Talking Technology

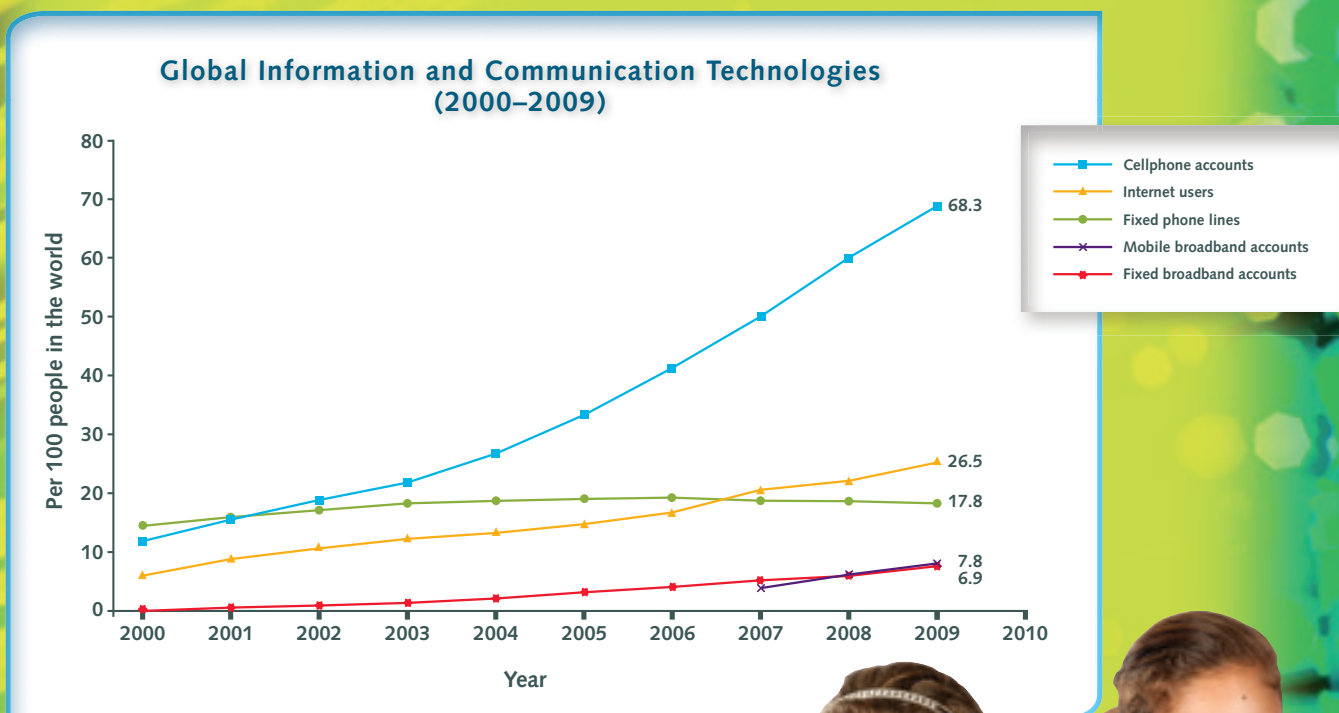**TECHNOLOGY** Cellphone technology is becoming cheaper and easier to use and is changing the lives of people everywhere. It affects how we socialise, do business, and find out information.

Activity One

1. Amy and Katarina are doing a research project on telecommunications. They find this graph on the Internet.

Global Information and Communication Technologies (2000–2009)

Per 100 people in the world

- Cellphone accounts
- Internet users
- Fixed phone lines
- Mobile broadband accounts
- Fixed broadband accounts

Cellphone accounts: 68.3
Internet users: 26.5
Fixed phone lines: 17.8
Mobile broadband accounts: 7.8
Fixed broadband accounts: 6.9

Year

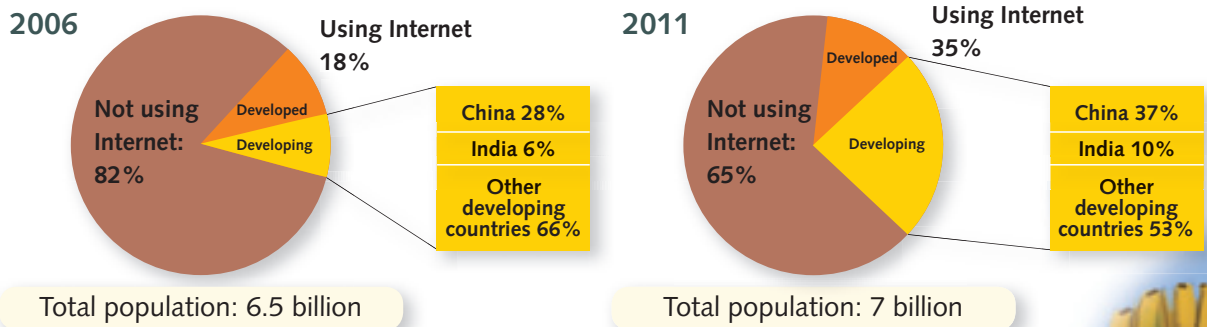Amy and Katarina explore the graph to see what stories it tells.

> Since 2007 there have been more Internet users than fixed phone lines per hundred people in the world.

a. Write several statements, based on the graph, about information and communication technologies.

b. Using the graph, estimate the number of cellphone accounts and fixed phone lines per 100 people in 2010.

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2. In 2010, there were 78 cellphone accounts and 17 fixed phone lines for every 100 people in the world.
   a. How do these numbers compare with your estimates?
   b. Do you think the trends shown in the graph will continue?

3. Amy and Katarina find these statistics:

2006

Using Internet 18%

Not using Internet: 82%

Developed

Developing

| China 28% |
| India 6% |
| Other developing countries 66% |

Total population: 6.5 billion

2011

Using Internet 35%

Developed

Not using Internet: 65%

Developing

| China 37% |
| India 10% |
| Other developing countries 53% |

Total population: 7 billion

Discuss with a classmate what trends the graphs show.

Activity Two

In 2002, fewer than half of cellphone users lived in developing countries. In 2010, two-thirds were in developing countries.

1. In a 2010 survey, 50 students in Uganda were asked which functions they used on their cellphones. Here are the results:

Conduct a similar survey and compare the results with those of the Ugandan students. Draw a graph (or graphs) to support your comparison.

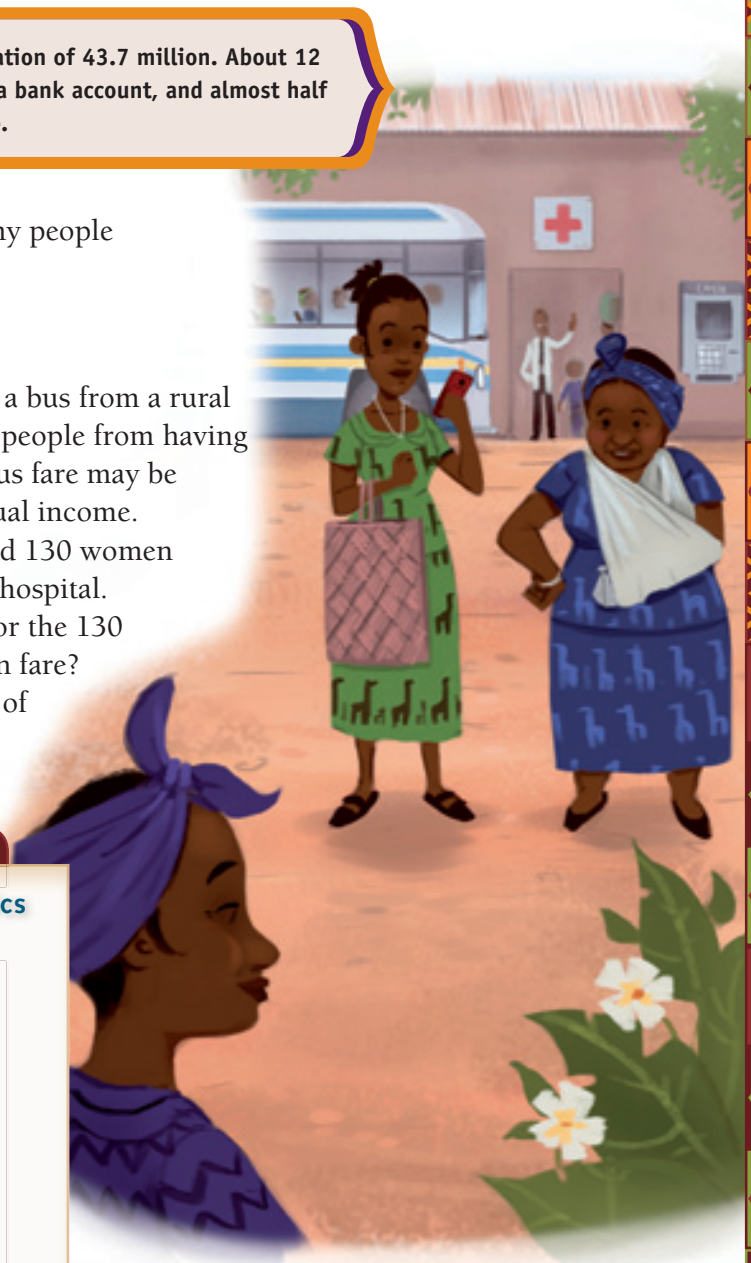| Function	Number using the function
Alarm clock	34
Picture messaging	18
Voicemail	17
Internet access	26
Calculator	41
Text messaging	49
Voice call	44

2

2. In many parts of Africa, access to banks and bank accounts is difficult and expensive. Today, many people there use their cellphones to store and transfer money. They withdraw money at special "cashout points", using identification.

> In 2009, Tanzania had a population of 43.7 million. About 12 percent of the population had a bank account, and almost half the population had a cellphone.
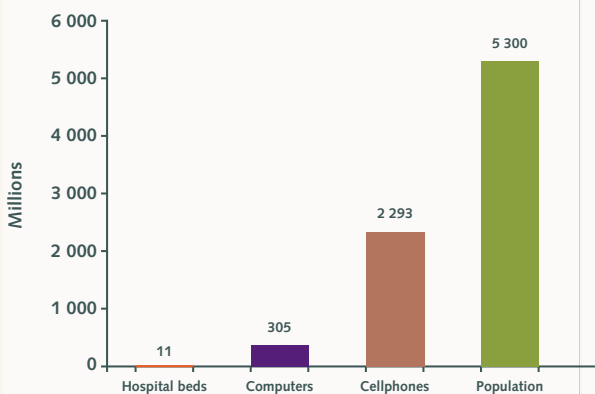
In 2009, approximately how many people in Tanzania had:
a. a bank account?
b. a cellphone?

3. In Tanzania, the cost of catching a bus from a rural area to a hospital prevents many people from having operations that they need. The bus fare may be one-tenth of a rural family's annual income. A hospital in Dar es Salaam texted 130 women the money they needed to get to hospital.
a. If the hospital paid $5,200 for the 130 bus fares, what was the mean fare?
b. Estimate the annual income of a rural family in Tanzania at that time.

Technology and Health-related Statistics for Developing Countries (2009)

Bar graph with y-axis labelled "Millions" (0 to 6 000). Hospital beds: 11; Computers: 305; Cellphones: 2 293; Population: 5 300.

4. Discuss with a classmate what stories this graph of technology and health-related statistics tells.

5. Using cellphones to provide health services and information is called mHealth (mobile health). Investigate ways that cellphones are being used for health promotion in developing countries.

Focus   Interpreting statistics