Capture the moment

Choosing between a digital SLR and digital compact camera depends on the type of photos you take. We help you pick the right one for you

If you're considering buying a digital camera, then the first decision is to choose either a digital single lens reflex (DSLR) camera or a compact digital camera. DSLRs are usually big, expensive and come with a wider range of manual features than compact cameras. Digital compact cameras are smaller, more portable and suited to being carried around in your pocket. But which type should you choose?

Compact digital cameras have improved greatly in recent years, and now make it easy to take high-quality pictures. They come with a host of handy features, such as face detection, which means that the camera can recognise that the photographic scene includes people, and correctly exposes their faces. Compacts also feature scene modes, so you can select the type of picture you're trying to take – such as a landscape – and it will automatically choose the right settings. Taking good photos still demands a good eye for composition, but using compacts can be more convenient than using a DSLR for casual photography.

DSLRs take a different approach. Bigger and heavier than compacts, they can't shoot video and cost considerably more to buy. However, they are capable of taking better photos, particularly in more challenging conditions, such as low light. To get the best out of them, you have to learn how they work, and you can also buy extra high-quality lenses to supplement the kit lens a



DSLRs are capable of taking better photos DSLR comes with, but the results make the investment worth it.

We tested eight of the latest DSLRs and 15 compact cameras to help you choose one that suits your needs. We also found that manufacturers such as Sony and Panasonic are able to compete with more established camera brands like Canon and Nikon for both compact cameras and DSLRs.

Which should you choose?

Best on a budget

SAMSUNG S860 £70 If you want only a small, inexpensive camera to point-and-shoot with, we recommend the Samsung S860. It doesn't have loads of features, but it takes good-quality photos, especially outdoors, and is easy to use. It's available to buy online.



Best for features CANON POWERSHOT S5IS

£200 If a DSLR sounds hard work and costly, but you want a camera with lots of options, then take a look at the Canon PowerShot S5IS. Image quality is excellent, and a mighty zoom range of 36-432mm is great for shooting at distance.



Best for pockets SONY CYBER-SHOT DSC-T2

£230 If you want the smallestpossible camera that still takes decent photos, then the Sony CyberShot DSC-T2 (4) should attract your attention. While a £240 price tag is high for a camera that is light on creative features, it certainly is tiny.



Best previously loved

CANON 300D £200 If you crave a digital SLR but your budget is tight, it might be worth checking out a second-hand model. A Canon 300D (a former Which? Best Buy) can be had for as little as £200. Try your local camera shop, or have a look at websites such as **www.lcegroup.co.uk**.





SON

1 DSLR

78% Nikon D80 + 18-70mm £660

The D80 is joint best with the Sony Alpha 700, but takes better pictures in automatic mode. Results are equally good when you leave the camera to its own devices, and when you get stuck in to all the settings. Picture quality is the highest on test, but not quite good enough to gain the maximum rating. The camera is easy to use, has an excellent flash, and is quickly ready to shoot after being switched on. Our one gripe is a lengthy shutter delay time. It's cheapest at Jessops. WORTH KNOWING

You'll have to buy one of Nikon's 'VR' (vibration reduction) lenses to get image stabilisation.

Available Jessops Optical zoom range 27-105mm Resolution 10Mp Size 14x11x15cm Weight 1,045g



2 DSLR

78% Sony Alpha 700 + 18-70mm £1,100

Sony's Alpha 700 is an impressive, easy-to-use camera, with a very low shutter delay. It is quick to start up, but you do need to use manual settings to get the best out of it. Unlike compact cameras, for DSLRs we use the photo quality scores from manual mode rather than automatic mode. Had we used the latter, the Alpha would have a total test score of just 62 per cent, so it's not a camera for dabblers. Mechanical image stabilisation is built into the body, so the sensor moves to correct

shake. This system provided the best image stabilisation of all the DSLRs tested. It's cheapest at Jessops.

WE LIKE The Alpha 700 comes with an HDMI socket so you can plug it into an HDTV.

Available Jessops Optical zoom range 27-105mm Resolution 12Mp Size 15x11x15.5cm Weight 1,090g





76% Canon EOS 40D + 17-85mm IS £950

The 40D is an impressive camera, capable of taking high-quality pictures if you're prepared to adjust the settings. Our tests found that the lens-based optical image stabilisation was effective – but, if you buy a different lens, you need to make sure it is labelled 'IS' if you want to have image stabilisation. Despite having a high maximum ISO of 3200 (see 'Jargon buster', p44), the 40D's low-light performance wasn't great and

the flash wasn't as good as some of the other cameras we tested. It's cheapest at Argos.

WE LIKE After being switched on, the camera is ready to shoot in a mere 0.27 seconds.

Available Widely available on the high street Optical zoom range 27.2-136mm Resolution 10Mp Size 15x11.5x16.5cm Weight 1,380g





75% Panasonic Lumix DMC-L10 + 14-50mm £649

Like the Nikon D80, the L-10's picture quality didn't vary much whether manual or automatic settings were used. The 10-megapixel photos were full of detail, with natural colours and clarity. The camera was easy to use, but it takes more than a second to get itself ready to shoot after you switch it on. The flash was slightly lacklustre in our tests. Image stabilisation is integrated into the lens; although it worked well, it wasn't as effective as the systems used by our Sony and Canon Best Buys. It's cheapest at John Lewis. WE LIKE You can tilt and rotate the screen to get the best viewing angle.

Available Jessops, John Lewis Optical zoom range 28-100mm Resolution 10Mp Size 13.5x9.5x16.5cm Weight 1,040g







69% Canon Digital Ixus 860 IS £240

The 860 IS is an impressive compact camera. It takes good-quality photos and records better video footage than most. It's easy to use and has an excellent screen, effective flash and longlasting rechargeable battery. It has a minimal shutter delay, and the optical image stabilisation works well. It includes face detection to help with shots of people, making it a great point-and-shoot device. The lens is capable of very wide-angle shots – good for getting lots of subjects in frame. It's cheapest at Jessops and John Lewis. WE LIKE The camera is ready to start

WE LIKE The camera is ready to sta

shooting in just over 1.5 seconds, good for a compact.

Available Jessops, John Lewis Resolution 8Mp Size 9.5x6x3cm Weight 181g Optical zoom range 28-105mm





2 COMPACT

1 COMPACT

66% Panasonic Lumix DMC-FX33 £150

The 8-megapixel images from the FX33 are the best of all the compact cameras we tested, and it features 20 scene mode options. The screen is good quality and the camera is user-friendly, and we found that the video quality is decent. If you select high-sensitivity mode, then a maximum ISO of 6400 is available, which should help darker scenes. Indeed, the Lumix's low-light performance is among the best in this test. But optical image stabilisation was one of the worst of all the compact cameras we looked at. It's cheapest at PC World and Currys.

WE LIKE It features a

wide-angle lens for capturing scenes. Available Widely available on the high street Resolution 8Mp Size 9.5x5.5x2.3cm Weight 151g

Optical zoom range 28-100mm





3 COMPACT

65% Fujifilm Finepix F50fd £170

The F50fd may be small, but it can take very high resolution 12-megapixel images. Resolution isn't everything though – our tests found that while shots are acceptable they aren't as good as those taken with the 8-megapixel Panasonic Lumix FX33. The camera has good battery life, is easy to use and has face detection. We found that video quality is average, and the flash falls short of full marks. There is optical image stabilisation, but our tests

revealed it wasn't as effective at reducing blur as the Best Buy Canon Ixus. It's cheapest at Currys, Jessops and PC World.

WE LIKE At just 0.2 seconds, shutter delay is minimal.

Available Widely available on the high street Resolution 12Mp Size 9.5x6.5x3cm Weight 175g Optical zoom range 35-105mm



Jargon buster Our helpful guide puts a range of digital camera terms in the frame

Aperture Measured by the camera's f-value, it can help control depth of field. You can alter the f-value manually on some compacts and all DSLRs.
Depth of field This refers to how much of the scene you are trying to photograph is in focus, from foreground to background.

■ ISO This setting determines how sensitive your camera's digital sensor is to light. The higher the ISO number, the more sensitive it is. Higher ISOs mean that you can use the camera in low light without the flash, or use a faster shutter speed. Higher ISOs increase the amount of 'noise' in photos. ■ Shutter speed Determines how long the camera exposes its digital sensor to light. Fast shutter speeds are good if you want to capture quick-moving subjects. Longer shutter speeds are useful if you need to take photos in very low light or want to have a blurred effect, such as headlight trails at night. **Raw files** Digital SLRs have the option to save your photos in a format called Raw, in addition to the Jpeg format. Raw files give you the maximum possible image quality, but there are downsides, not least of which are the huge file sizes of Raw format files.

Compact cameras compared with DSLRs

We reveal the main differences between the two types of digital camera

Thanks to a technology called a pentaprism, a digital SLR is able to show through the viewfinder the exact scene that you are about to photograph, whereas the view through a compact camera's viewfinder is only an approximation.

Most compact digital cameras don't use a viewfinder, relying on the display panel on the back to show the scene. This is fine for framing your shots, as the screen shows exactly what the camera is about to record, but if you want to frame your shots on a bright day, an LCD display can make that hard due to glare from the sun.

The main difference between a DSLR and a compact is that the former is designed to give you control over lots of settings, while the latter hides them away and encourages you to pointand-shoot.

The back of a DLSR is usually laden with buttons and, occasionally, dials that let you alter parameters such as ISO. On a compact, these functions require you to delve into menus. DSLRs have the ability to accept different lenses, with alternate lenses able to improve quality in different shooting conditions.



BASIC DIGITAL PHOTOGRAPHY TIPS

Get started with our guide to better photos

Settings Most cameras have scene modes, such as portrait, snow, and landscape. Selecting the correct one for the type of photos you wish to take should help you get the best out of your camera. More general settings, such as aperture priority and shutter



speed priority, are useful – the latter for taking action shots and the former for landscapes (high f-value) or portraits (low f-value).

■ **Composition** Often, you'll get a better picture if your subject isn't dead centre in the frame. A good rule of thumb for composing your shots is the 'rule of thirds', where you imagine the frame is divided into nine squares. Try to match up the elements of your scene to where the lines of these squares intersect. Another tip is to frame moving objects travelling from one side of the frame to the other with more space in front of them than behind – it makes them appear more dynamic.

Shutter Gently pressing the shutter button half-way down prompts the camera to automatically focus itself for the shot you're intending to take, but not actually trigger the shutter. When you press the button down fully, the picture is taken but with less delay as the camera doesn't need time to focus, making it more likely that you'll capture the exact moment you desire.

WHICH? ONLINE

See www.which.co.uk/cameras for reviews of more than 180 models including 35 Best Buys. This information is regularly updated with new models, prices and availability.

BEST BUY COMPETITION

Win a Best Buy digital photography package

As the holiday season approaches, we are giving one reader the chance to win a Best Buy digital photography package to help capture those fantastic holiday moments. This includes a Best Buy Canon Digital Ixus 860 IS digital camera, an Epson PictureMate 290 photo printer, and a copy of the photography software package Adobe Photoshop Elements 6. We also have two digital cameras to give away as runner-up prizes.

TO ENTER, SIMPLY ANSWER THE FOLLOWING QUESTION

According to our report on small photo printers (see p48), what size photos do these devices print as standard?

- (a) A4 photos (12x8 inches)
- (b) Postcard-sized photos (6x4 inches)
- (c) A7 photos (3x4 inches)

To enter our Best Buy competition online, go to www.which.co.uk/bestbuycompetition or send your entry on a postcard to 'Best Buy June 08', Which?, PO Box 44, Hertford X SG14 1SH.

Include your name, address and postcode, daytime phone number and Which? membership number (found on your Which? membership card) as your user name. Entries received by 19 June 2008 will be entered. Our competition is open only to current Which? members. Only one entry per household. Usual rules apply. See www.which.co.uk/bestbuycompetition or Which?, June 2007, p49, for a full set of rules. First prize: Canon Digital kus 860 IS camera, Epson PictureMate 290 printer, Adobe Photoshop Elements 6. Two second prizes: Canon Digital kus 860 IS camera.

Congratulations to the winners of our April competition: Mr Higginbotham, Jersey; Mr Connearn, Hinckley; Miss Ramsay, Edinburgh; Mr Hillier, Woodbridge; Ms Hodkinson, Leigh.

Contacts

Canon 0870 514 3723; www.canon.co.uk Fujifilm 01234 217 724; www.fujifilm.co.uk Kodak 01442 261122; www.kodak.co.uk Nikon 0871 200 1964; www.nikon.co.uk Olympus 020 7253 2772; www.olympus.co.uk Panasonic 0844 844 3852 www.panasonic.co.uk Pentax 0870 736 8299; www.pentax.co.uk Samsung 0845 726 7864; www.samsung.co.uk

Sony 0870 511 1999; www.sony.co.uk

USING THE TABLES

The more stars the better.

Specification

Price Full pricing details are on p41. **Resolution** The maximum resolution in megapixels that the camera can capture. **Weight** wrist strap, and also lens with DSLR cameras. Maximum ISO The highest ISO the camera can be set to. Memory card type The type of memory card the camera uses. Optical zoom The

Includes memory card and

range that you can zoom in to far-off objects (high number) and zoom out to get lots of subjects in frame (low number) in mm. **Scene modes** Presets that optimise the camera's settings for certain shots. **Face detection** Detects faces in the frame and alters exposure settings. **Continuous shooting** Whether the camera can take pictures continuously, and how many. 'Unlimited' means the camera will shoot until the memory card is full.

Image stabilisation

Whether the camera features non-digital image stabilisation, and whether it is optical or mechanical. **Movie zoom** Whether zoom is available when shooting movies, and if it is optical or digital.

	DSLR MODEL AND LENS		SPECIFICATION											
		PRICE (£)	RESOLUTION (Mp)	SIZE (cm) (wxhxd)	WEIGHT WITH LENS (g)	MAXIMUM ISO	LCD SCREEN (mm) (wxh)	MEMORY CARD TYPE	START-UP TIME (s)	SHOT-TO-SHOT TIME (s)	SHUTTER DELAY (s)	EASE OF USE		
1	NIKON D80 + 18-70mm	660	10	14x11x15	1,045	3200	48x32	SDHC Card	0.84	0.33	0.668	*****		
2	SONY Alpha 700 + 18-70mm	1,100	12	15x11x15.5	1,090	6400	60x40	CF II or MemoryStick Duo	0.29	0.51	0.286	*****		
3	CANON EOS 40D + 17-85mm IS	950	10	15x11.5x16.5	1,380	3200	60x40	CF II	0.27	0.31	0.364	****		
4	PANASONIC Lumix DMC-L10 + 14-50mm	649	10	13.5x9.5x16.5	1,040	1600	49x37	SDHC Card	1.65	0.44	0.404	*****		
5	CANON EOS 400D + 18-55mm	395	10	13x14x10	810	1600	50x33	CF II	1.07	0.36	0.292	****		
6	NIKON D40X + 18-55mm	380	10	12.5x10x15.5	800	3200	48x32	SDHC Card	0.41	0.37	0.218	*****		
7	OLYMPUS E-510 + 14-42mm	430	10	14x9.5x13.5	810	1600	50x37	CF II or xD Card	3.09	0.36	1.286	***		
8	OLYMPUS E-410 + 14-42mm	330	10	13x9.5x13.5	690	1600	50x37	CF II or xD Card	2.96	0.34	1.058	****		

DIGITAL COMPACT MODEL		SPECIFICATION										
	PRICE (£)	RESOLUTION (Mp)	SIZE (cm) (wxhxd)	WEIGHT	MAXIMUM ISO	LCD SCREEN (mm) (wxh)	MEMORY CARD TYPE	OPTICAL ZOOM	SCENE MODES	FACE DETECTION	CONTINUOUS SHOOTING	IMAGE STABILISATION
1 CANON Digital Ixus 860 IS	240	8	9.5x6x3	181	1600	60x45	SDHC Card	28 - 105	10	\checkmark	unlimited	optical
2 PANASONIC Lumix DMC-FX33	150	8	9.5x5.5x2.3	151	6400 ^a	50x37	SDHC Card	28 - 100	21	\checkmark	unlimited	optical
3 FUJIFILM FinePix F50fd	170	12	9.5x6.5x3	175	6400 ^b	54x40	SDHC Card or xD Card	35 - 105	16	\checkmark	unlimited	optical
4 SONY Cyber-shot DSC-T2	230	8	9x6x2.1	154	3200	54x41	MemoryStick Duo	38 - 114	10	\checkmark	100	optical
5 OLYMPUS μ 830	220	8	10.5x6x2.5	142	1600	50x37	xD Card	36 - 180	20	\checkmark	unlimited	mechanical
6 OLYMPUS FE-300	190	12	10x6x2.3	132	6400 ^b	50x37	xD Card	35 - 105	14	\checkmark	n/a	n/a
7 FUJIFILM FinePix Z100fd	150	8	9.5x6x2.2	152	1600	54x41	SDHC Card or xD Card	36 - 180	14	\checkmark	unlimited	mechanical
8 SAMSUNG NV20	190	12	9.5x6.5x3	168	3200 ^b	50x37	SDHC Card	34 - 102	15	\checkmark	unlimited	n/a
9 SONY Cyber-shot DSC-T200	240	8	10x6x2.1	184	3200	76x43	MemoryStick Duo	35 - 175	10	\checkmark	100	optical
10 NIKON Coolpix S51c	150	8	10x6x2.3	143	1600	61x46	SDHC Card	38 - 114	14	\checkmark	unlimited	optical
11 PENTAX Optio Z10	100	8	10x6x2.4	145	3200	50x37	SDHC Card	38 - 266	10	✓d	unlimited	n/a
12 FUJIFILM FinePix F480	100	8	9.5x6x3	157	800	54x40	SDHC Card or xD Card	28 - 112	14	n/a	3	n/a
13 OLYMPUS μ 1200	250	12	10x6x2.4	140	6400 ^b	54x40	xD Card	35 - 105	20	\checkmark	unlimited ^b	mechanical
14 NIKON Coolpix S700	220	12	9.5x5.5x2.3	146	3200 ^b	54x41	SDHC Card	37 - 111	14	✓	unlimited	optical
15 KODAK EasyShare V1253	150	12	10.5x6x2.5	173	3200 ^b	69x39	SDHC Card	37 - 111	19	\checkmark	3	n/a

a Only with High Sensitivity setting b Not at maximum resolution c Sound is disabled when using optical zoom during movie recording d Only in portrait mode

Test performance

Shutter delay How rapidly a photo is taken after you press the shutter (subject ten metres from camera). Viewfinder/screen How good the screen is in terms of clarity and brightness. Viewfinder is rated for accuracy of the shot it portrays. **Flash** Rated for evenness and correct intensity. **Battery life** Rated for how long it can power the camera taking pictures on a single charge. **Ease of use** Rating for how userfriendly the camera is. This includes the quality of the manual, how easy it is to remove the camera's memory card, how quickly the camera is ready to shoot after being powered on, and how well the menus and controls work.

Score (DSLRs)

This ignores price a	nd is
based on:	
Picture quality	31%
Ease of use	26 %
Viewfinder/monitor	12.5 %
Features	12.5%
Battery life	10%
Flash	8%

Score (compacts)

Ignores price and bas	sed on:
Picture quality	30 %
Ease of use	25 %
Viewfinder/monitor	12 %
Features	12 %
Battery life	10 %
Flash	8 %
Movie quality	3%

	SCORE %				
	FOCUSING	PICTURE QUALITY (AUTOMATIC)	PICTURE QUALITY (MANUAL)	FLASH	
	****	****	****	*****	78
	***	***	****	*****	78
	***	***	****	****	76
	***	****	****	****	75
	***	***	****	****	74
	***	***	***	*****	69
	****	***	***	*****	67
	****	***	***	****	66

Now we test

The most important element of a camera is making sure that it takes good-quality pictures. We photograph different test cards for technical tests, which use geometric patterns to reveal lens distortion, and colour charts to measure how accurately the camera captures different hues.

We then use the cameras to take typical 'real world' shots, such as a portrait of someone in a living room, and an outdoor photo of a building in bright



sunlight. These images are scored and allow us to build up a reliable overall rating for photo quality. Ease of use, battery life and other factors are also tested.

Facts & scores

From fast to slow, and light to heavy – camera facts we found

Starting up

While it may be heavy, the **Canon EOS 40D (3)** is ready to shoot just over a quarter of a second after you switch it on – the **Nikon Coolpix S51c (10)** takes five seconds.

Heavy and light

The lightest camera on test is the **Olympus FE-300 (6)**, which weighs 132g – a tenth of the weighty **Canon EOS 40D (3)**.

Prince and pauper

For the £1,100 a Sony Alpha 700 (2) costs you, you could buy 11 Pentax Optio Z10s (11) or Fujifilm FinePix F480s (12).

			V	HICH? TEST	SCORE %			
MOVIE ZOOM	SHUTTER DELAY (s)	PICTURE QUALITY	MOVIE QUALITY	VIEWFINDER/ SCREEN	FLASH	BATTERY LIFE	EASE OF USE	
digital	0.3	***	***	****	*****	*****	****	69
n/a	1.0	****	**	***	*****	****	****	66
n/a	0.2	***	**	***	****	*****	****	65
optical	0.5	***	**	***	*****	****	****	64
digital	0.5	***	**	***	****	****	****	63
optical ^c	0.9	***	**	***	****	****	****	62
n/a	0.5	***	**	**	****	****	****	61
optical	1.1	***	**	***	*****	*****	***	59
optical	0.1	***	**	***	*****	***	****	59
digital	1.0	***	*	***	*****	****	***	58
optical	1.0	***	**	**	****	***	****	57
n/a	1.2	***	**	**	****	***	***	53
digital	1.3	****	**	***	****	****	**	52
digital	1.5	****	**	***	****	***	**	51
optical	1.6	***	**	***	****	****	**	49

HOUS TECT DEDEODMAN