

## Element Animation Project Planning Template

You will choose an element from the periodic table to research, and then create an animated “box” for that element using Scratch coding. Your animation should include some basic information about the element, as well as interesting facts.

Here is an example that I created to give you ideas: [Neon Sample Project](#)

Please note: My example is basic - I expect yours to incorporate more information and design elements. A rubric is included at the end of this document.

**Element to Research:** [Insert Name of the Element]

### **Research Phase**

During this phase, you should be seeking information from reliable sources such as textbooks, scientific journals, and reputable websites. You will need to cite your sources, so keep track of where you got your information at the bottom of this planning template.

Here are a few to get you started:

<https://pubchem.ncbi.nlm.nih.gov/periodic-table/>

<https://www.rsc.org/periodic-table>

<http://www.ptable.com/>

<https://www.fishersci.com/us/en/periodic-table.html>

### **Basic Information:**

- Atomic Number:
- Atomic Mass:
- Symbol:
- Discovery Year:
- Category: (e.g., Noble Gas, Transition Metal)
- State at Room Temperature: (Solid, Liquid, Gas)

### **Properties:**

- Physical Properties (e.g., Melting Point, Boiling Point):
- Chemical Properties (e.g., Reactivity, Oxidation States):

### **Historical Significance:**

- Discovery (who discovered it, when, and how):
- Historical Uses:
- Notable Events or Discoveries Related to the Element:

### **Fun Facts:**

- Interesting Trivia:
- Unusual Properties:
- Modern Applications:

1. What made you choose this element for your project?
2. Looking at the information you collected above, is there anything that you would like to incorporate into your design? Brainstorm some ideas and share them below.

### **Scratch Animation Design Phase**

You can create your animation using the [CS First Scratch](#) platform (I used the [Google Logo Design](#) one) or using the standard [Scratch platform](#). Play around with some tutorials on CS First to learn more about design elements and things you can do to enhance your animation project.

You must include:

- The element name, symbol, and atomic number somewhere on your project
- At least five (5) interesting facts
- At least ten (10) interactive/coded features

Everything else is up to you!

#### **Storyboard Creation:**

- Sketch a rough storyboard outlining the scenes and interactions in your animated "box." Consider how you will present the basic information and fun facts about your element. You can do this on paper and actually sketch and insert a photo here, or you can list your storyboard below.

#### **Interactive Elements:**

- List interactive features you want to include (e.g., clickable buttons, animations triggered by user actions).

#### **Animation Style:**

- Decide on the visual style of your animation (e.g., colors, fonts, background). Consider how the design can reflect the element's characteristics.

#### **Coding Concepts:**

- Identify Scratch coding concepts you'll use (e.g., variables, loops, conditional statements) and plan how to implement them in your animation.

### **Content Incorporation Phase**

#### **Element Information Presentation:**

- Determine how you'll present basic information about the element within the animation. Will you use text, voice narration, or both?

#### **Fun Facts Integration:**

- Plan how to incorporate fun facts about the element creatively. Think about animations, pop-up text, or interactive elements to engage the audience.

**User Engagement:**

- Consider how users will interact with your animated "box." Ensure it is intuitive and user-friendly.

**Testing and Iteration****Testing:**

- Test your animated "box" thoroughly. Check for functionality, readability, and user experience. Make necessary adjustments. Have a classmate test it out and provide suggestions and feedback
- Share your animation with peers for feedback (share your doc with comment access or allow them to edit). Note their suggestions and consider making improvements based on their input.

**Teacher Feedback:**

- Seek feedback from the teacher. Revise your animation based on the feedback received.

**Finalization****Polishing:**

- Polish your animation, fixing any remaining bugs or issues. Ensure all interactive elements work seamlessly.

**Documentation:**

- Document the coding concepts you used and explain how they contribute to your animation. Tell me about the choices you made and how your research influenced your design.

**Presentation Preparation:**

- Prepare a brief presentation to explain your element choice, research findings, and animation design to the class.

Remember to have fun and be creative with your project! Good luck!

**References (list below in MLA format):**

Rubric Title: Element Animation Project