# Mobile phones

# NEED TO KNOW

There are two basic types of mobile phone: 3G, short for 'third generation', and GSM, which stands for 'global system for mobile communications'.

#### **3G PHONES**

3G phones offer highspeed connections to the mobile internet, which is a cut-down version of the internet on a computer. They also offer locationbased services that let you find the nearest cash machine, for example, and access to multimedia services, such as faster video-clip downloads.

Tailored TV services are also available. In May, Orange launched Orange TV, offering nine channels, including news, sports and reality TV. Live footage is streamed on Orange's 3G network (see 'All change', <u>August 2005, p38</u>).

3G phone sales are only now beginning to take off. The major networks are busily investing in new masts that support 3G in order to boost coverage, but 3G is still waiting for the 'killer application' to spur growth.

#### GSM

GSM phones, also known as 2G phones, remain the most common type of handset. You can still use them to access the mobile internet. But access is slower and not all the services are available. GSM network coverage is superior to 3G, but in the absence of adequate coverage 3G phones will switch to a GSM network.

#### SMART PHONES

A smart phone is a combination of a personal digital assistant (PDA) and a mobile. This Nokia has Quickoffice to view Word, Excel and Powerpoint files. The operating system,

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### **BEST BUYS**

Competition for Best Buy status is tough in the mobile phone sector. For a phone to achieve this status we're looking for a combination of all-round quality and outstanding features.

#### 3G

The **Nokia 6680 (1)** is an excellent phone and the best 3G model we've tested to date. Admittedly it's not as intuitive to navigate as other Nokia models but you can blame that on the mountain of features (See 'Smart phones', above).

#### GSM

The **Nokia 6230i (5)** is an upgrade of the **Nokia 6230 (8)**. Both boast lots of features, including music player and FM radio, but the newer Nokia (5) fared much better than the older model on durability tests, and both the camera and display have improved.

The Sony Ericsson K750i (6) is heavily advertised, more as a camera than a phone. The superb array of camera features – auto focus, 4x digital zoom, red-eye reduction, lens cover – are complemented by an exceptionally clear screen, great battery life and an expandable S. The operating system, Symbian OS, also supports Adobe PDF reader and there's a 64MB memory card to store files. As it's also a 3G phone, it offers quicker access to email and the internet. It also has two cameras, so when making a video conference call you can both see and be seen. Unlike some smart phones, it has no built-in keyboard.

64MB memory card. But our latest reliability data (see 'Tackling faulty mobiles', August 2005, p16) reveals Sony Ericsson handsets are among the most likely to develop problems. So we can't make this model a Best Buy.

If you live in a poor mobile reception area, consider the angular-styled **Nokia 6170** (7), which has excellent reception. At 123 grams it is a little heavy (compared with an average of 100 grams for a GSM phone) but the intuitive basic functions more than make up for the weight.

For the fashion-conscious, the stylish **Nokia 7270 (9)** clamshell phone is a doddle to use and features soft, changeable, textile covers.

The compact **Samsung SGH-D500 (10)** has a 1.3Mp camera that isn't as good as others on test, but the phone is extremely easy to use with excellent sound quality.

The clamshell **Samsung SGH-E600 (11)** is the lightest on test at only 90 grams. The display is small so expect to scroll more when texting. Like all our Best Buys it has Java, which lets you play a wider range of downloadable games.



#### TABLE NOTES

We've tested latest 3G and GSM models from leading brands.

#### Price

**Contract** Typical price range on a monthly contract.

#### Features

**Camera** Resolution of the built-in camera in megapixels (Mp) **Music player** Allows you to store and playback music files (eg MP3 files).

#### Performance

**Portability** This is based on dimensions, shape and weight. **Pictures** Camera quality and ease of use.

#### SCORE

Battery17.5%Ergonomics17.5%Texting10%Camera, display10%	SCORE								
Battery17.5%Ergonomics17.5%Texting10%Camera, display10%	Ignores price and is based on:								
Ergonomics17.5%Texting10%Camera, display10%	Use for calling	35%							
Texting10%Camera, display10%	Battery	17.5%							
Camera, display 10%	Ergonomics	17.5%							
	Texting	10%							
Games, extras 10%	Camera, display	10%							
	Games, extras	10%							





10 Samsung

GSM

Nokia

GSM

Nokia

8 Nokia

GSM

#### DIGITAL CAMERAS

The resolution of digital cameras on mobile phones continues to rise. Nearly half of our latest crop have a resolution of at least 1Mp.

This Nokia boasts a 1.2Mp camera that is better than most at capturing movement. It's easy to transfer images to your computer and there's a 32MB memory card (expandable to 512MB) for storing both snaps and short video clips on the phone.

## 77 mobiles on test

The main table shows Best Buys from our latest tests and previous tests, as well as the six next best newly-tested models. However, there are 77 mobiles from this and previous tests for sale. See www. which.co.uk/ mobilephones for full details.

#### **GSM CAMERA PHONES**

The small table below shows the results for seven of the newest camera phones that you may see promoted in the shops. Visit our website

www.switchwithwhich.

**co.uk** for the best deal from more than 300 tariffs.

GSM camera phone	Camera (Mp)	Сатега	Score (%)
Alcatel 756	0.3	0	65
Samsung E630	0.3	0	65
Nokia 3230	1.2	☆	63
Samsung X640	0.3	0	62
LG C3300	0.3	$\Theta$	60
Siemens SF65	1.2	0	60
Panasonic X400	0.3	0	51
Last report May 2005			

Mobile	Price	Fea	tures	Performance				Ease of use		Score	
phones	Contract (£)	Camera (Mp)	Music player	Sound	Battery	Portability	Durability	Pictures	Calling	Texting	(%)
3G	0 0 0 0 0	9 9 9 9 9 9	6 6 6 8 8 8 8 8 8 8 8 8	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0 8 9 9 9 9 9	6 6 6 6 6 6	0 9 0 9 9 9	0 0 0 0 0 0 0	0 0 0 0 0 0	• • • •
1 Nokia 6680	0-300	1.2	1	☆	☆	e	☆	☆	☆	☆	68
2 LG U8138	0-200	0.3	1	☆	${\simeq}$	0	☆	0	☆	☆	67
3 LG U8150	0-190	0.3	1	☆	\$	0	0	0	☆	☆	62
4 Motorola V975	0-250	0.3	1	0	0	•	☆	0	☆	☆	62
GSM											
5 Nokia 6230i	0-250	1.2	1	0	\$	☆	☆	☆	☆	☆	69
6 Sony Ericsson K750i	0-215	2.0	1	0	*	☆	☆	☆	0	☆	69
<b>7 Nokia</b> 6170	0-150	0.3	6 6 6 6 6 6	☆	${\leftrightarrow}$	0	☆	0	☆	☆	68
8 Nokia 6230	0-206	0.3	1	0	${\leftrightarrow}$	☆	0	0	☆	☆	68
<b>9 Nokia</b> 7270	0-170	0.3	- 6 6 6 6 6	☆	\$	0	☆	0	*	☆	68
10 Samsung SGH-D500	0-250	1.3	- - - - - - - - - - - - - - - - - - -	☆	☆	☆	☆	0	*	☆	68
11 Samsung SGH-E600	0	0.3	6 6 6 6 6 6	0		☆	☆	0	☆	☆	68
<b>12 Nokia</b> 6020	0-150	0.3	6 6 7 8 6 8 8 8	☆	${\leftrightarrow}$	☆	☆	0	☆	☆	67
<b>13 Nokia</b> 9300	0-330	n/a	1	0	\$	e	☆	n/a	☆	*	67
14 Motorola V635	0-200	1.2	1	0	\$	0	☆	☆	☆	☆	66
<b>15 Nokia</b> 7710	10-290	1.0	1	0	\$	e	☆	☆	0	*	66
16 Samsung E720	0-250	1.0	1	☆	☆	☆	*	0	*	0	65
17 Sony Ericsson K300i	0	0.3	1	0	*	☆	☆	0	0	☆	65

Samsung

GSM