Investigation 5
Ramp champ

Girls and boys, start your engines!
Your task is to make your toy car travel as far as it can after leaving the ramp.
How far can you make your toy car travel? How will you measure this distance?
Who will be the class ramp champ?

☑ Topics
Before you start the Investigation you need to know...

☐ NA1 Count in ones .............................................. p32
☐ NA5 Read and write two-digit numerals ...... p40
☐ MG1 Measuring length ........................................... p96
☐ MG2 How long is a metre? ................................. p98
☐ MG5 How heavy is it? ........................................... p104

Teachers
• A comprehensive lesson plan, suggestions and resources are available in iMaths 1 Teacher Book.
• The BLMs for this Investigation can be downloaded from www.imathsteachers.com.au.
1 Exploring ramps.
Talk about ramps. Make your own ramp and roll toy cars down it.

2 How far?
How far does your car travel after leaving the ramp? What is the best way to measure this distance? Why?

3 What will you change?
In groups, discuss what will make your car travel further after it leaves the ramp. Try some of these ideas to see what happens.
What things made your car go further?
What things made your car go faster?

4 Let it rip.
Roll your car down the ramp. Make sure you don’t push the car. Measure the distance it travelled after it left the ramp. Do this four times.
Use BLM 5.1 to record your results.
Make the car heavier. Roll the car down the ramp another four times. Record your results.
Investigate what happens if you make the ramp steeper. Record your results on BLM 5.2.

5 Reporting back.
Describe the results of the ramp tests.
What was your group’s best distance? Explain why?
Was this distance more or less than a metre?
Who is the class ramp champ, and why?