Smooth Operator

UNIT: Medical Technologies\_LEVEL 3

Step 1: Define the problem

|  |
| --- |
| Technology Challenge: Write a brief description of the problem you are to solve on the line below.  |
|   | Develop a surgical instrument from everyday materials to pick up a variety of objects in a surgical procedure.  |
|   |
|   |
|   |

|  |
| --- |
| **Criterion and Constraints** List all of the things your idea must do to solve the problem.  |
| 1 | Instrument must retrieve three objects and keep them intact.  |
| 2 | Must not knock over neighboring organs or tissues (dominos)  |
| 3 | All components must remain intact.  |
| 4 |   |
| 5 |   |
| 6 |   |
| 7 |   |
| 8 |   |
| 9 |   |
| 10 |   |
| 11 |   |
| 12 |   |
| 13 |   |
| 14 |   |
| 15 |   |
| 16 |   |

Step 2: Generate Ideas

Draw pictures of your ideas here. Be sure to include the materials you expect to need to build your design!

|  |
| --- |
|   |
| Materials Required for Building:  |

Step 3: Final Solution

Draw a picture of your group’s final instrument design here.

|  |
| --- |
|   |

Answer the following questions in complete sentences:

1. How much did you feel your ideas impacted the final group design?
2. Did your group have to restart? Why?
3. Did you have any extra materials leftover that you thought you would need?
4. Did you test your design at all during construction?