CSS Animation Notes

Transform property

Transforms change the shape and position of the affected content by modifying the coordinate space. They are most often used to move an object in the browser window. They don't disrupt the normal document flow (aka the cascading styles and hierarchy of child/parent relationships or inline/block level elements).

Values:

- Translate: 100px means it will move exactly 100px, 100% means it will move 100% of original size
- Scale: a scale of 1 is the current size, so 2 would be double, 0.5 would be half
- Skew: is written in deg (degrees), 0 is the default state and move can be made up to 360.
- Rotate: is written in deg (degrees), 0 is the default state and move can be made up to 360.

```
.box {
  transform: translate(100px) skew(20deg) scale(2) rotate(120deg);
}
```

Specific Values

```
.box {
  transform: translateX() translateY() translateZ() translate3d();
  transform: scaleX() scaleY() scaleZ();
  transform: skewX() skewY();
  transform: rotateX() rotateY() rotateZ() rotate3d();
}
```

Perspective property

You must declare the perspective property and value using a parent selector because it applies to child elements. It can be written in px or em. It is a little counter intuitive: a higher number is lesser change, a lower number is a more intense change.

```
.wrapper {
  perspective: 1000px;
}
```

Transitions property

Must have a beginning and end state. They are useful on hovers. For our example, the hover becomes the end state.

Values:

- The simple value is to add a time. Then end state will take #of seconds to formulate.
- The complex way to write the values is to 1:target a property 2:specify time 3:timing function.

```
    transition: background-color 5s ease-in;
}
```

Keyframes

Keyframes are a list describing what should happen over the course of the animation. This includes, time, speed, and visual changes. To use a keyframe animation you must **Define and Assign**

- Define the animation (tell CSS what should happen)
- Assign it to an element (or elements)

Define

Create a @keyframes rule, give it a name, and add the declarations for what it does.

Assign

Assign the animation with the **animation-name** property and specify the time with **animation-duration**

Full list of animation properties

From/to versus Percentages