

Max's Forces Experiment Record

Learning objective: To identify how forces act on different surfaces and understand how they make objects move or stop.

Join Max the monkey as he investigates forces! Choose two different surfaces (like carpet, wood, or a rug) and roll a toy car across them. Use this template to record your findings and see how friction affects movement.

Word bank: force · friction · surface · smooth · rough · movement · speed · distance · push · pull

1. Prediction: Max wants to know which surface will be faster. Which surface will you choose and why do you think the car will travel further on it? (2 marks)

2. Method: Describe the steps you took to make sure your test was fair. How did you push the car each time? (2 marks)

3. Observation: Describe what happened to the car on the smooth surface compared to the rough surface. (3 marks)

4. Scientific Reasoning: Explain how friction acted on the car when it moved across the rough surface. (3 marks)

5. Conclusion: Based on your results, if you wanted the car to travel the furthest distance, which surface would you choose and why? (2 marks)

Extension challenge: Max challenges you to find a third surface, like a piece of sandpaper or a kitchen towel, and predict if it will create more or less friction than your previous surfaces.