



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.