

When Forces and Motion Collide

By Chris Oxlade

Before you read the book

1. In your own words explain what you think Force, Motion and Collide mean.

Read to page 8

2. How do you work out the speed of an object?
3. Explain what a **force** is.
4. Why are forces and motion closely linked?

Read to page 17

5. Explain what an unbalanced force is.
6. What is gravity?
7. Who is Isaac Newton?
8. Why do the planets not get pulled into the sun?

Read to page 23

9. Explain what friction is.
10. How can we reduce friction on a bike?
11. What is air resistance?
12. Why do race cars and planes have rounded often pointed fronts?
13. What is 'upthrust'?

Read to page 31

14. What are the 'poles' of a magnet?
15. Explain what a simple machine is.
16. Why do you think scientists or engineers need to be able to measure forces?

- Make a list of forces and motion you can see around the class or school. Take a photo of this and label the force at work. Present your ideas carefully.
- Find out about Isaac Newton. Present your information carefully.