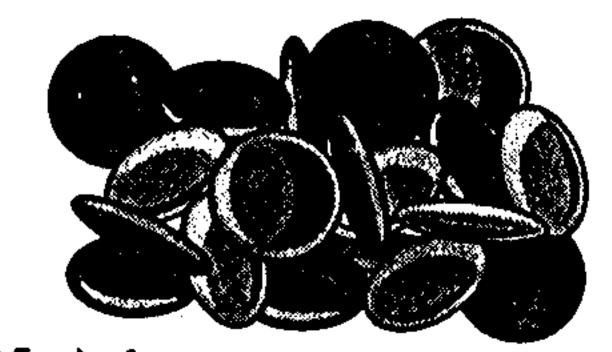
## Investigation

## Smarties statistics



Equipment needed: small packet of Smarties (25 g), large pack of Smarties (250 g). Smarties come in many colours, usually 8 in total.

Prediction: How many Smarties do you think there are in your

small box?

Which colour will there be the most of?

1. Open your small box of Smarties. Do not eat any!!!!

Copy and complete the following table for your box of Smarties:

| Colour | Tally  | Frequency | Percentage of total |
|--------|--------|-----------|---------------------|
| Blue   |        |           |                     |
| Brown  |        |           |                     |
| Green  |        |           |                     |
| Orange |        |           |                     |
| Pink   |        |           | •                   |
| Purple |        |           |                     |
| Red    |        |           |                     |
| Yellow |        |           |                     |
|        | Totals |           |                     |

OK! Now you can eat some!!!!

- 2. How many Smarties were in your box?
- 3. What was the most popular colour?
- 4. Compare your results with those of other members of your group, and other members of your class. What was the most popular colour for the whole class?
- 5. You have a 25 g box of Smarties. First, using the data from your box of Smarties, predict the number of each colour in a 250 g packet. Repeat this, using the data from your group.

| Colour  | Prediction 1 | Prediction 2 | Reality |
|---|--------------|--------------|---------|
| Blue<br>Brown<br>Green<br>Orange<br>Pink<br>Purple<br>Red<br>Yellow |              |              |         |
| Totals  |              |              |         |

Check your predictions by opening and counting the distribution of colours in the 250 g packet.

6. I magine you are in charge of production

a. What would be your ratio of colours in a packet of 100 sweets?

6. Compare your choices with those of 3 other groups.

7. You are to order coloning for Red Yellow and Blue Amarties. You must order coloning in lots of 100 bottles. How many bottles of each (R, Y, B) should you order?

Colue this sheet in your book. You will need the smarties starts next term.