Students Name: ­­­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Unit 2: Systems**

**Lesson 1: Core Technologies**

File 2.1.1: Categorizing the Core Technologies

Step 1: In your small groups, sort the subsystems you identified during the video into the following categories—which are known as the Core technologies—in the table below. Core technologies represent subsystems within a larger, more complex system.

Step 2: If your group did not see one of the core technologies represented, propose how it could be included in the device depicted in the video.

Step 3: Create a visual representation (Draw a picture) of your own unique design using an example from at least 5 of the 9 categories below.

Step 1

|  |  |  |  |
| --- | --- | --- | --- |
|  | Mechanical | Structural | Electrical |
| Subsystem from Device in Video |  |  |  |
| Fluid | Optical | Thermal |
|  |  |  |
| Material | Electronic | Biotechnology |
|  |  |  |

Step 2

1. The following core technologies were not represented in the device:
2. The \_\_\_\_\_\_\_\_\_\_\_ core technology could be included by:
3. The \_\_\_\_\_\_\_\_\_\_\_\_\_ core technology could be included by:

Step 3

Create a visual representation (Draw a picture) of your own unique design using an example from at least 5 of the 9 categories below. Draw and label your diagram on a separate sheet of paper (explain what is happening in your diagram)