# Engineering through Robotics and Automated Patient Care Activity – Guided Research Packet

**Directions**

Define the following words or phrases, and use them in a sentence that shows understanding.

|  |  |
| --- | --- |
| **Pressure Ulcer** | Definition: |
| Sentence: |
| **Deep Vein Thrombosis** | Definition: |
| Sentence: |
| **Medical Device** | Definition: |
| Sentence: |
| **Mechanical Engineering** | Definition: |
| Sentence: |
| **Bioengineering** | Definition: |
| Sentence: |
| **Robotics** | Definition: |
| Sentence: |

You will be required to design a medical device to help prevent one of the conditions listed in the chart below. Complete the table below to further your understanding of each of the conditions.

|  |  |  |  |
| --- | --- | --- | --- |
| **Condition** | **Description of Condition** | **Describe the Formation** | **Current Treatment** |
| Pressure Ulcer |  |  |  |
| Deep Vein Thrombosis |  |  |  |

How are robots used in hospitals today?

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Identify three pros and three cons for robots’ use in hospitals.

|  |  |
| --- | --- |
| **Pros** | 1. |
| 2. |
| 3. |
| **Cons** | 1. |
| 2. |
| 3. |

In your opinion, should robots be used in hospitals? Why or why not?