

Nova's Guide to Amazing Forces

Learning objective: To describe and explain how different objects move over surfaces using forces.

Use this writing frame to report your findings from our investigation. Nova the owl wants to know how things move when you push or pull them on different surfaces. Use the word bank to help you write full sentences.

Today, I investigated how different forces affect the movement of a toy car across various surfaces.

Word bank: friction · surface · rough · smooth · force · faster · slower · because · however · on the other hand

1. Prediction: What do you think will happen when the car moves across a smooth surface compared to a rough one? I predict that... (2 marks)

2. Method: How did you make sure the test was fair? To keep the test fair, I... (2 marks)

3. Observation: Which surface made the car travel the furthest? The surface that made the car travel the furthest was... (2 marks)

4. Explanation: Why do you think the car slowed down on the rough surface? The car slowed down because of friction, which is... (3 marks)

5. Conclusion: What have you learnt about forces today? In conclusion, I have learnt that forces can change how objects move by... (2 marks)

Extension challenge: Nova asks: Can you draw a diagram of your car and label the 'push' force and the 'friction' force acting upon it?