



STEAM Science Investigation

Can Shark-Inspired Design Improve a Door Handle?



Team Members: _____

1 Introduction

Explain the problem and how shark skin inspires our design.

- What is the problem?

- How does shark skin inspire our design?



Shark skin

2 Objective

Explain what you want to find out.

- Our aim is to:

3 Prediction

What do you think will happen? Why?

- We predict that:

- I think this will happen because:

4 Methodology

Explain how you will conduct a fair test.

Materials:

- _____
- _____
- _____
- _____
- _____

Procedure (steps):

1. _____
2. _____
3. _____
4. _____
5. _____



Variables

- What we change (Independent variable):

- What we measure (Dependent variable):

- What we keep the same (Controlled variables):

5 Results

Record your data and calculate the percentage.

Surface	Total number of rice grains used	Number of grains on the handle	Percentage (%)
Smooth			
Patterned			



Calculate the percentage here:

6 Analysis and Conclusion

Use your results to answer the questions.

- A. What do the results tell us?

- B. Did your results support your prediction? Why?



Final Conclusion

In one or two sentences, answer the investigation question.



Remember: Rice grains represent particles, not real bacteria.
This experiment shows particle transfer only.