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# INTRODUCTION TO JAVASCRIPT

## Lecture 19

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# TODAY'S TOPICS



- Sass Mixins
- Sass @Extend
- Sass Parent Selector
- Review: Boxes
- Exercise: Sassy Shapes

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# ANNOUNCEMENTS

- Sign-in Sheet

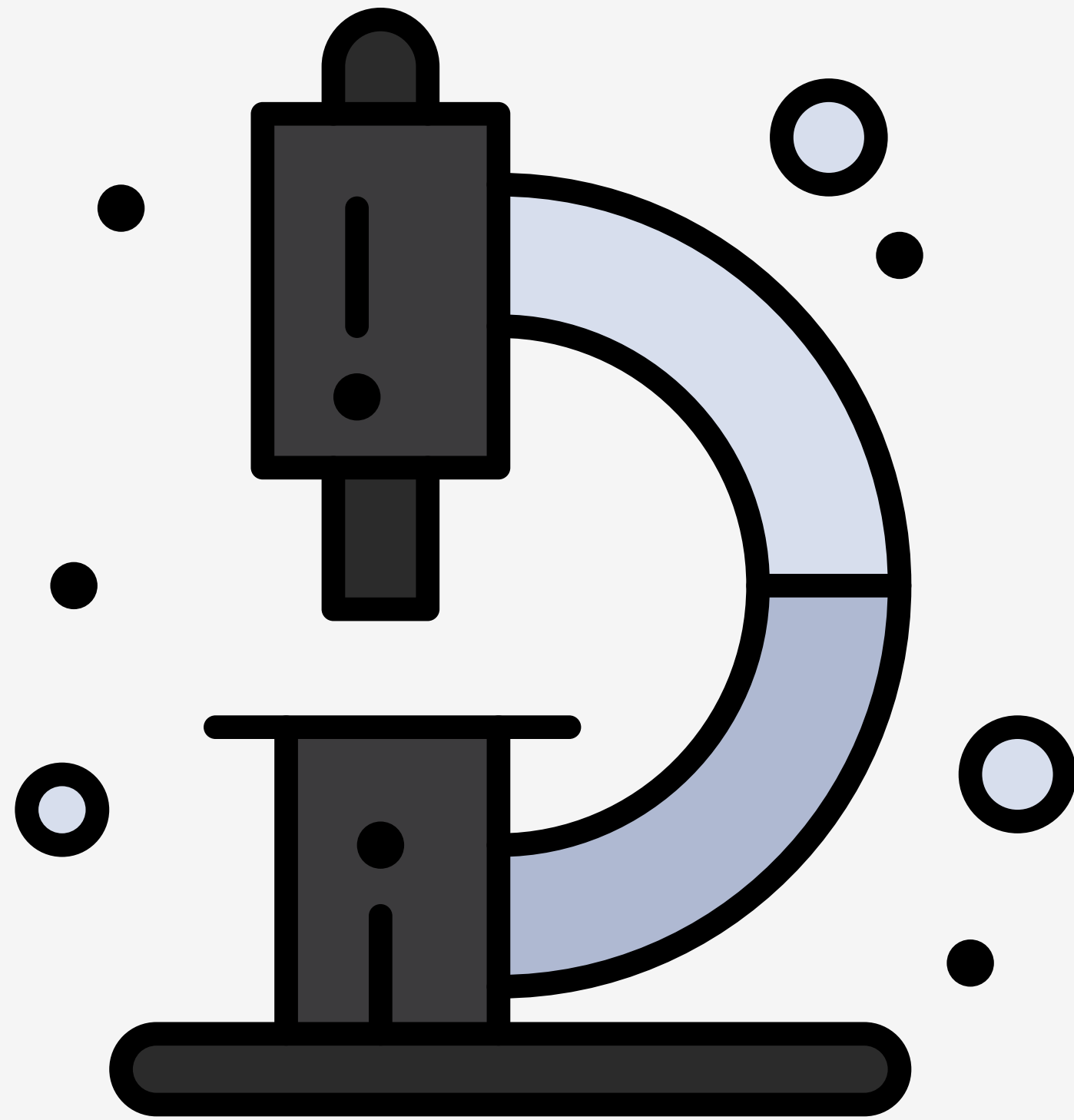


**QUESTIONS?**

# SASS MIXINS

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# SASS MIXINS



- **Mixins** are like functions that return CSS styles
- **Mixins** are defined using `@mixin` rule and take arguments
- **Mixins** are "called" using the `@include` rule

```
/* Sass */
@mixin backgroundImage ($image) {
    background-image: url($image);
    background-repeat: no-repeat;
    background-position: center center;
    background-size: cover;
}

.jumbotron {
    @include backgroundImage('water.jpg');
}

.bridge {
    @include backgroundImage('bridge.jpg');
}
```

```
/* CSS */
.jumbotron {
    background-image: url("water.jpg");
    background-repeat: no-repeat;
    background-position: center center;
    background-size: cover;
}

.bridge {
    background-image: url("bridge.jpg");
    background-repeat: no-repeat;
    background-position: center center;
    background-size: cover;
}
```

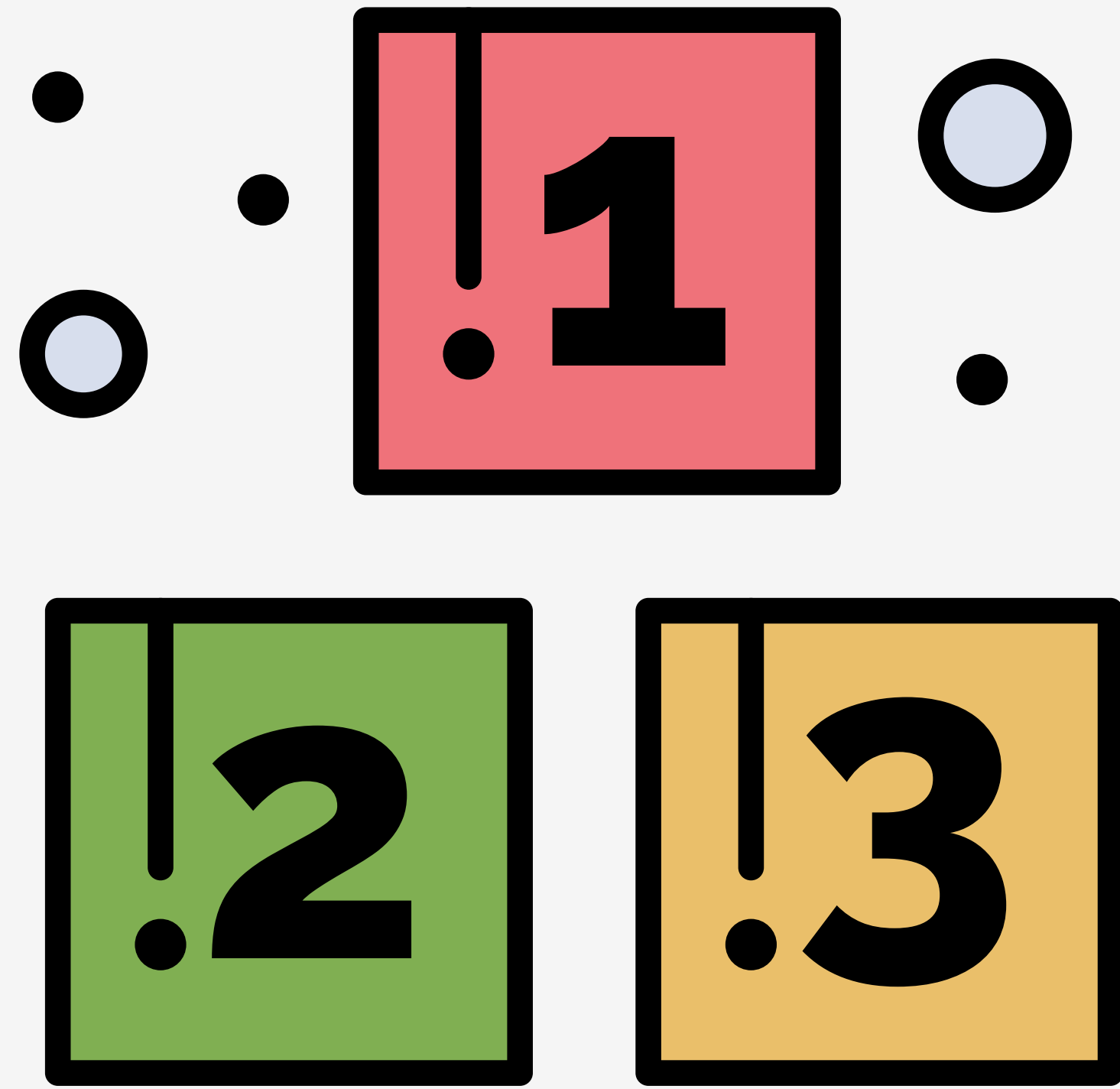
**HANDS-ON**



**SASS @EXTEND**

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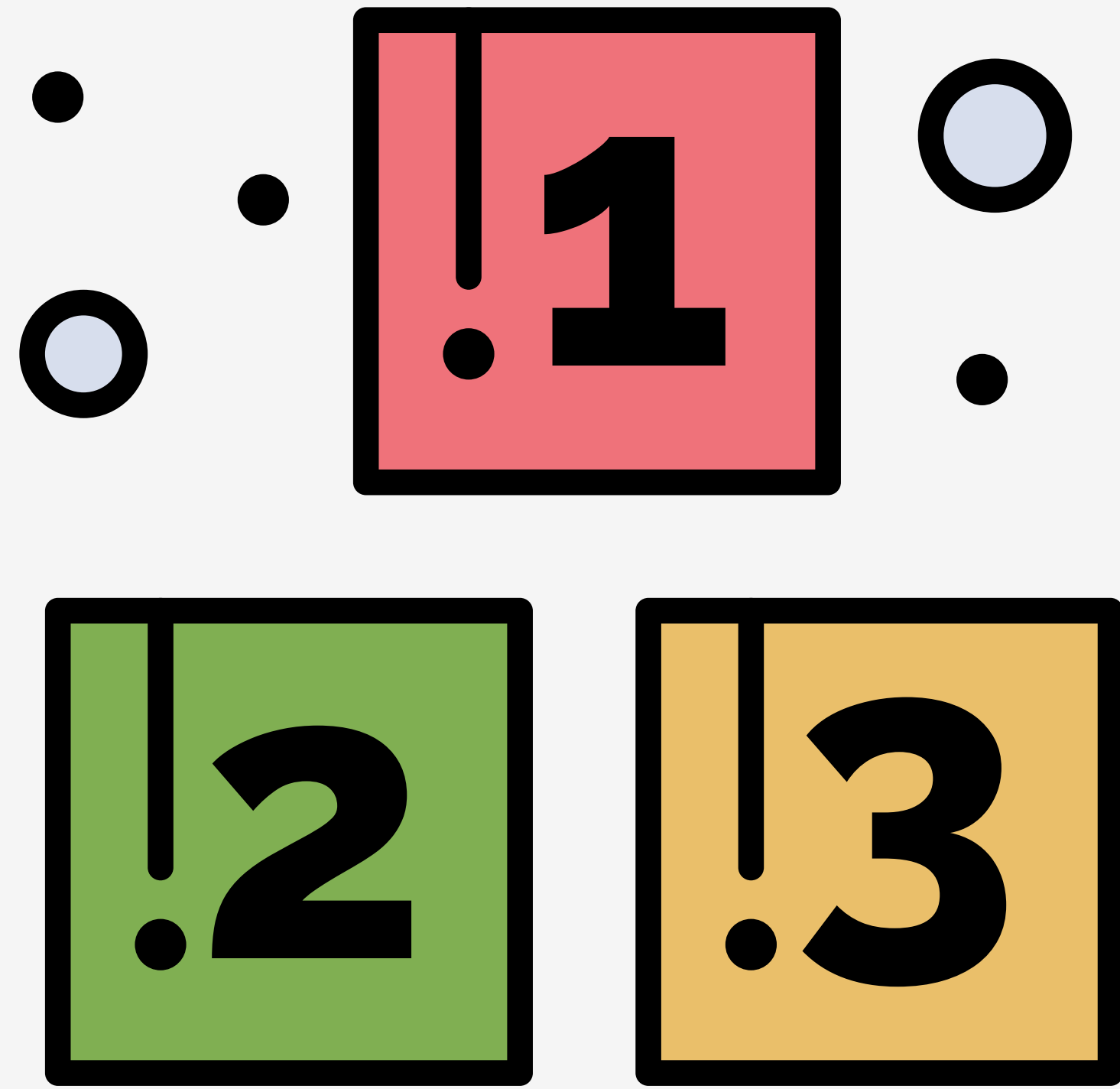
# SASS @EXTEND



- The `@extend` rule allows for one selector to inherit the styles of another
- The "child" selector can then override any inherited styles.

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# SASS PLACEHOLDER SELECTOR



- The **placeholder selector** starts with a % and it not include in the CSS output
- Any CSS contained in a **placeholder selector** will only appear if used in conjunction with the **@extend** rule

```
/* Sass */
```

```
%btn {
```

```
  display: inline-block;
```

```
  padding: 6px 12px;
```

```
  text-align: center;
```

```
  background-color: grey;
```

```
  color: #fff;
```

```
}
```

```
/* CSS */
```

```
/* Sass */
%btn {
  display: inline-block;
  padding: 6px 12px;
  text-align: center;
  background-color: grey;
  color: #fff;
}

.btn-hot {
  @extend %btn;
  background-color: #D14348;
}

.btn-cool {
  @extend %btn;
  background-color: #0076A3;
}
```

```
/* CSS */
.btn-hot, .btn-cool {
  display: inline-block;
  padding: 6px 12px;
  text-align: center;
  background-color: grey;
  color: #fff;
}

.btn-hot {
  background-color: #D14348;
}

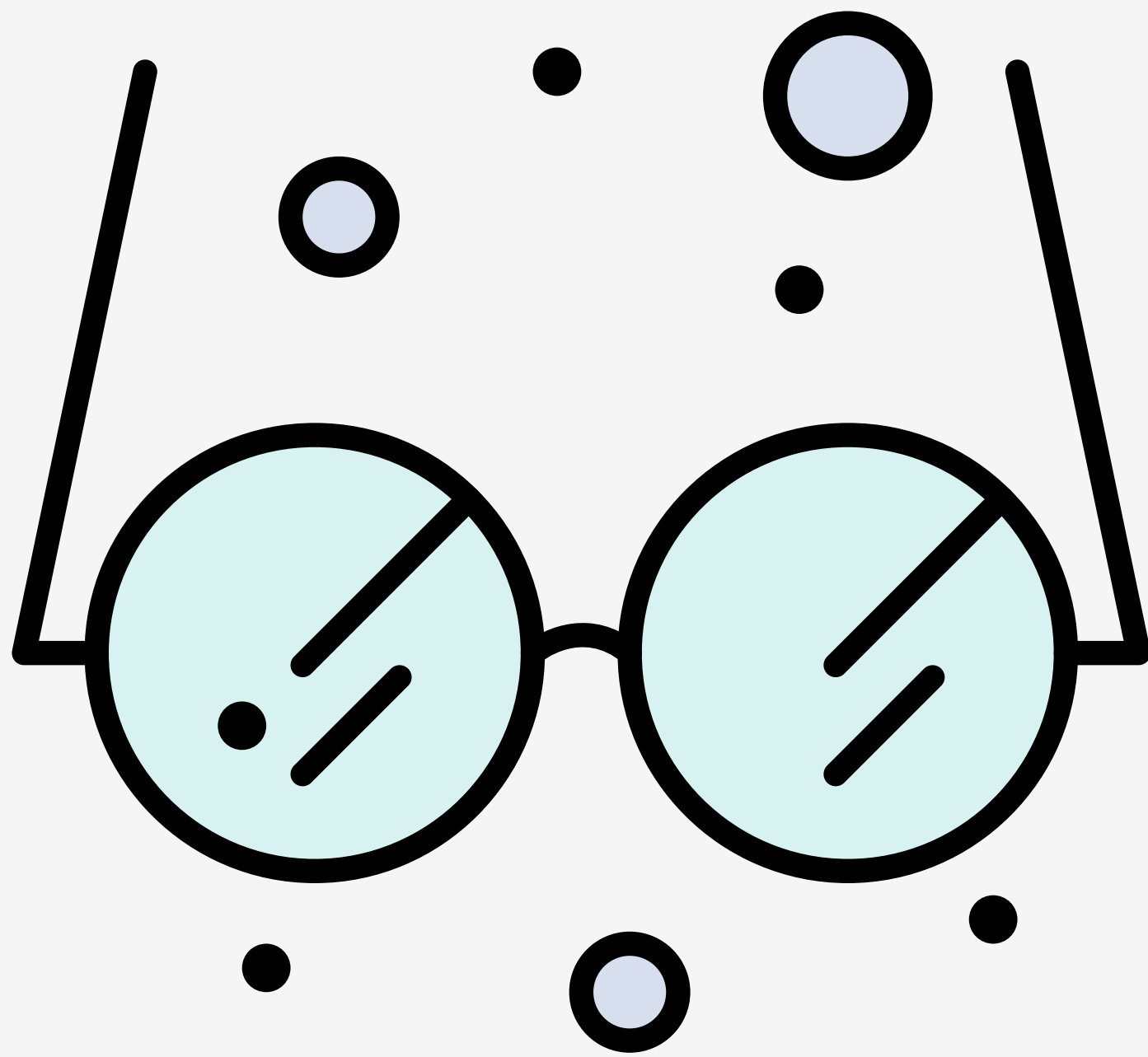
.btn-cool {
  background-color: #0076A3;
}
```

**HANDS-ON**

# **SASS** PARENT SELECTOR

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# SASS PARENT SELECTOR



- The **parent selector** ( **&** ) is used to refer to the outer selector when nesting
- The **parent selector** can be used to make complex selectors or structured class names



```
/* Sass */
a {
  color: blue;

  &:hover {
    text-decoration: underline;
  }

  &.active {
    font-weight: bold;
  }

  .upper {
    text-transform: uppercase;
  }
}
```

```
/* CSS */
a {
  color: blue;
}

a:hover {
  text-decoration: underline;
}

a.active {
  font-weight: bold;
}

a .upper {
  text-transform: uppercase;
}
```

```
/* Sass */  
.nav {  
  display: flex;  
  
  &-link {  
    padding: 10px;  
  }  
}
```

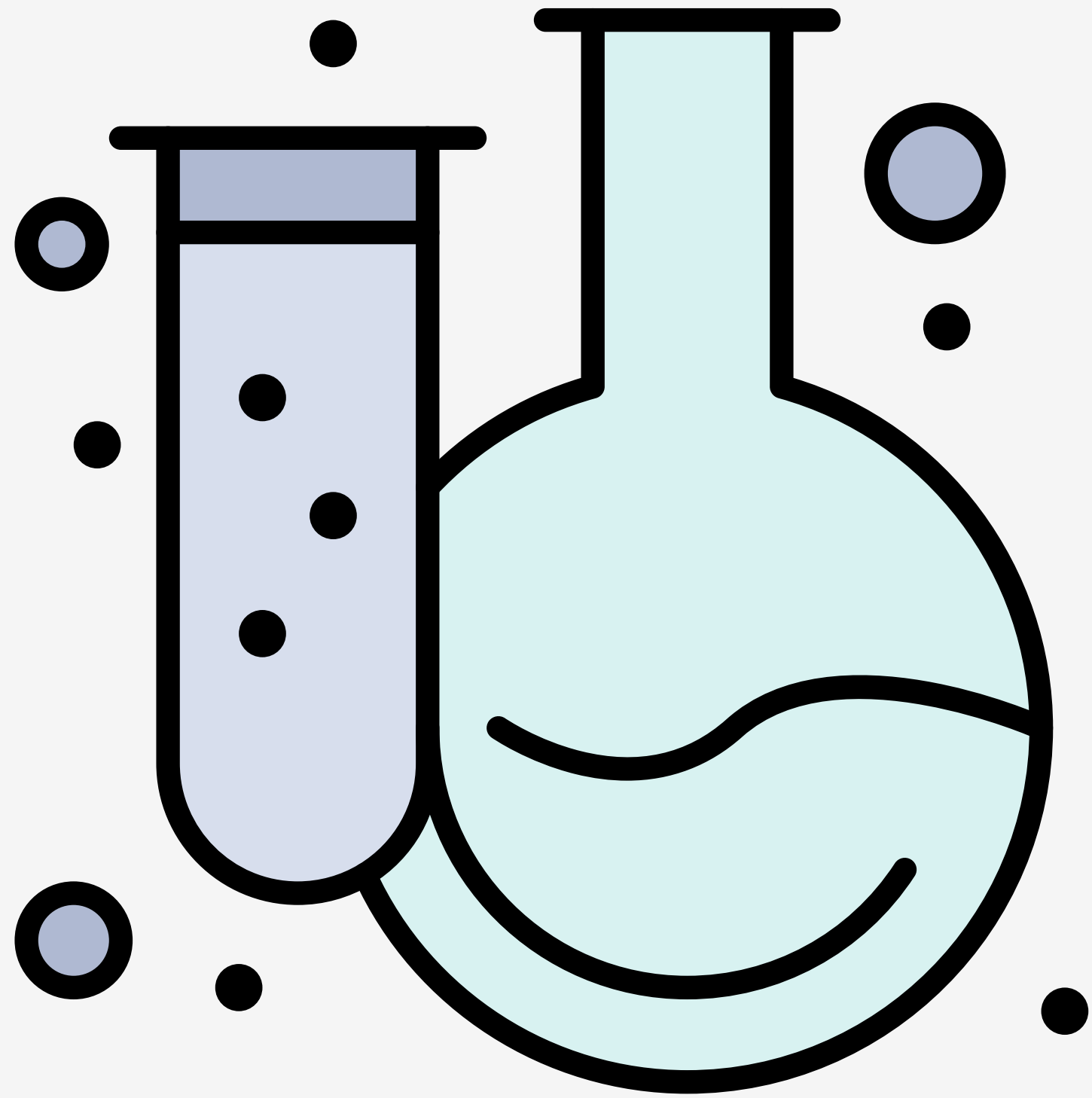
```
/* CSS */  
.nav {  
  display: flex;  
}  
  
.nav-link {  
  padding: 10px;  
}
```

**HANDS-ON**

**PRACTICE**

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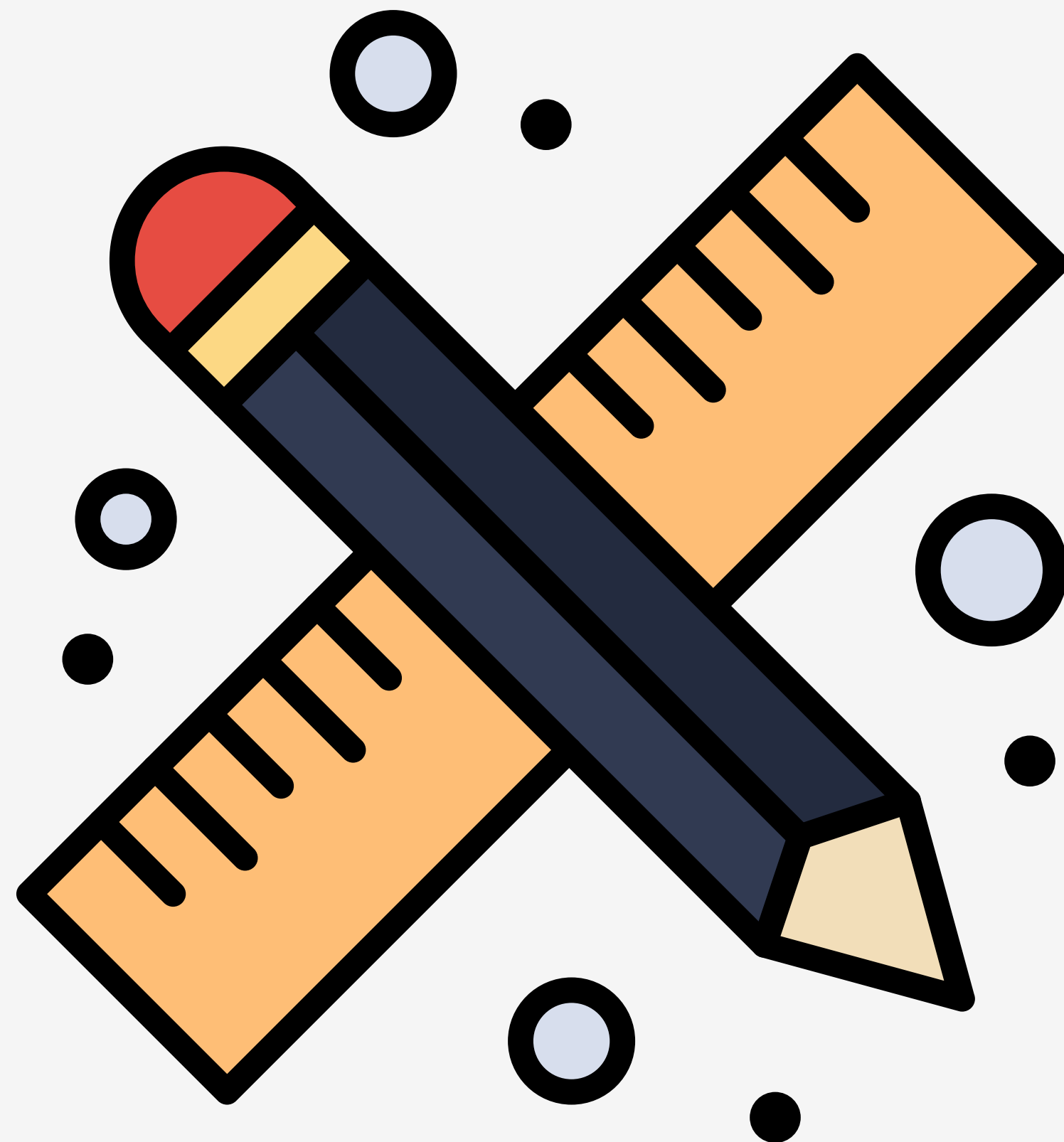
# BOXES - NOT GRADED



- Use Sass to create the CSS classes to create boxes of different colors and size.

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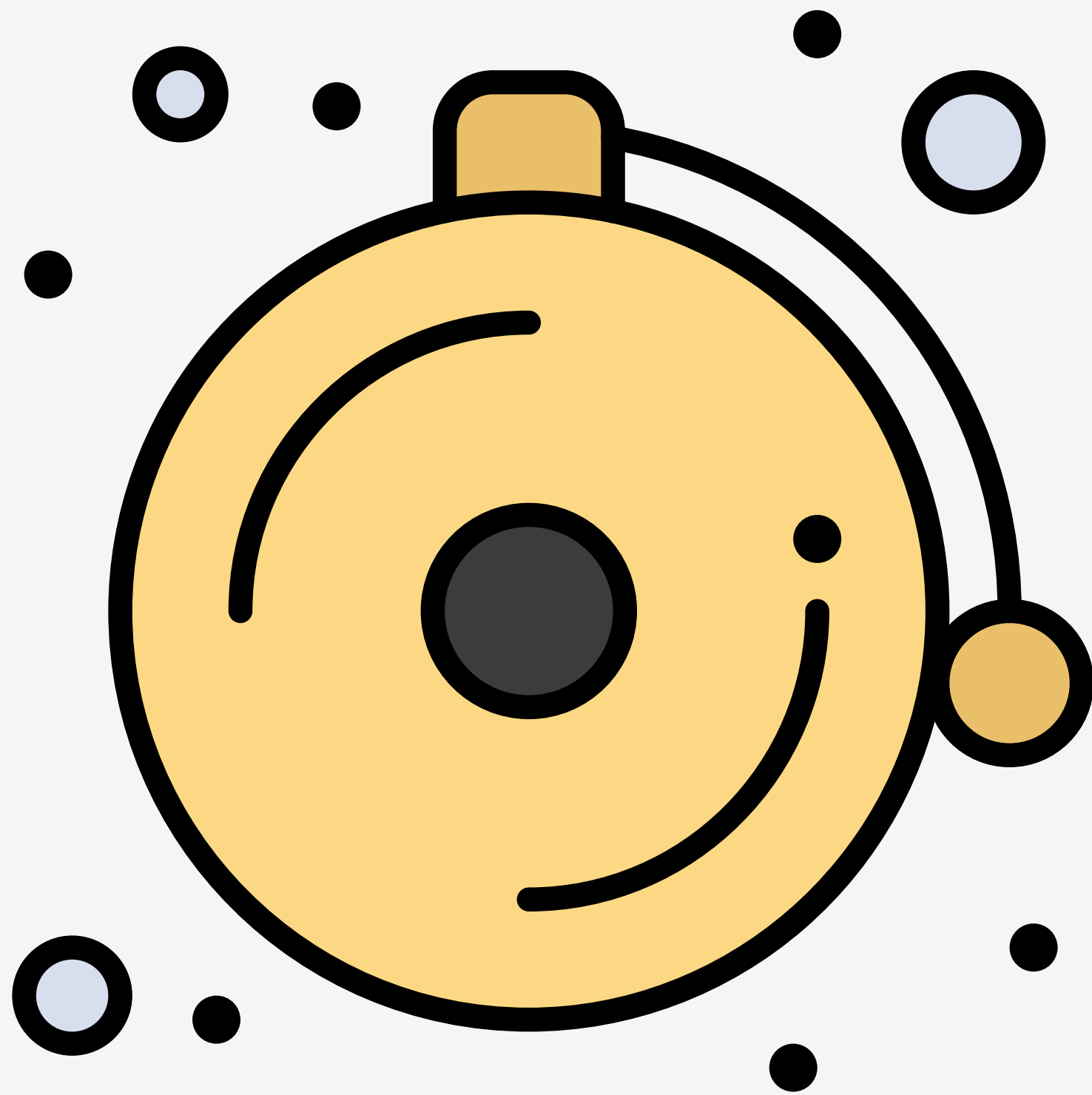
# SASSY SHAPES



- *GITHUB CLASSROOM ASSIGNMENT*
- Create five different shapes in five different colors using Sass and JavaScript
- Dynamically create the HTML elements using JavaScript
- Dynamically create the CSS using Sass
- *TEST YOUR CODE*
- Submit the URL to your repository
- *DUE:* Thu. Dec. 5 @ 11:59 PM

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# NEXT TIME...



- SassScript
- Participation: Sassy Cats