11.2.3

JavaScript Objects

It's been a good day of research. Dana is far more familiar with some of the basic components of JavaScript: she now knows that variable declaration can actually occur three ways, and the array she is working with is similar to a Python dictionary. It's a great start, but Dana's still a little fuzzy on the array. It looks like a JSON, or a dictionary, so it's more complex than a simple list, right?

Dana's intuition has served her well: the JavaScript array is indeed a bit more than a simple list. Let's take a closer look at JavaScript objects and how to interact with them, which will help us as we begin to create our code.

Coding in JavaScript requires proficiency with JavaScript objects. And, in JavaScript, many different things can be considered an "object." We've actually already encountered one! Let's look at a snippet of code from our `data.js` array:

```
var data = [
  {
    datetime: "1/1/2010",
    city: "benton",
    state: "ar",
    country: "us",
    shape: "circle",
    durationMinutes: "5 mins.",
    comments: "4 bright green circles high in the sky going in circles then one bright green light at my fron
  },
```

As mentioned earlier, this looks very similar to a Python dictionary or something we'd find in a JSON file. In this code snippet, everything within the curly brackets is considered to be properties of a JavaScript object. The object is our variable: data.

There are several ways we can access the properties, also called key-value pairs or objects, in the array.

↻ Retake

Also, objects are not limited to being contained within an array. In fact, an array itself is an object. Dates are also objects, as are functions; and Booleans *can* be objects. Basically, many things can be—or are—objects. We'll get plenty of practice with objects as we start to build our website.

Before building the website, we should plan it out. By using a storyboard and mapping the elements out beforehand, it will be easier to assemble them later.