

For Teacher Reference: Large Versions of Figures 4-7

Figure 4. An example 3D print of an RFID reader prototype.

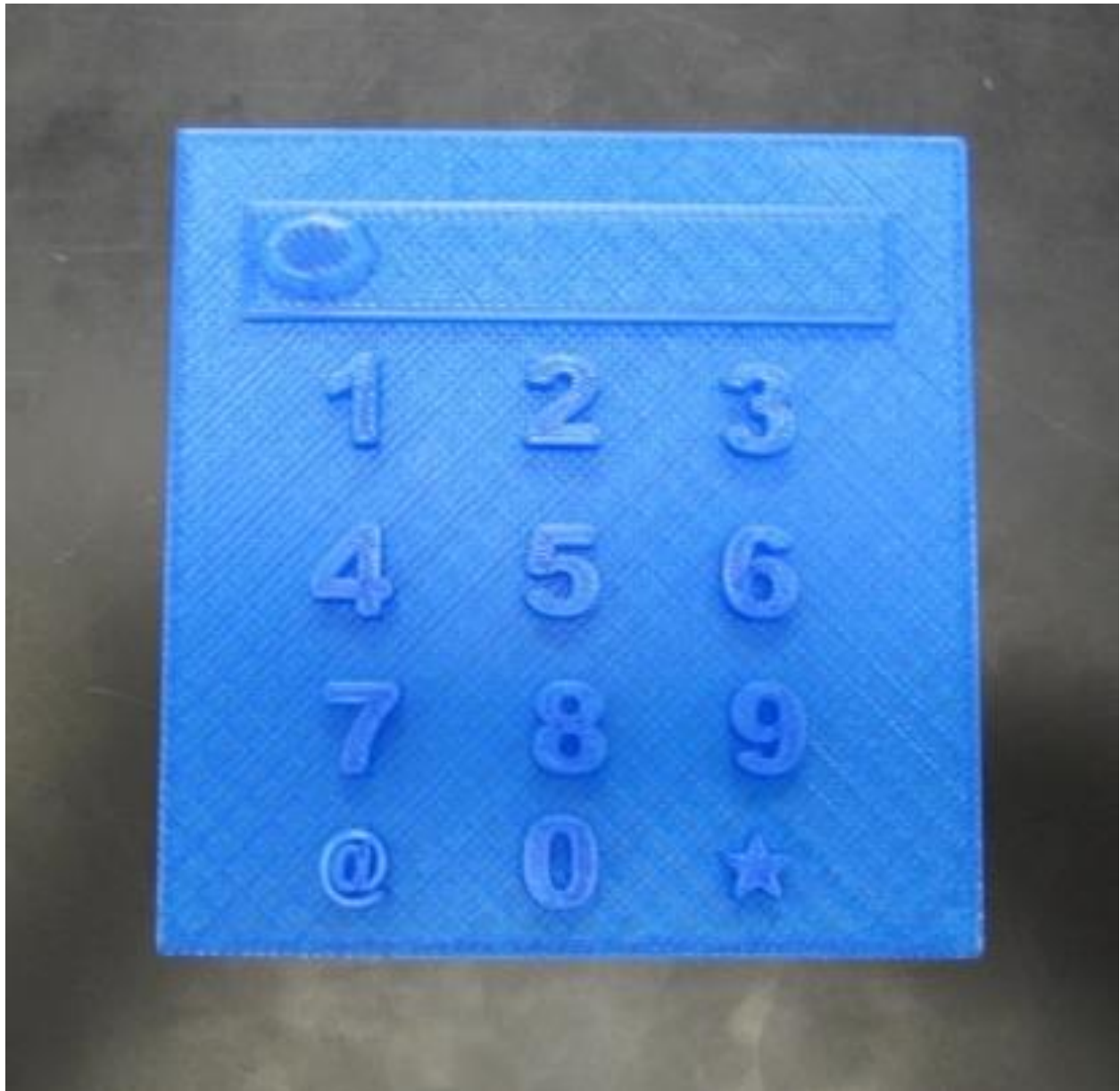


Figure 5. Example completed student peer-evaluation document for the initial design.

My Name: [redacted] Date: 3-8-15 Hour: 2

Evaluating Initial Designs

Directions: Use the checklist below to evaluate YOUR PARTNER'S pressure sensor design. Once you have completed the checklist, answer the questions that follow.

My Partner's Name: [redacted]

	Yes	No
(example: Does the design include the student's name?)		✓
Does the design include an antenna?		✓
Is the function of the antenna described?		✓
Does the design include a RFID tag?		✓
Is the function of the tag described?		✓
Does the design include an external reader? (In other words, the reader cannot be in the same space as the sensor.)		✓
Is the function of the external reader described?		✓
Does the design include a structure that will measure pressure?	✓	
Is the function of this pressure sensor described?		✓
Based on the drawing, does it appear that the design could fit into an eye?		✓
Based on the drawing, does it appear that the design would be comfortable in the eye?		✓
Is the design neat and orderly?	✓	

What recommendations would you make to improve the design?

example: I recommend writing your name on the graph paper.

I recommend that you write your name on it, make it comfortable for the eye and make it fit. Add an antenna and a RFID tag also and external reader. Describe the function of the pressure sensor also.

Figure 6. Example student initial intraocular pressure device design, including top and side views identifying structures and functions.

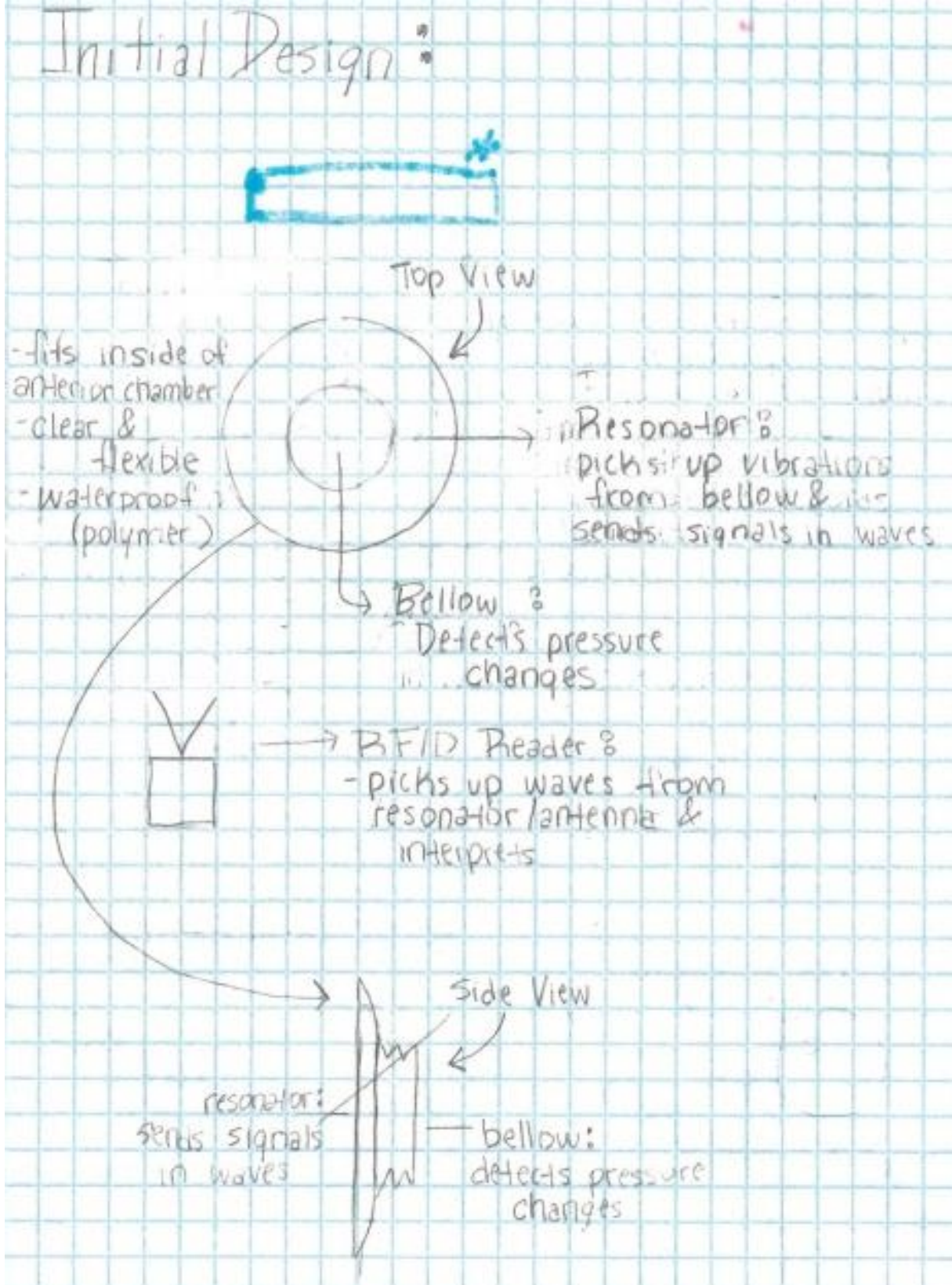


Figure 7. Three examples of student-created 3D-printed intraocular pressure sensor prototype devices with their design sketches.

