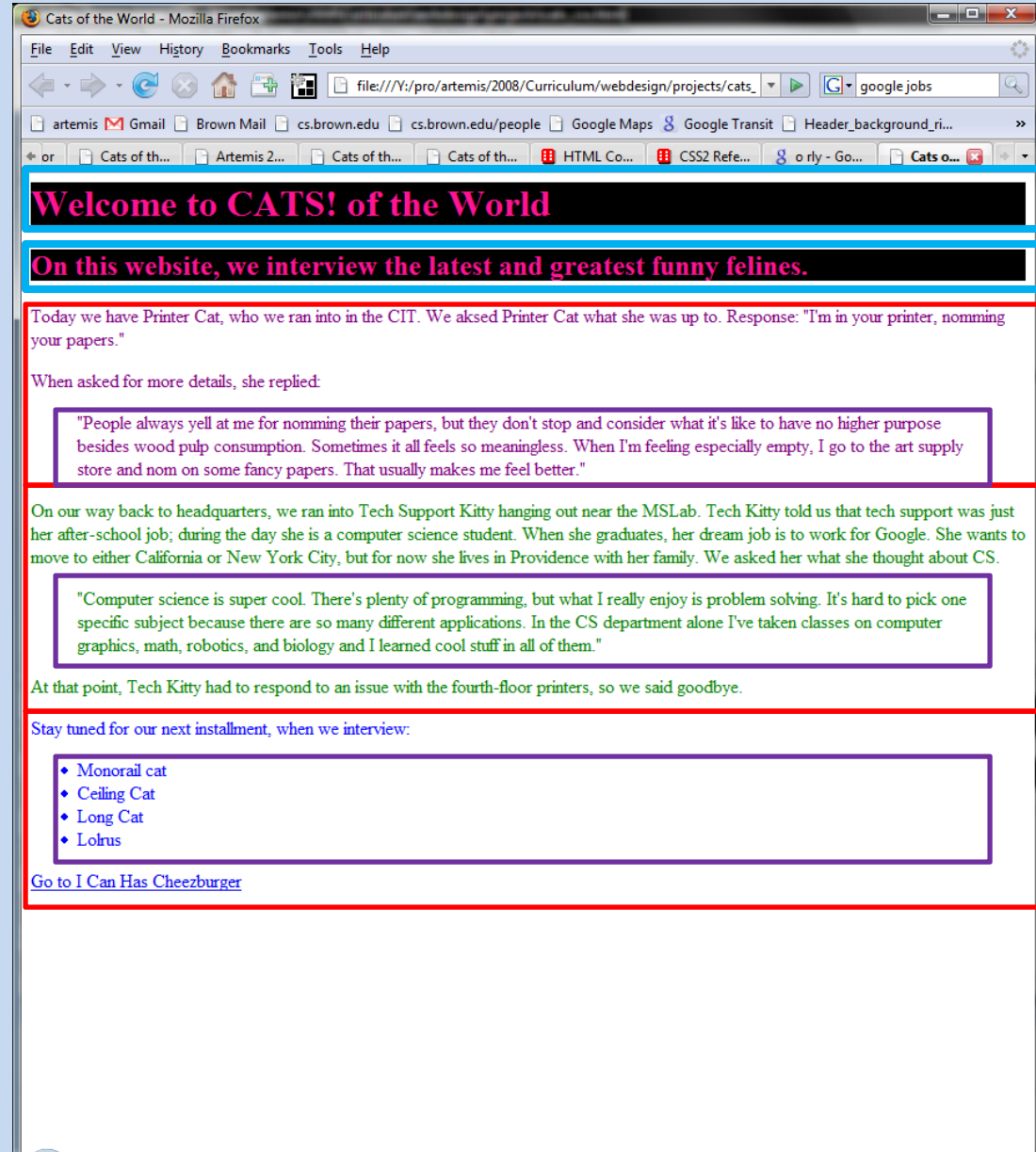
- Make everything about the Printer Cat purple and make everything about the Tech Kitty green
- Answer:
 - Specify all tags around anything to do with Printer Cat as part of one class

```
<p class="printerCat"></p>
<blockquote class="printerCat"></blockquote>
```
 - Do the same thing for Tech Kitty
 - Then CSS it

```
.printerCat {
  color: purple;
}
.techKitty {
  color: green;
}
```

Structure

- Structure is important if you use CSS
- Your page should be made up of blocks
- All the outlined blocks in the image are block elements



Inheritance

- Remember all the way back to when we used

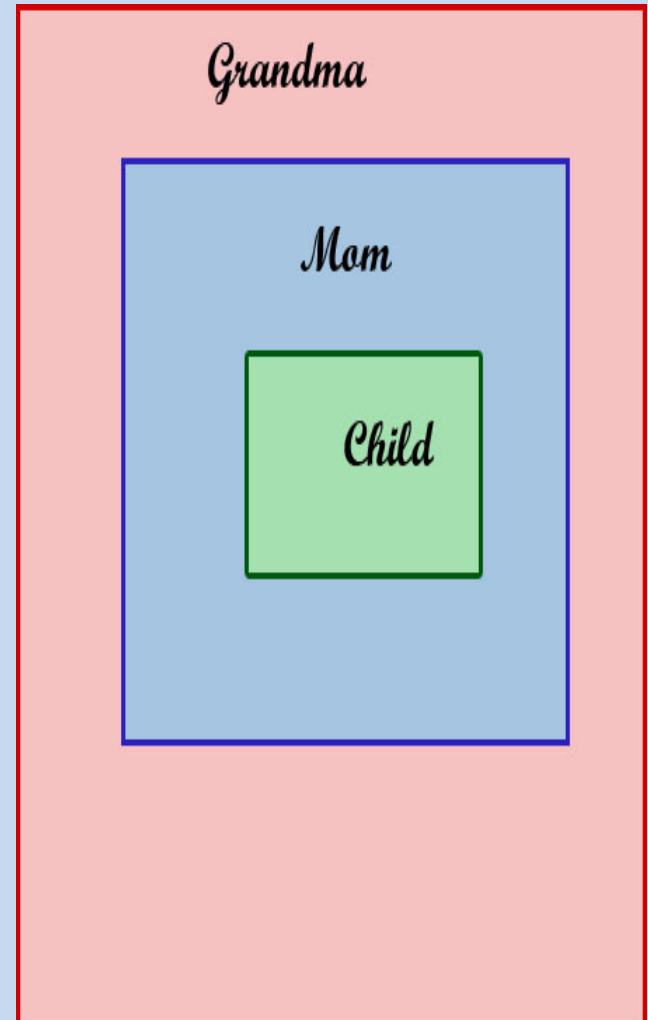
```
body {  
    color: blue;  
}
```

- If you think about it, `body` only refers to one thing, the body, but all the paragraphs and links, and text were *all* colored blue
- This is because of inheritance



Inheritance Continued

- What **inheritance** means is that the styles you apply to a parent will also be applied to child elements
- Wait... Parent? Child? What?
 - Think of **parents** as a block in the structure picture we just showed you
 - Anything inside that block is a **child**
 - The child will be styled the way the big block is unless you specifically change it
 - The body element is a huge block that surrounds everything on the page



Vocabulary Lessons

- Now that you know the syntax of CSS, you need to know some of the words you can use
- There are lots of different **properties**:
 - font-color
 - border
- There are also lots of different **values**:
 - blue
 - bold
- Let's look at some properties and values

Font Family

- Font families are priority lists of fonts to use to display your webpage
- The property is **font-family**
- Example:
`font-family: Arial, Verdana, sans-serif;`
- Stick with these options:
 - sans-serif
 - serif
 - monospace
 - Arial
 - Georgia
 - Lucida Sans
 - Times New Roman
 - Verdana

Practice 3

- Change the font of your CATS! website
- Try different fonts
- Which selector would you put the property and value in?

```
body {  
    font-family: Arial;  
}
```



Font Size

- Specify the body font size. Then specify the rest of the font sizes relative to the body font size.
- Example:

```
body {  
    font-size: medium;  
}  
h1 {  
    font-size: 200%;  
}
```
- h1 is in body, so it inherits the medium size. Therefore 200% means 200% of medium.
- Some of the sizes you can define by words:
xx-small, x-small, small, medium, large, x-large, xx-large
- You can also use pixels or ems for more precision (e.g. 12px or 0.8 em)

Practice 4!

- Turn your body font size into medium
- Then adjust your heading size
 - “Welcome to CATS! of the World” should be 250%
 - “On this website... felines.” should be 120%

- Answer

```
body{  
    ...  
    font-size: medium;  
}
```

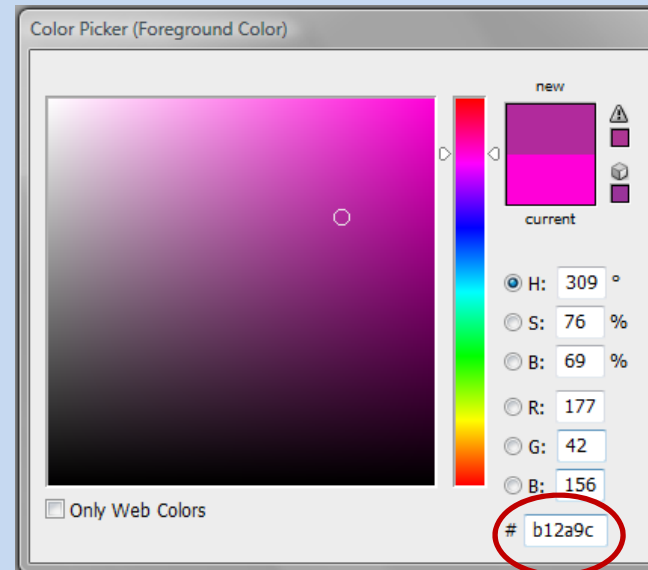
```
h1{  
    font-size: 250%;  
}
```

```
h2 {  
    font-size: 120%;  
}
```

Font Color

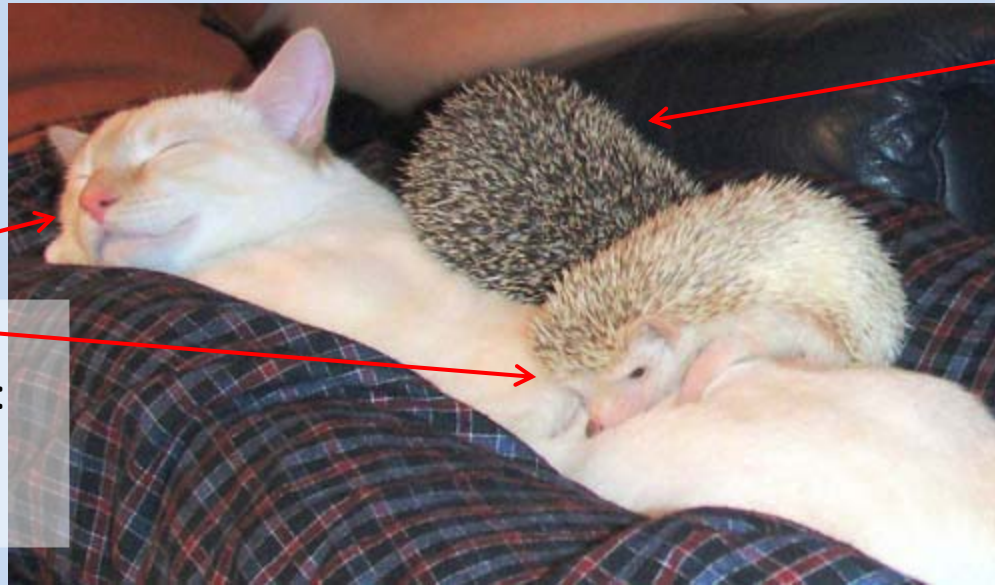
- The property is **color**
- The values are **hexadecimals**
 - #ffffff is white
 - #000000 is black
 - #cc6600 is orange
 - #b8cbd8 is a certain shade of light blue
- You can also use some common words
 - blue
 - maroon
 - green
- More colors:
 - http://www.w3schools.com/Html/html_colors.asp
 - and Photoshop's color palette

000000	000033	000066	000099	0000CC	0000FF
003300	003333	003366	003399	0033CC	0033FF
006600	006633	006666	006699	0066CC	0066FF
009900	009933	009966	009999	0099CC	0099FF
00CC00	00CC33	00CC66	00CC99	00CCCC	00CCFF
00FF00	00FF33	00FF66	00FF99	00FFCC	00FFFF
330000	330033	330066	330099	3300CC	3300FF
333300	333333	333366	333399	3333CC	3333FF
336600	336633	336666	336699	3366CC	3366FF
339900	339933	339966	339999	3399CC	3399FF
33CC00	33CC33	33CC66	33CC99	33CCCC	33CCFF
33FF00	33FF33	33FF66	33FF99	33FFCC	33FFFF
660000	660033	660066	660099	6600CC	6600FF
663300	663333	663366	663399	6633CC	6633FF
666600	666633	666666	666699	6666CC	6666FF
669900	669933	669966	669999	6699CC	6699FF
66CC00	66CC33	66CC66	66CC99	66CCCC	66CCFF
66FF00	66FF33	66FF66	66FF99	66FFCC	66FFFF
990000	990033	990066	990099	9900CC	9900FF
993300	993333	993366	993399	9933CC	9933FF
996600	996633	996666	996699	9966CC	9966FF
999900	999933	999966	999999	9999CC	9999FF
99CC00	99CC33	99CC66	99CC99	99CCCC	99CCFF
99FF00	99FF33	99FF66	99FF99	99FFCC	99FFFF
CC0000	CC0033	CC0066	CC0099	CC00CC	CC00FF
CC3300	CC3333	CC3366	CC3399	CC33CC	CC33FF
CC6600	CC6633	CC6666	CC6699	CC66CC	CC66FF
CC9900	CC9933	CC9966	CC9999	CC99CC	CC99FF
CCCC00	CCCC33	CCCC66	CCCC99	CCCCCC	CCCCFF
CCFF00	CCFF33	CCFF66	CCFF99	CCFFCC	CCFFFF
FF0000	FF0033	FF0066	FF0099	FF00CC	FF00FF
FF3300	FF3333	FF3366	FF3399	FF33CC	FF33FF
FF6600	FF6633	FF6666	FF6699	FF66CC	FF66FF
FF9900	FF9933	FF9966	FF9999	FF99CC	FF99FF
FFCC00	FFCC33	FFCC66	FFCC99	FFCCCC	FFCCFF
FFFF00	FFFF33	FFFF66	FFFF99	FFFFCC	FFFFFF



Background color

- The property is **background-color**
- The values are the same as font color-hexadecimals or color names



```
.cat, .hedgehog2 {  
  background-color:  
  #ffffff;  
}
```

```
.hedgehog1 {  
  background-  
  color: #000000;  
}
```

Practice 5!

- Turn the background color of the whole Kitty blog page into `#b8cbd8`
- Which selector do you think you put the code in?
 - the body
 - answer:

```
body{  
...  
background-color: #b8cb8;  
}
```

Practice makes perfect!



Divs

- `<div></div>` is an element in HTML
- HTML documents should consist of a bunch of nested and consecutive block elements
- `div` is a **block element** used for grouping other block elements into
- Think of it as a container for different sections of your page

How would you use div?

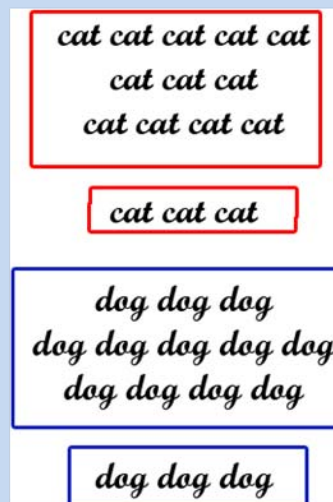
- div is used as a logical divide
 - If you have a page about cats and dogs, you can surround the cat part with `<div class="cat">`
`</div>` and surround the dog part with another `<div class="dog">`
`</div>`
- This lets you style everything about cats all at once, even if they're in different individual blocks



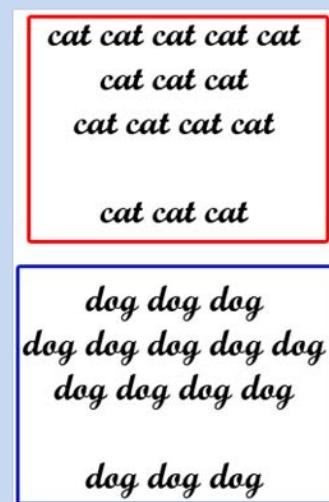
I thought classes did that anyway?!

- Yes they do, but if you put a border around all elements in class “cat”, everything will have a separate border of its own, rather than share one border

WITH OUT DIV



WITH DIV



How to Use div

- Place the `<div>` and `</div>` wherever you think you need to group a bunch of block elements
- Make sure the divs have a class
 - `<div class="cats">`
- Then style it like you would style any other element in CSS

```
.cats {  
    css-property: value;  
    [etc.]  
}
```

Using div with id's and classes

- Sometimes div has an id instead of a class
 - `<div id="header"></div>`
- The CSS looks like this:

```
#header {  
    css-property: value;  
    [etc.]  
}
```
- When do you use id vs. class?
 - Use **id** if you only need one div with that id (for example, usually there is only one header on a page)
 - Use **class** if you need multiple divs (for example, if you plan to have several sections on cats interspersed throughout your page)

Span

- `` is just like `div`, except it's used for inline elements



Practice 6!

- Go back to the CATS! web page
 - Turn the background of the section about printer cat `#dbcff6`
 - Turn the background of the section about tech kitty `#99ff99`
 - Use two divs with two different classes (`.printerCat` and `.techKitty`)



Practice 6 Answer

- Put `<div class="printerCat">` and `</div>` around the printer cat section
- Put `<div class="techKitty">` and `</div>` around the tech kitty section
- Edit your CSS for the two sections:

```
.printerCat {  
    ...  
    background-color:#dbcff6;  
}  
.techKitty {  
    ...  
    background-color:# 99ff99;  
}
```

Summary of the confusing stuff

- Use **div** to style a block of content
- Use **span** to style an inline element
- Divs, spans, and other html tags (such as h1, p, and img) can have classes and/or id's
- Use **classes** (.classname) when you will have multiple instances of the same thing
- Use **id** (#idname) when you will have only one instance

So is that it?

- No! Go online to find more properties and values
 - <http://htmldog.com/reference/cssproperties/>
 - http://www.w3schools.com/css/css_reference.asp
- Do the CSS mini project
- Next time we'll make layouts using CSS!

