

**Year 6 Gold Badge** - Complete both tasks and hand this back to your class teacher for them to mark.

### Task 1

**Associate a fraction with division**

1. In the 2012 Tour de France there were 20 stages altogether.
  - $\frac{1}{5}$  were medium mountain stages
  - $\frac{1}{4}$  were mountain stages
  - $\frac{1}{10}$  were individual time-trial stages
  - The rest were flat stages.
  - How many of each type of stage were there?
2.  $\frac{1}{3}$  of the flat stages,  $\frac{1}{2}$  of the medium mountain stages and 100% of the time trials were won by British riders.
  - How many stages altogether were won by British riders?

### Task 2

**Calculate the area of parallelograms and triangles.**

James wants to make a gift box out of a chocolate box in the shape of a triangular prism. The box is 30 cm long with an equilateral triangle of side 5 cm making the faces at each end of the box. The box is 4 cm high. James wants to paint the box. James needs one tin of paint for every 100 cm<sup>2</sup>. Each tin of paint costs £3.30. How much will it cost for James to paint the chocolate box?

