

Discuss your Organ System:

- 1). What organ system are you modeling?
 - **Integumentary System**
- 2). What are the functions of your organ system?
 - Protection - Impermeable
 - Regulate Temperature
 - Eliminate Waste Product
 - Senses Changes in Environment

Discuss Your Model

- 1). What function(s) does your model demonstrate? How does it demonstrate each function?
 - **Protection** - plastic box/chicken wire
 - **Semipermeable** - saran wrap
 - **Regulate Temperature** - heat lamp/fan
 - **Pores** - chicken wire gaps
 - **Hair Growth** - homegrown grass
 - **Sense Change to Environment** - growing grass
- 2). What functions of your organ system are not demonstrated by your model? If you had unlimited time and resources, how would you demonstrate these functions?
 - protect UV radiation - put umbrella over
 - protect against diseases - spray pesticides
- 3). What scientific principles did you need to understand in order to build your model?
 - photosynthesis
 - growth
 - absorption
 - evaporation

Discuss the design process

- 1). How did you come up with ideas?
 - brainstorming, throwing out random ideas

2). How did your group decide on the ideas/plan that resulted in your model?

- we went with the one that could most display different functions of our system

3). What ideas were considered and then dismissed? Why were they dismissed?

- a shoe, a candle, and a sock
- we figured it wouldn't be professional to turn in a shoe and using a candle to represent sweat would be the only function

4). What problems did you face in the design process and how did you solve them?

- grass wasn't growing
- we planted a new box with fresh seeds instead of old
- how to represent heating/cooling
- we used a heat lamp/fan

5). How many times did you have to redesign/test/improve?

- twice

Discuss Collaboration

1). Who did what in your group?

- Mikayla - brought in needed materials, helped construct planting box, worked on powerpoint/google doc
- Toran - brought old grass seeds, helped construct box (cut chicken wire) and work on original powerpoint, brainstorm
- Kyle - watered soil, plant seeds/fertilizer, helped answer questions, brainstorm ideas
- Cole - brainstorm ideas, planted seeds, built model

2). How did you decide you did what?

- through open discussions and brainstorming

3). Did you leverage strengths and talents of people in your group or was random or volunteer basis?

- We used our members' talents in the design and building process, and people volunteered to bring in specific items

Discuss Process Management

1. How was the work managed in your group? Was there a leader? Did you choose a leader? How?
 - Mikayla naturally came into the role of being our leader. Through no fault of our own or Mikayla's, she spearheaded our research and building efforts, always keeping us on track. Overall she expended more energy than any of us. We didn't vote or debate or fight over who was the leader, it just sort of...happened.
2. How did you resolve disagreements?
 - We didn't have any disagreements to resolve, this was a fairly straight-forward project.
3. How did you communicate with each other about ideas and logistics of building the model?
 - We talked and respected all ideas.

Relate to the real world

1. How could what you learned during this project, your model, the concepts used in your model or the design and building process contribute to/ help a real life situation?
 - Using the knowledge that we acquired over the duration of this project, we could apply it to helping burn victims with skin grafts, or people caught in explosions receive artificial skin. Or we could always go into the landscaping business, "Grass Grafts ltd."

