



# Spoken Word:

## Spreading the word

### Mobile millions / Teachers notes

#### Focus

This activity looks at published data on use of mobile phones and provides an opportunity for students to engage in data analysis.

#### Objectives

Students will:

- learn about the uses of mobile phones from published data.
- analyse published data for patterns.

#### Outcomes

All students will:

- answer some questions about mobile use.

Most students will also:

- answer all questions about mobile use, most will be correct.

Some students will also:

- provide correct answers to all questions and make sensible comments on ambiguous data about battery life and phone size.

#### Equipment

- Worksheet: *Mobile millions* (1 copy per student).

#### Running the activity

This worksheet works well with work on the mobile phone survey from *Catch me on my mobile*. The data gives a wider picture of mobile phone use than is possible from individual surveys by students. Some of the later questions on the worksheet would also make useful discussion topics. How would students show a correlation between battery size and phone talk time? How close does the data need to be to the line to qualify as a correlation? The worksheet also provides a useful homework.

#### Answers to questions

- 1
  - a 10,403,951
  - b i. 5.4 million    ii. 10.212 million
  - c 87% (this is likely to be an over-estimate as some French people will have more than one mobile phone)
  - d i. 121%    ii. There are more mobiles than people in the UK, this is because some people have more than one phone.
- 2
  - a iPhone3G
  - b Nokia N95
  - c 115.5 mm
- 3
  - a 2%
  - b 8-11 year-olds    12-15 year-olds
  - c Accept any sensible answers.
- 4
  - a Scatter graph should have mobile weight along x-axis and battery life along y-axis. The points should not be joined by a line.
  - b Accept any sensible answers. The data is ambiguous because heavier phones in the table tend to be more capable and so require more current to operate.