**Engineers think outside the square**

**Rubric**

|  |  |  |  |
| --- | --- | --- | --- |
| **Criteria** | **Beginning** | **Achieved** | **Exceeded** |
| Uses SCAMPER to generate new ideas | Applies some aspects of the SCAMPER routine to iterate the object. | Applies every aspect of the SCAMPER routine to iterate the object. | Applies every aspect of the SCAMPER routine to develop significantly different iterations of the object. |
| Problem-solving and innovation | Identifies some known variations on the object. | Creates some novel variations on the object that solve specific problems. | Considers problems and opportunities and designs novel variations of the object to address these. |
| Communication | Sketches and annotations provide some insight into design thinking. | Sketches and annotations provide clear insight into design thinking. | Sketches and annotations provide clear insight into design thinking and decisions by highlighting materials, processes or purpose. |
| Final design | The final design demonstrates some creative thinking. | The final design is creative and original. | The final design is unique and represents a valuable, innovative iteration of the object. |