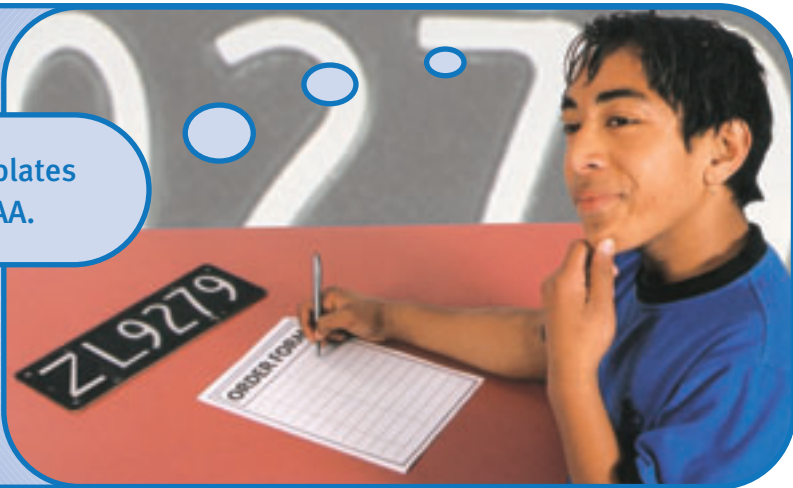# On a Plate

**ACTIVITY**

Ma'afala sends out the number plates for new cars. Until a few years ago, each plate was of the type AZ2345 (2 letters followed by up to 4 digits). When he got down to the plates starting with Z, he knew it was time to order a new series.

**This series won't last much longer.**

1. How many 2-letter, 4-digit plates will have been issued altogether, from AA1 to ZZ9999?

2. Ma'afala orders new plates that have 3 letters and 3 digits.

**There will be 999 plates starting with AAA.**

How many new plates could Ma'afala order altogether?

3. Ma'afala knows that about 190 000 vehicles are registered for the first time in New Zealand each year.
   At this rate, how many years should the new plates last for?

4. Ma'afala can think of 20 combinations of three letters that may be unsuitable for number plates.
   How many plates could he order if he excluded these combinations?