

Is this a test?

- 0) Your name
- 1) Once upon a time, JavaScript couldn't be run on the command line. Then someone fixed it up so you could - what's this programming language called?
- 2) What command do you need to run when you first download/use a new project?
- 3) What does -g do when using it to install a package?
- 4) What is package.json?
- 5) What is node_modules?
- 6) What is linting?
- 7) Name two things a build system might do.
- 8) What is the build system that we use called?
- 9) What is Handlebars? What does Handlebars code look like?
- 10) What's the SVG element for a circle? How about a squiggly line?
- 11) Name three JavaScript events
- 12) I'm building a choropleth about measles outbreaks in different states - the more red, the more measles outbreaks. The state with the most cases of measles has 100 cases. Write out the scale I would use to color the states, and assign it to a variable.
- 13) I'm building a bubble map about measles outbreaks in different cities. Each city has a circle, and the larger the city's circle, the more measles outbreaks. The city with the most cases of measles has 25. Write out the scale I would use to size the circles, and assign it to a variable.
- 14) In D3, when do you use .data() and when do you use .datum? A little example code would help make it clear.
- 15) What's the difference between the `d` in `.attr('d', ...)` and `function (d) { ... }`?

16) The code below is the “margin convention”

```
const margin = { top: 30, left: 30, right: 30, bottom: 30 }
const height = 300 - margin.top - margin.bottom
const width = 700 - margin.left - margin.right

const svg = d3
  .select('#chart-1')
  .append('svg')
  .attr('height', height + margin.top + margin.bottom)
  .attr('width', width + margin.left + margin.right)
  .append('g')
  .attr('transform', 'translate(' + margin.left + ',' + margin.top + ')')
```

Explain what it’s doing, and why we need it. It might be helpful to draw a diagram.

17) I have some data that looks like this:

```
city,cases,state
Rockland,155,New York
Oakland,40,Michigan
Baltimore,8,Maryland
Champaign,4,Illinois
```

We’re building a horizontal bar chart that will look something like this:

```
Rockland =====
Oakland =====
Baltimore ==
Champaign =
```

Write the D3 code necessary to draw and position the rectangles, pretending we have all the right scales already (and they’re named the normal names). Yes, coding on paper sucks, you’ll have a chance to redeem yourself soon.