

Scene but not blurred

The latest digital cameras come packed with cutting-edge technology to help you take great shots

When capturing those special moments, it's good to know that your camera is loaded with features to help take the best photos in a range of different conditions. These days, even the smallest compact cameras come with various technologies to help prevent dull, poorly defined or blurred photographs.

All but one of the cameras we tested feature scene settings (see 'Setting the scene', right). You select the most appropriate one for the conditions you are photographing. Some cameras have a sensor that can automatically select the most suitable scene mode, changing the camera's settings accordingly.

Several blur-prevention technologies, such as image stabilisation, help you take sharper photos. Many cameras now also come with face-detection technology, which automatically recognises faces in a shot and focuses on them.

The good news is that all of this technology need not come at a high price. Even the cheaper cameras in our tests have features that help you take the best pictures possible.

For maximum manual control over your photographs, you can't beat a digital SLR camera. We hold these cameras to a higher standard than the compact cameras, so, despite some high scores, none in this batch of tests was good enough to be a Best Buy. But for a fraction of the price of a DSLR you may wish to consider a 'bridge' camera. These mid-size models feature long zoom lenses and offer a greater degree of manual control than most compact cameras, so even on a budget you can find a camera with a range of adjustable settings. And unlike with DSLRs, there is no need to buy extra lenses for these bridge models. See 'Which should you choose?', p49, for advice on finding one to suit your budget.

For further advice on choosing a digital camera and getting the most out of the features and settings available, go to www.which.co.uk/cameras, where you can also find more than 200 of our previous reviews of digital cameras.

Setting the scene

Smart cameras can help you make the most of any photographic situation



Most cameras feature a range of scene settings, designed to maximise the quality of your pictures under various conditions. Leaving your camera on automatic mode sometimes means it reverts instantly to one of these scene settings, or you can select one yourself.

Sports mode

This is for capturing people or objects moving at speed. Some cameras offer further options for indoor and outdoor sports. Occasionally, even these settings may prove inadequate, and it may be better to manually increase the shutter speed instead.

Night shots

Intended for capturing starry skies or scenes in poor light, this decreases the shutter speed and increases the ISO for low-light sensitivity. A downside can often be 'grain' in the picture. To prevent blurred images, it can be helpful to put the camera on a solid surface or tripod while you snap away.

Sunset

Sunset modes change the white balance of your shots to emphasise the vivid reds and yellows in the picture. Some detail can be sacrificed, but it is usually unnoticeable unless you are enlarging pictures a lot.

Portrait

This uses a softening effect for portraits. This can be flattering, improving skin tones for example, but inevitably some detail is lost.

Snow

The brightness of snow on a sunny day can be confusing for a camera sensor. This mode helps ensure that photographs do not suffer from a blue tinge, while reducing the darkness of people against the white background.

Jargon buster

Understanding photography's more technical terms

■ **ISO** Varies the sensitivity of the camera's digital sensor to light. Higher ISOs allow you to shoot in low light without the flash. The downside is added 'noise' in your photos – a grainy effect that can spoil the picture, particularly when enlarged.

■ **APERTURE** The aperture settings control the depth of field, letting you focus primarily on objects in

the foreground, or on a broader shot including background objects. Some compacts and all DSLRs give you the option to adjust this yourself.

■ **IMAGE STABILISATION**

There are various means for correcting camera shake. With optical image stabilisation, a mechanical stabiliser is built into the lens. Alternatively, a stabilising mechanism may

be built into the camera itself, moving the sensor to compensate for wobbling hands. Digital image stabilisation, sometimes known as 'anti-blur', is usually less refined – this attempts to prevent blur effects by increasing the ISO and shutter speed in low lighting, where blurring can easily occur. This can be marred by increased 'noise' in the picture.



1 DIGITAL COMPACT

73% Olympus SP-570UZ £240

This is an excellent, but quite heavy, bridge between compact digital cameras and more expensive SLRs. Boasting a mighty 26-520mm range lens, this 10Mp camera is great for zooming in from afar or for taking wide-angle shots. With 22 scene settings, it has the flexibility to get the best results in various conditions, and its excellent colour reproduction gives great-looking pictures. The only letdown is a lag of 2.4 seconds between shots. It's cheapest online.

WORTH KNOWING It is compatible with xD memory cards only.

Available www.purelygadgets.co.uk Resolution 10Mp Size 9x13x10cm Weight 590g Optical zoom range 26-520mm

which?
BEST BUY



2 DIGITAL COMPACT

72% Canon Digital Ixus 90 IS £195

The highest-scoring pocket-sized camera we tested, the 90 IS has a wealth of automatic and manual features, despite its size, including 12 scene settings. The 10Mp resolution will keep your photos looking sharp – the picture quality impressed our testers. The camera has a superb battery life, and also offers acceptable video recording, as well as face-detection technology and an optical image stabiliser. It's cheapest at Currys

Available Jessops and Currys Resolution 10Mp Size 6x10x2cm Weight 181g Optical zoom range 35-105mm

which?
BEST BUY

The 90 IS has a wealth of automatic and manual features, despite its size



3 DIGITAL COMPACT

70% Canon Digital Ixus 970 IS £200

Another impressive pocket-sized camera from Canon, the 10Mp 970 IS has many of the same features as the 90 IS (2), but boasts a longer zoom range. The 37-185mm lens gives a reasonable 5x zoom, but makes the shooting angle somewhat tight in confined spaces. The delay between pressing the shutter and capturing the shot is only 0.4 seconds, and in burst mode it can continuously shoot until the memory card is full. It's cheapest at Amazon.

WORTH KNOWING The camera comes with a 32MB SD memory card.

Available Currys and online Resolution 10Mp Size 6x10x3cm Weight 185g Optical zoom range 37-185mm

which?
BEST BUY



5 DIGITAL COMPACT

67% Olympus mju 1020 £175

Despite being slim enough for any pocket, the mju 1020 manages to pack in a 37-260mm zoom lens. At only 156g, this 10Mp camera may feel lightweight, but with 20 scene modes, face detection and image stabilisation, there's plenty of technology in its slight frame. You can take photos in burst mode until a memory card has been filled. The picture quality is decent but not outstanding, though it is very easy to use and has an excellent battery life. It's cheapest online.

WE LIKE The body of the camera is splash-proof.

Available Online and independents Resolution 10.1Mp Size 6x11x3cm Weight 156g Optical zoom range 37-260mm

which?
BEST BUY



6 DIGITAL COMPACT

67% Sony Cyber-shot DSC-H10 £170

Not quite a bridge camera between compacts and SLRs, the DC-H10 is nonetheless quite bulky, at 326g. It offers a degree of manual control not always available in slimmer models, but not to the extent of larger bridge cameras. However, its picture-taking speed is impressive, as is the 10x optical zoom lens. The image quality is acceptable without being exceptional, but it has plenty of good features, such as nine scene modes, image stabilisation and face detection. It's cheapest online.

WORTH KNOWING The ISO can go up to 3,200 if you lower the resolution.

Available Jessops and online Resolution 8Mp Size 7x12x6cm Weight 326g Optical zoom range 38-380mm

which?
BEST BUY



7 DIGITAL COMPACT

66% Fujifilm FinePix S100fs £400

A heavy and expensive bridge camera, the S100fs is still cheaper than most digital SLRs. For the price, you may be disappointed by the picture quality, despite the fact that the camera has a resolution of 11Mp. The aperture and shutter-speed settings can be manually adjusted, and there are 15 scene modes. The monitor position can be twisted vertically. While it has many good points, not least a 28-400mm lens, at this price it may be worth considering an SLR model. It's cheapest at Jessops and Currys.

WE LIKE It has a hot-shoe connector, so you can add an external flash.

Available Jessops and Currys Resolution 11.1Mp Size 10x14x16cm Weight 1,023g Optical zoom range 28-400mm

which?
BEST BUY



4 DIGITAL COMPACT

69% Fujifilm FinePix S8100fd £240

An affordable alternative to a digital SLR, the feature-packed S8100fd has a zoom range of 27-486mm, making it great for both wide-angle shots and zooming in from a distance.

Its picture quality in outdoor conditions is excellent, though it's not as good indoors. It has the aperture and shutter priority settings you would expect from an SLR, as well as an option for manual focus. It's cheapest at Jessops.

WORTH KNOWING You can add to the 58MB of built-in memory with an xD or an SD memory card.

Available Jessops and Currys Resolution 10Mp Size 8x12x10cm Weight 530g Optical zoom range 27-486mm



8 DIGITAL COMPACT

66% Panasonic Lumix DMC-TZ4 £163

Slimmer cameras are available, but not all can incorporate a 10x zoom lens, which can also be used in video recording. There are 22 scene settings, including a high-sensitivity mode, which raises the ISO to 6,400 at the expense of the usual 8Mp resolution. It comes with an image-stabilising system, and there is no limit to the number of pictures taken in the very fast burst mode. The picture quality is quite good, given the reasonable price. It's cheapest online.

WE LIKE Though small, this camera has a powerful and versatile zoom.

Available www.ukdigitalcameras.co.uk Resolution 8.1Mp Size 7x11x4cm Weight 236g Optical zoom range 28-280mm

Detection technologies

Cameras can spot faces and smiles in a shot

Face detection

Increasingly, modern digital compact and SLR cameras come equipped with face-detection technology. This allows the camera to recognise human faces in the composition and focus on them as you take your shot. Face detection can help to define the features in a person's face as you photograph, giving a good distinction between eyes, nose and mouth. Some cameras can recognise more than a dozen individual faces at once, or track a face as a person moves across your shot.

Smile detection

A newer technology, featured on the Sony Cyber-shot DSC-T300 (14), is smile detection. With your camera in smile-detection mode, it focuses on the individual you are photographing, but holds back from taking a shot until it recognises a smile on their face. Unlike the more useful face detection, this feels somewhat gimmicky. As well as sometimes prompting false smiles among your friends, this technology can struggle occasionally with bearded faces.

Contacts

Canon 0870 514 3723
www.canon.co.uk

Casio 020 8450 9131
www.casio.co.uk

Fujifilm 01234 217724
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

Free of charge

Battery life tests Kodak

As with all cameras that don't come with a rechargeable battery, we tested the Kodak EasyShare Z1085 IS (not shown in table) with a set of high-capacity NiMH rechargeable batteries. These are very widely available and usually offer long life. However, we found battery life on this camera using these batteries to be very poor. We bought and tested another sample of this camera to make sure – this confirmed the result.



Assault on batteries

We contacted Kodak and it told us that this camera requires lithium batteries for good performance. The manual does not explicitly advise against the use of NiMH batteries. We now intend to test the Kodak with lithium batteries to measure any improvement. We'll put the results online at www.which.co.uk/cameras as soon as they're available, and we'll report them in the magazine with our next digital cameras test.

Which should you choose?



Best on a budget

NIKON COOLPIX L18 £90 Though not quite a Best Buy, the Coolpix L18 (15) is still a good choice for a cheap, compact camera. It features 13 scene settings and image stabilisation, and at 6x10x3cm it will fit your pocket as well as your budget.



Best SLR alternative

OLYMPUS SP-570UZ £240 If you're after a budget alternative to a DSLR that's still packed with features and manual options, consider a bridge camera. The SP-570UZ (1) topped our test this time, but also check out the Panasonic FZ-18 at www.which.co.uk/cameras.



Want to record in HD?

SAMSUNG NV24HD £160 The NV24HD (18) can record 720p video at 30 frames a second, as well as taking 10Mp still photos. However, the movie quality failed to impress our testers, so either go for the two Canon Best Buys (2 and 3), which offer the best standard video, or wait for an affordable HD camcorder to reach the market.

USING THE TABLES

The more stars the better.

Specification

Price Full pricing details are on p39.

Weight Includes memory card and strap, and lenses for DSLR cameras.

Maximum ISO The highest ISO the camera can be set to, at maximum resolution. **Continuous shooting**

Whether the camera can take pictures continuously, and how many. 'Unlimited' means the camera can shoot until the memory card is full. **Image stabilisation**

Optical (mechanical stabiliser built into the lens), sensor (stabilising mechanism built into the camera body), or digital (see 'Jargon buster', p47). **Movie zoom** Whether the zoom is available when taking video, and if it is optical (better) or digital.

Test performance

Shutter delay How rapidly the camera focuses and takes a photo after you press the shutter (with the subject 10 metres from the camera). **Shot-to-shot time** The minimum delay in seconds between taking photos. **Viewfinder/screen** How bright and clear the screen is. Viewfinder is rated for the accuracy of the shot it portrays. **Flash** Evenness and correct intensity. **Battery life** How long it can power the camera, while taking pictures, on a single charge. **Ease of use** Includes the quality of the manual, how easy it is to remove the memory card and battery, how quickly the camera is ready after switching on, and how well the menus and controls work.

Score (compacts)

This ignores price and is based on:

Picture quality	30%
Ease of use	25%
Viewfinder/monitor	12%
Features	12%
Battery life	10%
Flash	8%
Movie quality	3%

Score (DSLRs)

This ignores price and is based on:

Picture quality	31%
Ease of use	26%
Viewfinder/monitor	12.5%
Features	12.5%
Battery life	10%
Flash	8%

MODEL		SPECIFICATION								
		PRICE (£)	RESOLUTION (Mp)	SIZE (cm) (h x w x d)	WEIGHT (g)	MAXIMUM ISO	LCD SCREEN (mm) (w x h)	MEMORY CARD TYPE	OPTICAL ZOOM (mm)	SCENE MODES
DIGITAL COMPACT										
1	OLYMPUS SP-570UZ	240	10.0	9x13x10	590	1,600	54x40	xD Card	26-520	22
2	CANON Digital Ixus 90 IS	195	10.0	6x10x2	181	1,600	60x45	SDHC Card	35-105	12
3	CANON Digital Ixus 970 IS	200	10.0	6x10x3	185	1,600	50x37	SDHC Card	37-185	11
4	FUJIFILM FinePix S8100fd	240	10.0	8x12x10	530	1,600	51x38	SDHC or xD Card	27-486	16
5	OLYMPUS mju 1020	175	10.1	6x11x3	156	1,600	54x40	xD Card	37-260	20
6	SONY Cyber-shot DSC-H10	170	8.0	7x12x6	326	3,200	60x45	MemStick Duo	38-380	9
7	FUJIFILM FinePix S100fs	400	11.1	10x14x16	1,023	3,200	50x37	SDHC or xD Card	28-400	15
8	PANASONIC Lumix DMC-TZ4	163	8.1	7x11x4	236	1,600	49x37	SDHC Card	28-280	22
9	PENTAX Optio M50	130	8.0	6x10x2	130	1,600	50x36	SDHC Card	36-180	9
10	NIKON Coolpix P60	143	8.1	7x10x4	220	2,000	50x37	SDHC Card	36-180	15
11	SONY Cyber-shot DSC-W130	126	8.1	6x9x2	151	3,200	50x38	MemStick Duo	32-128	7
12	CASIO Exilim EX-Z200	199	10.1	6x10x2	150	1,600	58x37	SDHC Card	28-112	33
13	PANASONIC Lumix DMC-FX35	220	10.1	6x10x3	147	1,600	50x37	SDHC Card	25-100	22
14	SONY Cyber-shot DSC-T300	240	10.1	6x11x2	177	3,200	76x43	MemStick Duo	33-165	10
15	NIKON Coolpix L18	90	8.0	6x10x3	175	1,600	60x45	SDHC Card	35-105	13
16	NIKON Coolpix S550	149	10.0	6x10x2	135	2,000	50x37	SDHC Card	36-180	13
17	SAMSUNG Digimax i8	120	8.2	6x9x2	139	1,600	54x41	SDHC Card	38-114	14
18	SAMSUNG NV24HD	160	10.1	7x10x3	169	1,600	51x39	SDHC Card	24-85	14
19	FUJIFILM FinePix J50	100	8.2	6x10x4	160	800	54x40	SDHC or xD Card	37-185	14
20	KODAK EasyShare V1273	155	12.0	6x10x3	167	3,200	60x45	SDHC Card	37–111	19
21	OLYMPUS FE-350 Wide	138	8.0	6x10x3	154	640	60x54	xD Card	28-112	13

a Only without sound, otherwise only digital zoom

MODEL		SPECIFICATION							
		PRICE (£)	RESOLUTION (Mp)	SIZE (cm) (h x w x d)	WEIGHT (g)	MAXIMUM ISO	LCD SCREEN (mm) (w x h)	MEMORY CARD TYPE	
DSLR MODEL AND LENS									
22	CANON EOS 450D + 18-55mm IS	500	12.2	10x13x15	785	1,600	60x40	SDHC Card	
23	SONY alpha 350 + 18-70mm DT	490	14.2	10x14x16	965	3,200	54x36	CF Card	
24	PENTAX K200D Kit + 18-55mm DA AL	450	10.2	11x14x16	1,010	1,600	54x36	SDHC Card	
25	OLYMPUS E-420 Kit + 14-42mm ED	407	10.0	10x14x14	683	1,600	54x40	CF or xD Card	
26	PENTAX K20D Kit + 18-55mm DA AL	750	14.6	11x15x16	1,090	6,400	54x36	SDHC Card	

b Applies to the supplied 18-55mm kit lens

Note: Compact cameras and DSLRs go through the same tests in their automatic mode and their 'manual' mode (with custom white balance and manual focusing). The results of DSLRs and compact digital cameras are non-comparable in regard to image quality, nor are the final overall scores comparable. However, other

				WHICH? TEST PERFORMANCE										SCORE %
FACE DETECTION	CONTINUOUS SHOOTING	IMAGE STABILISATION	MOVIE ZOOM	START-UP TIME (s)	SHUTTER DELAY (s)	SHOT-TO-SHOT TIME (single shot)	PICTURE QUALITY	MOVIE QUALITY	VIEWFINDER/ SCREEN	FLASH	BATTERY LIFE	EASE OF USE		
✓	unlimited	sensor	optical ^a	3.14	0.89	2.43	★★★★★	★★	★★★★★	★★★★★★	★★★★★★	★★★★★	73	
✓	unlimited	optical	digital	1.60	0.43	1.94	★★★★★	★★★★	★★★	★★★★★★	★★★★★★	★★★★★	72	
✓	unlimited	optical	digital	1.93	0.41	2.01	★★★★★	★★★★	★★	★★★★★★	★★★★★★	★★★★★	70	
✓	unlimited	sensor	no	2.54	0.81	2.51	★★★★	★★	★★★	★★★★★★	★★★★★★	★★★★★	69	
✓	unlimited	sensor	digital	1.79	0.52	1.8	★★★★	★★	★★★	★★★★★★	★★★★★★	★★★★★	67	
✓	100	optical	no	2.43	0.27	1.52	★★★★	★★	★★★	★★★★★★	★★★★★	★★★★★	67	
✓	unlimited	optical	optical	2.51	0.54	1.21	★★★★	★★	★★★★★	★★★★★★	★★★★★★	★★★★★	66	
✓	unlimited	optical	optical	3.19	0.85	1.58	★★★★	★★	★★★	★★★★★★	★★★★★★	★★★★★	66	
✓	unlimited	digital	digital	3.55	0.35	3.93	★★★★	★★	★★★	★★★★★	★★★★★★	★★★★★	64	
✓	unlimited	optical	digital	4.12	0.99	2.95	★★★★	★★	★★★	★★★★★	★★★★★★	★★★★★	63	
✓	100	optical	no	2.05	0.31	1.78	★★★★	★	★★	★★★★★	★★★★★★	★★★★★	63	
✓	unlimited	sensor	digital	2.62	0.33	7.57	★★★★	★★	★★★	★★★★★★	★★★★★	★★★★★	62	
✓	unlimited	optical	no	3.30	0.99	2.03	★★★★	★★	★★★	★★★★★★	★★★★★	★★★★★	62	
✓	100	optical	optical	2.70	0.30	1.84	★★★★	★★	★★★	★★★★★★	★★★★★	★★★★★	62	
✓	unlimited	digital	digital	3.55	0.90	2.04	★★★★	★★	★★★	★★★★★	★★★★★★	★★★★★	61	
✓	unlimited	digital	digital	2.88	1.16	2.68	★★★★	★★	★★★	★★★★★★	★★★★★★	★★★★★	61	
✓	unlimited	digital	optical	2.02	0.38	1.67	★★★★	★★	★★★	★★★★★	★★★★★	★★★★★	60	
✓	unlimited	optical	optical ^a	2.09	0.37	2.06	★★★★	★★	★★★	★★★★★★	★★★★★	★★★★★	60	
	3	digital	no	3.04	0.69	4.67	★★★★	★★	★★★	★★★★★	★★★★★★	★★★★★	59	
✓	3	digital	optical	4.06	0.55	1.50	★★★★★	★★	★★	★★★★★	★★★★★	★★★★★	56	
✓	no	digital	optical ^a	4.03	1.31	4.58	★★★★	★★	★★★	★★★★★★	★★★★★	★★	47	

				WHICH? TEST PERFORMANCE										SCORE %
SCENE MODES	FACE DETECTION	CONTINUOUS SHOOTING	IMAGE STABILISATION	START-UP TIME (s)	SHUTTER DELAY (s)	SHOT-TO-SHOT TIME	PICTURE QUALITY (AUTOMATIC)	PICTURE QUALITY (MANUAL)	VIEWFINDER/ SCREEN	FLASH	BATTERY LIFE	EASE OF USE		
6		unlimited	optical ^b	0.61	0.23	0.38	★★★★	★★★★	★★★★★	★★★★★	★★★★★	★★★★★	70	
6		unlimited	sensor	0.77	0.18	0.57	★★★★	★★★★	★★★	★★★★★	★★★★★	★★★★★	70	
13		unlimited	sensor	0.46	0.28	0.35	★★★★	★★★★	★★★★★	★★★★★	★★★★★	★★★★★	67	
21	✓	unlimited	digital	1.49	0.29	0.31	★★★★	★★★★	★★★★★	★★★★★	★★★★★	★★★★★	65	
0		unlimited	sensor	0.36	0.23	0.31	★★★★	★★★★	★★★★★	★★★★★	★★★★★	★★★★★	63	

Each camera therefore comes out with two scores: an automatic score and a manual score. For the compact cameras, star ratings are awarded based on scores in automatic mode. For the DSLRs we use the manual scores. scores, including ease of use, speed scores and battery life are directly comparable. You can improve DSLR performance by fitting a better-quality lens.