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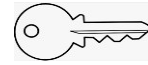
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## Fabrication Keychain Student Worksheet

### Instructions:

- Choose 5 of the 6 scenarios.
- Read and determine what problems the client needs to resolve based on the scenario.
- Provide a creative design for a keychain or keyring with key fobs to address the client's problem(s).
- Complete a Keychain/Keyring Design Brief using the template below.
- Draw on graph paper a technical drawing to scale.



### Design Brief Template: Maximum – 15 points/Client Design Brief and 5 points technical drawing

Client	<i>Write a customer name.</i>
Designer	<i>Write your name.</i>
Problem Statement	<i>Write in sentences.</i>
Design Statement	<i>Write in sentences.</i>
Constraints	<i>Write a detailed list (sizes, color, cost, specifications (DFA or DFM)).</i>
Deliverables	<i>Write list (sketches, technical drawings, prototype).</i>
Summary Presentation	<i>Describe prototype in sentences.</i>

**Scenarios** – To recap, your job is to resolve any issues by designing the most appropriate keychain or keyring with any needed key fobs. No one can wear a lanyard or neck chain.

1. A building manager must carry eight keys (1 house key, 1 car key and 6 work keys that are identical) in his pocket. The client spends too much time trying to determine matching a key to its door especially in the dimly lit storeroom.
2. A marketing specialist tosses her keys into her cluttered purse as she carries the display boxes. When she reaches the destination, she must unlock the exhibition hall door, open boxes and setup a professional display on a table for a large group of investors.
3. The ski patrol must carry 6 keys for buildings located throughout the slopes. Unfortunately, the keys sometimes drop into the snow.
4. A dogwalker simultaneously walks a total of 5 dogs for 2 neighbors every weekday morning and afternoon while the owners are at work. He must unlock and relock the two neighbors' doors with keys that look the same. The dogwalker is careful to keep the dogs away from cats that wander the neighborhood.
5. A research lab associate must use a lab door and desk key as well as keeps the key for the shared equipment and supply rooms. She must scan her Employee Identification Card at two doors, whereas the remaining doors are opened using one key. At least 3-4 times per week, she must lend her equipment room key to a visiting scientist.
6. A high school student must drive his younger brother and sister to school. Their mother carools with a friend to work. Afterschool, they stay for band practice, go to work at a grocery store and picks up their siblings by 8pm from their grandmother's. Their car, work, and house keys all get thrown together in their backpack.