# Do Now

1) Go to keithleyslhs.weebly.com → Intro to Comp Sci page and locate the buttons for Do Now JavaScript Objects.

2) Analyze the Javascript code for each example. How are they similar? How are they different?

# What are objects?

- Objects are a type of variable.
- Objects are variables that <u>hold more data</u> using a <span style="color:yellow">"key:value"</span> pair system.
- <u>Keys</u>, also called <u>properties</u>, are <u>strings</u>
- <u>Values</u> can be <u>any type</u> of data (numbers, booleans, strings, arrays, other objects, etc.

# Why objects?

- What other variables can hold more than one piece of data?

```
var keithley = ["Anthony", "SLHS",
"skateboarding", "Lizzy", "Cornelius",
"Tiffany", "burritos", "chili"];
```

- What do we use to access that data?

- What if I wanted a more clear way to access the data?

# Object Example

```
var teacher = {
   "name": "Keithley",
   "age": 33,
   "subject": "Comp Sci",
   "dope": true
};
```
Note: each key:value pair is separated by a **comma**

teacher is the **name** of the object.

name, age, subject, and dope are **properties** of the object

"Keithley", 33, "Comp Sci", and true are all **values** that correspond to the keys

# Object Example

```
var teacher = {
    "name": "Keithley",
    "age": 33,
    "subject": "Comp Sci",
    "dope": true
};
```

Notice: In one variable named teacher, we can store two strings, a number, and a boolean value

# Object Example

```
var teacher = {
  name: "Keithley",
  age: 33,
  subject: "Comp Sci",
  dope: true
};
```

Note: If your property names are only one word, you do not need to surround them with quotes.

Check the French and Tagalog objects in today's examples

# Accessing Property Values

Two ways:

1. With the **dot operator**

   `teacher.subject` returns "Comp Sci"

2. With **bracket notation**

   `teacher["dope"]` returns true

# Building Objects

- Go to bit.ly/objectExample and play around with the app.
- Complete the worksheet.

# Object methods

- Definition:
  - a <u>method</u> is a function that is <u>called **on** an object</u>

Example:

```
var name = "Jimbo";

console.log(name.substring(3));
```

Which part of the second line is a method?

substring

# Object methods

- Methods are <u>called using the dot operator on the name</u> of the variable or object

<u>Example</u>:

```
name.substring(3)
```

name is the variable/object

substring is the method

connected with the "." dot

# Built-in Objects

- There are many object types <u>built into Javascript</u> that we can use with their own methods.

- Go to the link below to investigate the Date object type

bit.ly/dateObjectExample