

DH Idea Development Protocol and Materials

Ask students to sit with their teams

- 2 minutes - Introduce the point of today's lesson
 - Idea development is one of the most important phases in the design process because it gives your team the opportunity to refine, develop, transform, and synthesize the original concepts you came up with
- 2 minutes - Transformation Types
 - Explain the difference between a lateral and a vertical transformation
 - Stress that both types are likely to happen today and that's ok -- the point is that they are transforming their concepts and not fixating on their original
- 2 minutes - Solar oven example
 - Stress that there is no right or wrong way to develop concepts
- 1 minute - Sunlight food cooking example
 - This is an example of one heuristic card being used to develop a concept in multiple stages
- 5 minutes - Sunlight food cooking example 2
 - This is an example of how multiple heuristics can be used to continually develop a concept
 - Notice how different Concept 7 is from Concept 1
- 3 minutes - Take away points
- 10 minutes - Practice activity
 - Hand a chair concept, a packet of concept sheets, a set of three DH cards to each team
 - Ask the teams to take 5 minutes to use all three DH cards to transform the original concept they were given. Make sure the teams draw and/or write their revisions. They should draw a new sketch for their concept
 - Ask the teams to share their original concept and their new concept with the rest of the class
- 5 minutes - **BREAK**
- 65 minutes - Brainwriting activity - Slide 9
 - 5 minutes - Explain activity
 - Your first goal as a team is to synthesize and transform the ten unique concepts you came into today with down to three concepts
 - After that, you will pass all three of these concepts onto the next group. They will then make their own transformations and modifications using the DH cards
 - All four groups will get a chance to see all the teams' concepts
 - 15 minutes - Team A uses DH deck to transform **their own** original concepts. They are only going to be able to pass three concepts onto the next team, so they should synthesize some of their original concepts together or transform their original concepts.
 - They will be given three packets -- one for each concept they are passing
 - Make sure they fully fill out **only the first page** of each of the packets
 - 15 minutes - Team B uses DH deck to transform the concepts they were just passed from Team A

- 15 minutes - Team C uses DH deck to transform the concepts they were just passed from Team B.
 - The teams are free to flip back in the packet to see what Team A wrote
 - Make sure Team C writes their edits only on a fresh page in the packet, not on either of the pages Team A or B filled out
- 15 minutes - Team D uses DH deck to transform the concepts they were just passed from Team C.
 - The teams are free to flip back in the packet to see what Team A or Team B wrote
 - Make sure Team D writes their edits only on a fresh page in the packet, not on either of the pages Team A, B, or C filled out
- 10 minutes - Give teams the chance to assimilate the feedback they were given into three unique concepts.
 - Check in with each team to make sure they have at least three unique concepts to present next week.









Your Team Name: _____

1a

Concept Drawing:



Concept Description: Describe the concept in detail. How does it work? What are the unique features, mechanisms, and details? **Which of *your* original concepts was this modification based on? How is this newly modified concept different or similar to the original concept(s)?**



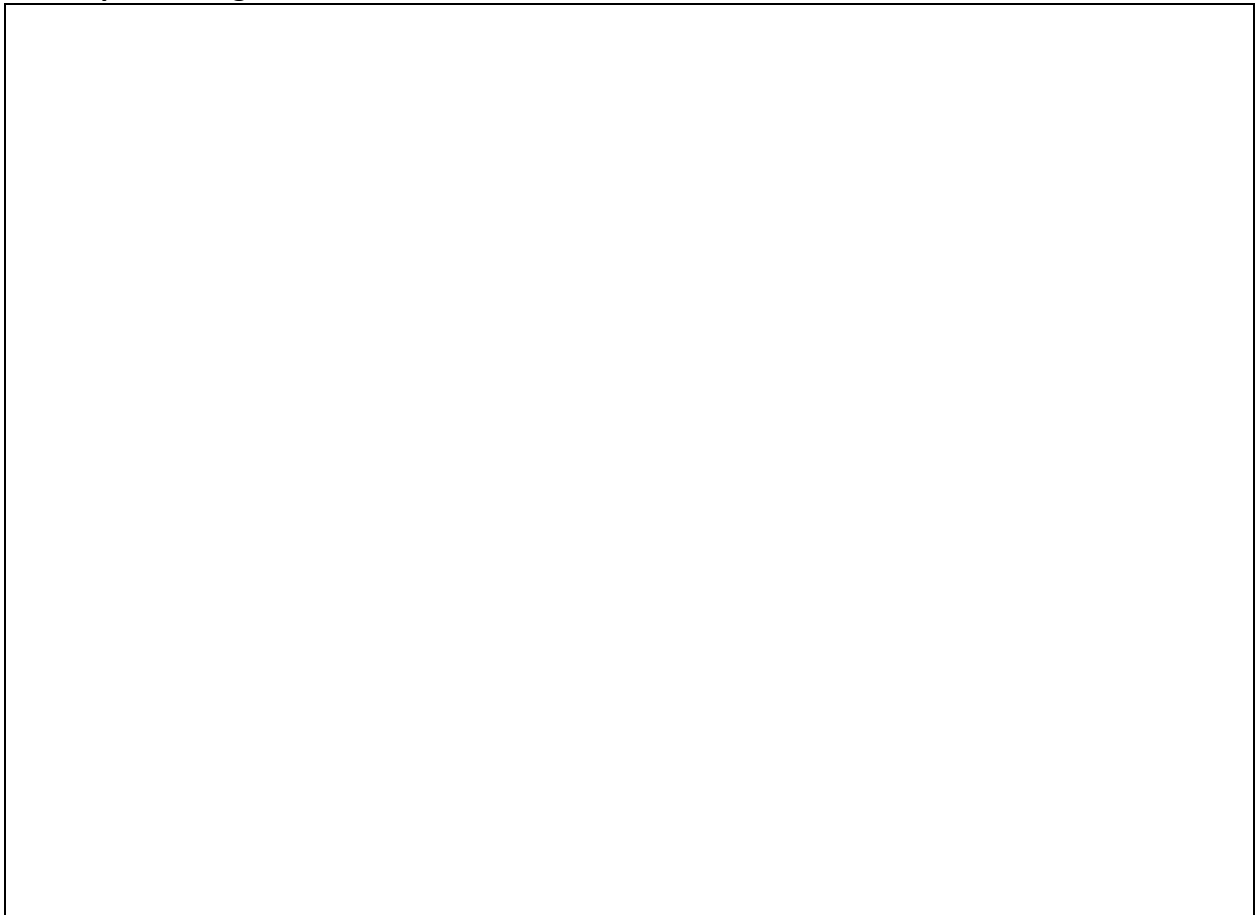
Concept Origin: Did you use any Design Heuristic cards? If so, write the name and number of each card you used. If you did not use any, write "none".



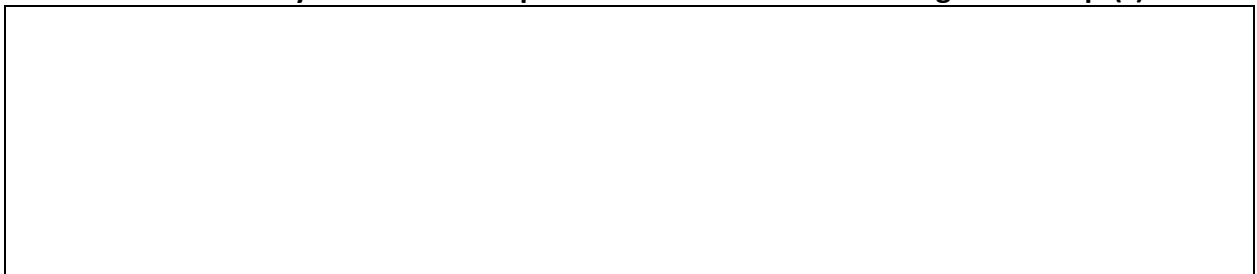
Your Team Name: _____

1b

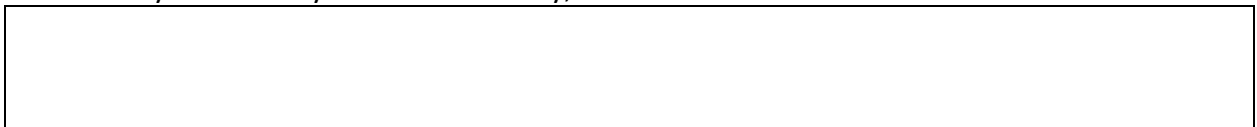
Concept Drawing:



Concept Description: Describe the concept in detail. How does it work? What are the unique features, mechanisms, and details? **Which of the original concepts was this modification based on? How is this newly modified concept different or similar to the original concept(s)?**




Concept Origin: Did you use any Design Heuristic cards? If so, write the name and number of each card you used. If you did not use any, write "none".



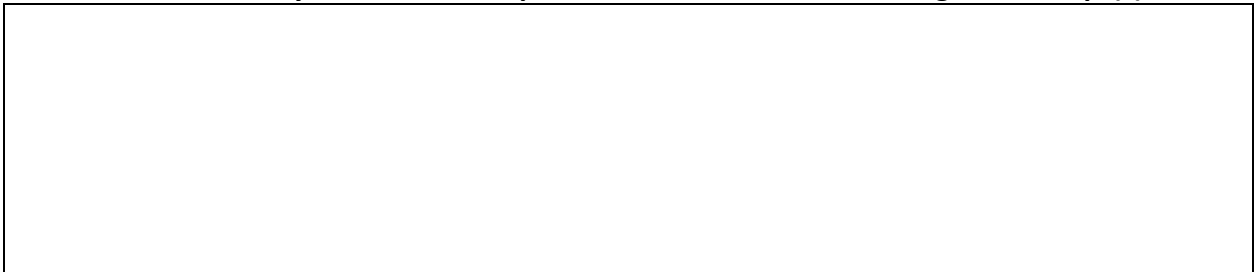
Your Team Name: _____

1c

Concept Drawing:



Concept Description: Describe the concept in detail. How does it work? What are the unique features, mechanisms, and details? **Which of the original concepts was this modification based on? How is this newly modified concept different or similar to the original concept(s)?**



Concept Origin: Did you use any Design Heuristic cards? If so, write the name and number of each card you used. If you did not use any, write "none".



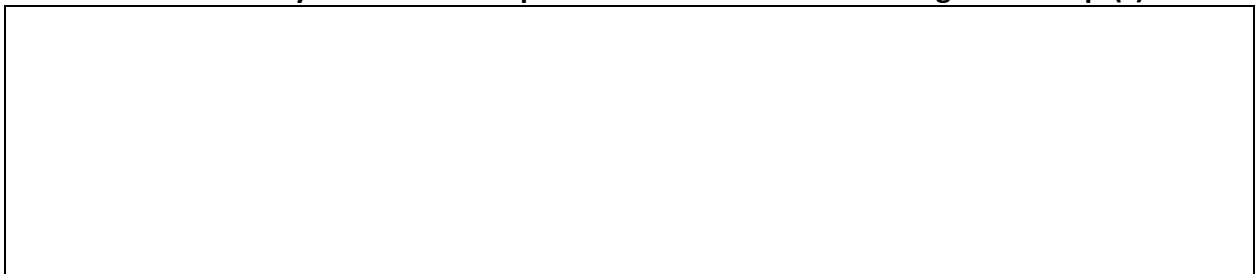
Your Team Name: _____

1d

Concept Drawing:



Concept Description: Describe the concept in detail. How does it work? What are the unique features, mechanisms, and details? **Which of the original concepts was this modification based on? How is this newly modified concept different or similar to the original concept(s)?**



Concept Origin: Did you use any Design Heuristic cards? If so, write the name and number of each card you used. If you did not use any, write "none".

