

textOutput()

Creates a screen reader-accessible description of shapes on the canvas.

`textOutput()` adds a general description, list of shapes, and table of shapes to the web page. The general description includes the canvas size, canvas color, and number of shapes. For example, `Your output is a, 100 by 100 pixels, gray canvas containing the following 2 shapes:`

A list of shapes follows the general description. The list describes the color, location, and area of each shape. For example, `a red circle at middle covering 3% of the canvas`. Each shape can be selected to get more details.

`textOutput()` uses its table of shapes as a list. The table describes the shape, color, location, coordinates and area. For example, `red circle location = middle area = 3%`. This is different from `gridOutput()`, which uses its table as a grid.

The `display` parameter is optional. It determines how the description is displayed. If `LABEL` is passed, as in `textOutput(LABEL)`, the description will be visible in a `div` element next to the canvas. Using `LABEL` creates unhelpful duplicates for screen readers. Only use `LABEL` during development. If `FALLBACK` is passed, as in `textOutput(FALLBACK)`, the description will only be visible to screen readers. This is the default mode.

Read [Writing accessible canvas descriptions](#) to learn more about making sketches accessible.

`textOutput()` generates descriptions in English only. Text drawn with `text()` is not described. Shapes created with `beginShape()` are not described. WEBGL mode and 3D shapes are not supported.

Use `describe()` and `describeElement()` for more control over canvas descriptions.

Examples

```
▶ ■
function setup() {
  // Add the text description.
  textOutput();

  // Draw a couple of shapes.
  background(200);
  fill(255, 0, 0);
  circle(20, 20, 20);
  fill(0, 0, 255);
  square(50, 50, 50);

  // Add a general description of the canvas.
  describe('A red circle and a blue square on a gray background.');
}
```

```
▶ ■
function setup() {
  // Add the text description and
  // display it for debugging.
  textOutput(LABEL);

  // Draw a couple of shapes.
  background(200);
  fill(255, 0, 0);
  circle(20, 20, 20);
  fill(0, 0, 255);
  square(50, 50, 50);

  // Add a general description of the canvas.
  describe('A red circle and a blue square on a gray background.');
}
```

```
▶ ■
function setup() {
  createCanvas(100, 100);
}

function draw() {
  // Add the text description.
  textOutput();

  // Draw a moving circle.
  background(200);
  let x = frameCount * 0.1;
  fill(255, 0, 0);
  circle(x, 20, 20);
  fill(0, 0, 255);
  square(50, 50, 50);

  // Add a general description of the canvas.
  describe('A red circle moves from left to right above a blue square.');
}
```

Syntax

```
textOutput([display])
```



Parameters

`display` Constant: either `FALLBACK` or `LABEL`.

This page is generated from the comments in [src/accessibility/outputs.js](#). Please feel free to edit it and submit a pull request!

Related References

`cursor` Changes the cursor's appearance.

`deltaTime` A Number variable that tracks the number of milliseconds it took to draw the last frame.

`describe` Creates a screen reader-accessible description of the canvas.

`describeElement` Creates a screen reader-accessible description of elements in the canvas.

`gridOutput`

`height`

`noCursor`

`pixelDensity`

`setup`

`startCoding`

`startPage`

`startPage`