

# GMP Card Sort

## Game Board and Cards

# GMP Card Sort Game Board



**Principle #1:**  
**Step by Step Written Procedures**



**Principle #2**  
**Follow Procedures**



**Principle #6**  
**Maintain Facilities and Equipment**



**Principle #7**  
**Define, Develop and Demonstrate Job Competency**



**Principle #3**  
**Document Work**



**Principle #4**  
**Validate Work**



**Principle #8**  
**Make Cleanliness a Daily Habit**



**Principle #9**  
**Build Quality Into the Product**



### **Principle #5**

**Integrate Productivity, Quality, & Safety Into  
Facilities and Equipment**













### **Principle #10**

**Conduct Compliance and Performance Audits**

Assemble the game board as follows:

1. Print out slides 3-5
2. Cut out the game board squares
3. Tape the squares together to make the game board shown below
4. If possible, laminate the board

 <p>Principle #1: Step by Step Written Procedures</p>	 <p>Principle #2 Follow Procedures</p>	 <p>Principle #3 Document Work</p>	 <p>Principle #4 Validate Work</p>	 <p>Principle #5 Integrate Productivity, Quality, &amp; Safety <u>Into</u> Facilities and Equipment</p>
 <p>Principle #6 Maintain Facilities and Equipment</p>	 <p>Principle #7 Define, Develop and Demonstrate Job Competency</p>	 <p>Principle #8 Make Cleanliness a Daily Habit</p>	 <p>Principle #9 Build Quality <u>Into</u> the Product</p>	 <p>Principle #10 Conduct Compliance and Performance Audits</p>

# GMP Card Sort Cards

# Cards - Set 1

**Bob looks up the Standard Operating Procedure (SOP) document that describes how to properly operate the spectrophotometer.**

**Jose writes down all of the details regarding the batch of LB (Lysogeny broth) he created in a batch record document that he signs and dates.**

**Jalisa carefully carries out each step of the Standard Operating Procedure (SOP) for inoculating a liquid culture of bacteria.**

**Michelle stores the batch reports from each bacterial production run in the appropriate files. This documentation demonstrates that bacterial culture is done the same way every time and that the bacterial cell line produces RFP consistently in every batch.**

**The Proteins R Us company designed their new manufacturing plant so that all of the air coming into the manufacturing clean rooms is filtered for sterility.**

**Asako and Dante carefully conduct maintenance on all equipment used in the clean rooms.**



# Cards - Set 1

**Rubin gets comprehensive training for his job as a production manager before beginning work at Proteins R Us.**

**Jackie follows proper gowning procedures before beginning work in the clean room in order to minimize any contamination coming from herself or her clothing.**

**Hiro inspects all documentation at Proteins R Us every six months. Ruby verifies that all regulations are being followed in the manufacturing plant.**

**Shari tests all raw materials before releasing them for use in the biomanufacturing process.**

## Cards - Set 2

**Sewite writes a Standard Operating Procedure for using the new shaker/incubator.**

**Carlos carefully carries out each step of the Standard Operating Procedure (SOP) for using the shaker/incubator.**

**Jennifer finishes checking the viability of a scaled-up bacterial culture. She fills out the appropriate parts of the Upstream Process Report Batch Record and signs and dates the sections of the report she has filled out.**

**Junji uses the new shaker/incubator to grow multiple batches of RFP+ bacteria. He records data about each batch to verify that the new equipment works properly every time. Once he has documented that the equipment functions properly and reliably, the equipment can be used by the upstream process team.**

**Sheila and Rosa carefully sanitize all clean room surfaces – floors, ceiling, walls, benchtops.**

**The MegaPharma Company has installed low pore size filters on all water lines that come into their clean rooms to be sure that all water used in their biomanufacturing processes is sterile.**

# Cards - Set 2

**Keiko and Amir have finished their aseptic technique training at Proteins R Us. Before being cleared to work in the clean room, they must demonstrate their ability to perform aseptic technique properly.**

**George washes his hands before gowning up to begin work in the clean room.**

**Alberto and Yuri test the purity of the protein product they are manufacturing after every phase of the downstream purification process.**

**Muhammed inspects all spectrophotometers every 2 months to verify that they are performing properly.**