

Index

Symbols & Numbers

16-bit file, 299
 16-bit images, 256
 35mm equivalents, 46
 3D artwork photographing steps, 386
 8-bit file, 299
 8-bit images, 256

A

AA batteries for
 insurance photography, 360
 travel photography, 219
 accessory flash for
 field research photography, 368
 sports photography, 143
 accessory flash unit, 98
 action
 defined, 311
 Photoshop action setting, 311
 Photoshop batch processing action, 313
 action capturing in sports photography,
 138
 Adjustment layer for JPEG workflow, 292
 Adjustment layer mask, 292
 adjustment layers, 271
 adventure racing photography, 147
 aerial photography challenges
 Plexiglass windows, 222
 transportation preparation, 222
 vibration, 222
 aerial photography tips, 224
 airplane shooting. *See* aerial photography
 alkaline AAs, 16
 analogous colors, 383
 angle of view, 345, 348
 aperture
 defined, 20, 23
 setting aspects, 59, 63
 aperture priority (AV), 24
 aperture priority mode (AV), for exposure setting,
 22
 aperture setting for
 fireworks photography, 427
 large product photography, 412
 small product photography, 410
 aperture size, determining, 64
 aquarium photography considerations
 flash, 201
 ISO settings, 201
 polarizing filter, use of, 201
 archery photography, 146
 architectural photography using
 DSLR cameras, 8

 point-and-shoot cameras, 8
 tripod, 29
 archival storage
 CDs, 314–315
 DVDs, 314–315
 floppy disks, 314–315
 hard drives, 314
 magnetic tapes, 314–315
 archiving methods for
 heavy shooters, 318
 light shooters, 315
 medium shooters, 317
 artist and graphic artist's photography checklist,
 375
 artist and graphic artist's photography
 considerations
 lighting set up, 376
 mini studio setting, 378
 neatness factor, 376
 photography-friendly background, 376
 props using, 376
 artist photography
 lighting considerations, 385
 of 3D artwork, 386
 of painting, 385
 auto racing photography of
 hot rod, funny car auto racing event, 149
 NASCAR-style auto racing event, 148
 small track auto racing event, 148
 autofocus in sports photography, 138, 140
 automobile lights photography considerations
 ISO settings, 428
 reflection factor, 429
 shutter speed, 428
 automobile photography checklist, 345
 automobile photography, considerations
 angle of view, 345, 348
 automobile shot, composing of, 348
 depth of field, 345, 349
 focal length, 345, 349
 polarizing filters, use of, 345–346
 reflections and glare, dealing with, 346
 shoot planning, 345
 wide-angle lens, use of, 349
 awards ceremonies, photographing
 challenges, 392
 checklist, 392

B

back lighting, 24, 98
 backdrop for
 for portrait, 120
 plants and flowers photography, 186

462 Index ♦ B–C

- background for
 - artist and graphic artist photography, 376–377
 - digital presentation, 406
 - large product photography, 412
 - occasional photography, 328
 - small product photography, 410
 - background choices for portrait photography, 119
 - background image, 63
 - backlighting for urban landscapes, 210
 - backscatter, 203
 - backup files
 - creating, 290
 - for raw workflow, 299
 - backups, 287
 - bad weather photography
 - dealing with elements for cameras, 87
 - dealing with elements for humans, 86
 - using digital camera, 77, 85
 - bad weather photography recommendations
 - camera raincoats, 88
 - desiccant packets, 88
 - fresh batteries, 87
 - badminton photography, 147
 - baseball photography, 149
 - basketball photography, 150
 - batch processing, 311
 - batch processing action, creating of, 313
 - batch processing steps, 313
 - batteries for
 - digital photography, 10
 - field research photography, 369
 - insurance photography, 360
 - nature photography, 180
 - occasional photography, 325
 - real estate photography, 334
 - beanbags for nature photography, 183
 - bedroom photography, 129
 - beginning photo for picture stories, 236, 242
 - Better Beamer, 368
 - biathlon photography, 151
 - bicubic interpolation, 284
 - billiards and pool photography, 152
 - bird photography considerations, 187
 - blinds
 - defined, 193
 - for conference photography, 414
 - blue screening, 119
 - blur for creative effect, 441
 - bobsledding photography, 152
 - bounce flash, 378
 - bowling photography, 153
 - boxing photography, 153
 - bracketing, 439
 - broad lighting, 116
 - buffer, 10
 - built-in flash for
 - digital photography, 91, 99
 - insurance photography, 363
 - built-in light metering systems
 - center metering, 96
 - center-weighted averaging, 96
 - evaluative, multisegment, or matrix metering, 96
 - spot metering, 96
 - bullfighting photography, 154
 - butterflies, shooting considerations, 183
 - butterfly lighting, 116
- ## C
- camera bag characteristics
 - box stitching, 27
 - flap, 27
 - material, 27
 - padding, 27
 - shoulder strap, 27
 - camera bags
 - handling, 26
 - styles and options, 25
 - for occasional photography, 325
 - camera basics
 - output, 5
 - resolution, 5
 - camera control
 - aperture settings, 59
 - shutter speed settings, 59
 - camera fixing, 448
 - camera positioning
 - digiscoping, 53
 - nature photography, 181
 - for panoramic photography, 79
 - occasional photography, 326
 - travel car photography, 227
 - camera problems checklist
 - battery contact problems, 329
 - battery failure, 329
 - broken camera, 329
 - camera lockup, 329
 - mis-seated memory cards, 329
 - camera supports, 31
 - camera to computer image capturing
 - camera controls, 250
 - software options, 250
 - candid photography, 105, 124, 133
 - canoeing photography
 - flat water, 154
 - white water, 154
 - captive animals photography, 179, 197
 - captive demonstrations. *See* captive animals photography
 - capturing. *See* image capturing
 - car travel photography considerations
 - camera positioning, 227
 - lighting aspects
 - head and tail lights, 226
 - night lights, 226
 - neon signs, use of, 226
 - reflections, 226
 - window mount/ball head combinations, 227
 - card reader, 251
 - card reader types
 - PCMCIA card, 12
 - USB version 1 and version 2.0, 12
 - catalog, setting up, 308

- cataloging system for image management, 307
 - CD-ROM for digital photography, 17–18
 - CDRW for digital image processing, 12
 - CDs for
 - digital image processing, 12
 - heavy shooters, 318
 - image archiving, 319
 - light shooters, 316
 - medium shooters, 317
 - center metering system, 96
 - center-weighted averaging system, 96
 - cheerleading photography, 154
 - Clamshell lighting, 130
 - close focusing
 - using LCD screen, 69
 - defined, 66
 - close-up lenses, 6, 70
 - close-up photography
 - for graphic artist photography, 384
 - for picture stories, 242
 - of flowers without lighting improvements, 74
 - close-up photography tools
 - close-up lens, 70
 - extension tubes, 70
 - LCD finder, 68
 - tele-converters, 70
 - clothing photography
 - exposure compensation, 419
 - lighting aspects, 416
 - model employing aspects, 416–417
 - color bit depth, 254
 - color casts, 19, 20
 - Compact Flash cards, 9
 - company newsletter photography. *See* newsletter photography
 - complementary colors, 383
 - composition for
 - digital photography, 34
 - plants and flowers photography, 186
 - conference photo shooting steps
 - lighting aspects, 414
 - reflection factor, 414
 - continuation images for picture stories, 236, 242
 - continuous shooting mode, 24
 - contrast, 92
 - contrast masking steps, 274
 - copy stand, 381
 - creative blur and zoom, 441
 - cricket photography, 155
 - cropping
 - defined, 81
 - for image processing purpose, 260
 - of JPEG files, 291
 - of raw format, 301
 - cruise ship travel photography
 - equipment, 228
 - perspective, 228
 - window considerations, 229
 - curling photography, 155
 - curves controlling aspects
 - curve adjusting steps, 269
 - fine color tuning, 269
 - white, black, and gray points setting steps, 268
 - cycling photography, 155
- D**
- daylight film, 19
 - DEP mode for
 - landscape photography, 208
 - exposure setting, 22
 - depth of field
 - controlling aspects, 63
 - exposure setting modes, depending on, 22
 - for automobile photography, 345, 349
 - for background image, 63
 - for foreground image, 63
 - for graphic artist photography, 384
 - for informal portrait, 122
 - for interior photography, 340
 - for landscape photography, 206–207
 - for public relations photography, 391
 - image sharpness, 64
 - maximizing via tripod, 29
 - of telephoto lens, 50, 55
 - destructive image sharpening, 277. *See also* nondestructive image sharpening
 - detail photos for picture stories, 237, 243
 - Dfine, for image processing, 283
 - diamond pose, 114
 - diffuser for
 - digital photography, 100
 - field research photography, 369
 - formal portrait, 109
 - insurance photography, 360
 - plants and flowers photography, 185
 - swimsuit photography, 132
 - digiscoping, 8
 - digiscoping, comparison with
 - point-and-shoot digital camera, 53
 - spotting scope, 53
 - telephoto lens, 53
 - digital camera
 - accessories, 15
 - advantages, 4
 - aperture settings, 59, 63
 - batteries, 15
 - built-in light meters, 96
 - exposure compensation, 23
 - exposure control, 23
 - features, 4
 - file format options, 252
 - flash units, 28
 - for artist photography, 385
 - for fireworks photography, 425
 - for image management, 304
 - for insurance photography, 360
 - for landscape photography, 206
 - for moving water photography, 424
 - for occasional photography, 327
 - for panoramic photography, 82
 - for picture stories, 241

Continued

464 Index ♦ D

- digital camera (*continued*)
 - for real estate photography, 333
 - for sports photography, 137
 - for travel photography, 215
 - for underwater photography, 202
 - ISO settings, 20
 - lens choosing, 9
 - megapixel cameras, 5
 - memory, 16
 - panoramic photo, 79
 - quality light aspects, 91
 - quality settings, 18
 - resolution, 18
 - response time, 59–60
 - settings, 15
 - shutter speed, 60–61
 - shutter speed settings, 59
 - weather worries, 77, 85
- digital camera accessories
 - camera bags, 25
 - flash units, 27
 - monopods, 28
 - stabilizers, 28
 - tripods, 28
- digital camera advantages
 - audio or video recording capability, 4
 - price-to-power comparison, 4
 - resolution, 4
- digital camera batteries
 - lithium-ion batteries, 16
 - nickel-cadmium batteries, 15
 - nickel-metal-hydride batteries, 16
- digital camera, choosing, 3–4
 - camera requirements, 9
 - extra features, 9
 - home computer features, 10
 - photography kind, 7
- digital camera items
 - batteries, 10
 - buffer, 10
 - LCD screen, 10
 - lens, 9
 - memory, 9
- digital camera operation, 15
- digital camera sensors, 253–254
- digital color filtering steps, 274
- digital darkroom, 249, 259
- digital image processing, 259
- digital image
 - defined, 4
 - quality, 23
- digital imagery, 304. *See also* image management
- digital memory types
 - compact flash cards, 17
 - memory sticks, 17
 - smart media cards, 17
- digital photo processing accessories, 12
- digital photography types
 - artists, 385
 - artists and graphic artists, 375
 - automobile photography, 345
 - business photography, 409
 - graphic artists, 376
 - insurance photography, 359
 - newsletter photography, 351
 - public relations photography, 389
 - realtors, 333
 - unusual images, 421
- digital photography advantages
 - built-in LCD screen, 3
 - over film, 3
 - reproducibility, 4
- digital photography definitions
 - aperture, 431
 - ball head, 431
 - bokeh, 431
 - bracket, 431
 - depth of field, 432
 - diffusion, 432
 - digital single lens reflex (DSLR), 432
 - digital zoom, 432
 - dynamic range, 432
 - FireWire, 432
 - firmware, 432
 - focal length, 432
 - four-thirds, 433
 - f-stop, 433
 - highlight, 433
 - interpolation, 433
 - microdrive, 433
 - motor drive, 433
 - pan/tilt head, 433
 - panning, 433
 - pentaprism, 433
 - red-eye, 433
 - selective focus, 435
 - sensor, 435
 - shutter, 435
 - shutter speed, 435
 - single lens reflex (SLR), 435
 - souping, 435
 - tele-converter, 435
 - white balance, 436
 - zone system, 436
- digital photography techniques, 437
- digital photos, 249
- digital presentation
 - color factor, 406
 - image quality, 405
 - images per slide, 405
 - understandable image creating options, 404
 - use of effects, 407
 - using vertical images, 405
- digital presentation elements
 - body, 402
 - conclusion, 403
 - introduction, 402
- digital presentation planning
 - message communication aspects, 400
 - presentation length, 401
 - shot list, creating of, 401
 - storyboard, creating of, 401
- digital presentation creating, 399, 403
- digital sensors, 23
- digital single lens reflex, 4

- digital single lens reflex (DSLR) cameras. *See* DSLR cameras
 - digital slide presentation, 399
 - digital workflow, 287
 - diopter
 - close-focusing capability, 70
 - defined, 70
 - magnification aspects, 70
 - dodging and burning steps, 272
 - dodging and burning tools, 272
 - domes, 378
 - Droplets, 313
 - DSLR. *See* digital single lens reflex
 - DSLR camera features
 - close-up photography, 6
 - costs, 7
 - focal length variety, 6
 - interchangeable lenses, 6
 - weight, 7
 - DSLR cameras
 - control settings, 15
 - for field research photography, 368
 - for landscape photography, 206, 208
 - for moving water photography, 424
 - for nature photography, 197
 - for product photography, 413
 - for wild animal photography, 189
 - ISO settings, 20
 - resolution, 4
 - telephoto lens, 47
 - dust spots, checking in JPEG workflow, 293
 - dust spotting steps, 276
 - DVDs for
 - digital image processing, 12
 - heavy shooters, 318
 - image archiving, 319
 - light shooters, 316
 - medium shooters, 317
 - dynamic range of photograph, methodology of, 440
- E**
- environmental portraiture, 124
 - equestrian photography, 156
 - establishing shot for
 - digital presentation, 404
 - picture stories, 235, 241
 - evaluative, multisegment, or matrix metering system, 96
 - EXIF. *See* Extended File Information
 - exposure, 63
 - exposure compensation, 23, 255
 - exposure compensation settings
 - for occasional photography, 327
 - lighting conditions, 19, 23–24
 - negative, 23
 - positive, 23
 - exposure control, 23
 - exposure correction process
 - histogram reading, 263
 - setting of levels, 264
 - understanding, 262
 - working with curves, 267
 - exposure setting modes
 - aperture priority mode, 22
 - DEP mode, 22
 - landscape mode, 22
 - macro mode, 22
 - manual mode, 20
 - portrait mode, 22
 - program mode, 21
 - shutter priority mode, 22
 - sports mode, 22
 - Extended File Information (EXIF) files, 305
 - exterior photography
 - flash units, use of, 336
 - illumination issues, 336
 - zooming aspects, 336
 - extreme focal lengths for plants and flowers photography, 186
- F**
- family gatherings shooting, 132
 - fast shutter speeds, 61
 - fencing photography, 157
 - field photography. *See* field research photography
 - field research photography challenges, 367
 - field research photography checklist
 - 10 essentials, 369
 - batteries, 368
 - diffuser, 369
 - memory, 369
 - reflector, 369
 - tarps, 369
 - field research photography lighting considerations
 - bringing out detail, 371
 - color of light
 - flash unit, use of, 372
 - white balance feature, 372
 - polarizing filter, 371
 - reflector/diffuser, 370
 - ring light, 371
 - file compression format. *See* JPEG file format
 - file format
 - compressed, 253
 - JPEG, 253
 - raw, 253
 - TIF, 252
 - uncompressed, 252
 - file preparation for image processing
 - cropping, 260, 262
 - image rotating, 260
 - keystoning, 260–261
 - file resolution, 19
 - fill flash for exterior photography, 336
 - fill light positioning, 115
 - finishing shot for picture stories, 237, 243
 - FireWire, 250
 - fireworks photography
 - aperture settings, 427
 - ISO settings, 427
 - lens zooming aspect, 427
 - using DSLR camera
 - exposure factor, 425

Continued

466 Index ♦ **F–G**

- fireworks photography (*continued*)
 - noise reduction, 425
 - shutter speed, 425
 - using point-and-shoot camera
 - exposure factor, 426
 - noise reduction, 426
 - shutter speed, 426
 - fish-eye lens, 47
 - fishing photography, 158
 - flash settings for occasional photography
 - programmed flash, 327
 - red-eye reduction, 327
 - straight or fill flash, 327
 - flash unit
 - choices and options, 27
 - for aquarium photography, 201
 - for automobile lights photography, 428
 - for awards ceremony photography, 393
 - for conference photography, 414
 - for DSLR cameras, 28
 - for field research photography, 368, 371
 - for graphic artist photography, 378
 - for occasional photography, 327
 - for public relations photography, 391
 - for underwater photography, 203
 - PC connection feature, 28
 - point-and-shoot camera, 28
 - slaved flashes, 28
 - FlashTrax, 218
 - flat lighting, 24
 - flat water
 - canoeing photography, 154
 - kayaking photography, 154
 - floodlights, 118
 - flower close-up without additional lighting
 - project
 - reflector positioning, 75
 - shutter release aspects, 74
 - using supplemental light, 74
 - flowers photography
 - close-up, 74
 - macro, 72
 - focal length
 - defined, 9
 - for automobile photography, 345, 349
 - for bird photography, 187
 - focal length, using creatively
 - via telephoto lens, 54
 - via wide-angle lens, 54
 - focal length, options
 - normal lens, 46
 - telephoto, 47
 - wide-angle, 47
 - focal lengths, artistic effect
 - using telephoto lens, 55
 - using wide-angle lens, 55
 - focus settings for occasional photography, 327
 - focusing options
 - selective focusing, 64
 - zone focusing, 64
 - focusing rail, 71
 - football (American-style) photography, 158
 - foreground image, 63
 - formal portrait, 105–106
 - family portrait, 113
 - group portrait, 113
 - lighting, 114
 - setting up, 109
 - formal portrait accessories
 - backdrops, 109
 - light modifiers, 109
 - lighting, 108
 - posing aids, 109
 - reflectors, 109
 - formal portrait lighting set-ups
 - butterfly lighting, 116
 - fill light, 115
 - main light, 115
 - formal portrait shooting steps
 - eyeglasses, handling of, 111
 - subject's appearance, 112
 - subject's clothing, 110
 - subject's expression, 112
 - subject's positioning, 110
 - formal portraiture. *See* formal portrait, 106
 - fractals, 285
 - framing, 35
 - Fresnel lens
 - for field research photography, 368
 - front lighting, 96
 - f-stop, 63
 - for landscape photography, 208
- ## G
- garage work lights, 118
 - ghoul lighting, 98
 - glamor lighting
 - Clamshell lighting, 130
 - glamor photography, 105, 128
 - categories, 128
 - glamor photography categories
 - boudoir, 129
 - nudes, 129
 - portraiture, 128, 130
 - swimsuit, 129–130
 - glare considerations for automobile photography, 346
 - golden light, 92
 - golf photography, 160
 - graphic artist photography
 - close-up photography, working with, 384
 - color managing aspects, 377
 - color using aspects, 383
 - light considerations, 384
 - mini studio setting at low budget, 381
 - sepia-toned shot creating project, 383
 - shallow depth of field factor, 384
 - graphic artists photography, 375
 - gray fill technique steps, 273
 - green screening, 119
 - grip-n-grin photo, 392. *See also* newsletter photography.
 - grip-n-grin problems for public relations photography, 392

grip-n-grins shots for public relations
 photography, 394
 group portraiture, 114
 group shots, 133
 gymnastics photography, 161

H

hard drive space, 11
 haze burning, 277, 294
 head shots, 356
 high-contrast condition photography, 98
 high-contrast lighting, 24
 High Pass filter sharpening technique, 278. *See also*
 Unsharp Mask filter sharpening technique
 high-angle shots, 39
 high-contrast light handling
 block light, 95
 filter light, 94
 for insurance photography, 363
 image recompositioning, 94
 light balancing aspects, 94
 high-contrast lighting, 91–92
 high-pass sharpening, 294–295
 high-resolution file for panoramic photography,
 83
 histogram view, 263
 hockey photography
 for ice hockey, 162
 for on field hockey, 163
 home computer, digital image processing
 requirements
 card readers, 12
 hard-drive space, 11
 RAM, 10
 removable storage medium, 12
 home exterior. *See* exterior photography
 home interior. *See* interior photography
 home portrait studio setting up steps
 backdrop adding, 120
 basic light mounting, 120
 basic light sources, determining of, 119
 light modifiers, deciding on, 120
 subject's seating aspects of, 120
 setting tripod using, 120
 use of flood light, 119
 hyper-focal distance, 206

I

image archiving, 303
 image browser software, 309
 image capturing
 raw mode, 289, 298
 using computers, 249
 via digital means, 249
 image capturing and reviewing
 in JPEG workflow, 289
 image capturing and reviewing phase
 in raw workflow, 298
 image capturing methods. *See* image transfer
 methods
 image cataloging programs, 307–308
 image capturing
 JPEG mode, 289
 image correction process. *See* exposure correction
 process
 image cropping steps, 262
 image editing programs, 256
 image editing software, 84
 image files, organizing steps, 308
 image frame, 33
 image levels
 highlight, 264
 midtone, 264
 shadow, 264
 image levels setting, steps, 264
 image management
 adding keywords, 303
 image cataloging, 303
 image naming, 303
 photo archive, organizing of, 303, 316
 plan creating, 303
 image management software, 308
 image management system development
 aspects
 actions and batch processing, use of, 311
 digital camera, use of, 305
 information recording, 304
 IPTC data, 306
 keywording, 306
 image mixing aspects of picture stories
 photos with a sense of direction, 238
 story ending, 240
 vertical shots, including of, 237
 image processing. *See* digital image processing
 image processing considerations
 exposure correction, 262
 file preparation, 260
 high-contrast images, 274
 image noise problems handling, 279
 image resolution aspects, 283
 image sharpening aspects, 276
 image tweaking methods, 273
 masking and selection aspects, 279
 programs for image processing, 283
 spotting and image repair, 275
 tonal range, 273
 image processing phase
 in JPEG workflow, 291
 in raw workflow, 300
 image processing programs
 Dfine, 283
 Intellihance, 283
 image processing workflow. *See* workflow
 image quality settings
 color casts, 19
 daylight, 19
 ISO settings, 20
 resolution, 19
 white balance (WB), 19
 image resolution. *See* resolution
 image resolution increase
 using bicubic interpolation, 284
 using third-party solutions
 using fractal math, 284
 using Pixel Smartscale, 285
 image rotating steps, 260

468 Index ♦ I-L

- image rotation
 - in JPEG workflow, 292
 - in raw workflow, 301
 - image sharpening technique
 - destructive, 277
 - nondestructive, 278
 - using Unsharp Mask filter, 277
 - image sharpness
 - aperture settings, 64
 - focal length, 64
 - from foreground to background, 64
 - f-stop factor, 64
 - image transfer methods
 - camera to computer, 249
 - media to card reader device, 250–251
 - PC card adapter to laptop PC card slot, 250
 - PC card adapters, 252
 - image tweaking methods
 - contrast masking technique, 274
 - digital color filters, use of, 274
 - gray fill, 273
 - industrial landscapes
 - composition, 206
 - lighting considerations, 211
 - informal portrait, 105
 - informal portrait shooting
 - depth of field, 122
 - lens choice, 122
 - light balancing, 122
 - informal portraiture. *See* informal portrait, 121
 - inset image, 404
 - insurance photography camera considerations, 360
 - insurance photography checklist
 - batteries, 360
 - flash unit, 360
 - memory, 360
 - portable printer, 360, 362
 - portable printer options, 361
 - power inverter, 360, 362
 - reflector/diffuser, 360
 - insurance photography lighting aspects
 - contrast issues, 363
 - high-contrast light, 363
 - low-contrast filters, use of, 364
 - ultra-contrast issues, 364
 - use of built-in flash, 363
 - insurance photography print making
 - considerations
 - finding emergency printing solutions, 362
 - printer choosing, 361
 - printer powering aspects, 362
 - insurance photography using point-and-shoot cameras, 364
 - IntelliHance for image processing, 283
 - interior photography, 333
 - lighting aspects, 339
 - of large interior spaces, 340
 - white balance considerations, 339
 - International Press Telecommunications Council (IPTC), 306
 - IPTC. *See* International Press Telecommunications Council
 - ISO settings
 - color degradation, 20
 - for aquarium photography, 201
 - for automobile lights photography, 428
 - for fireworks photography, 427
 - for noise problem handling, 279
 - for occasional photography, 326
 - for point-and-shoot cameras, 24
 - for product photography, 416
 - lens opening and shutter speed, 20
 - light sensitivity, 20
- J**
- JPEG compression, 290
 - JPEG file format, 253
 - JPEG workflow image capturing and reviewing steps
 - backup files, creating of, 290
 - CD burning, 290
 - file renaming, 290
 - image capturing, 289
 - image reviewing, 289
 - JPEG workflow image printing steps
 - high resolution selection, 297
 - image sharpening and resizing, 296
 - resizing, 297
 - JPEG workflow image processing steps
 - Adjustment layer, creating of, 292, 295
 - dust spot checking, 293
 - file cropping, 291
 - image rotation, 292
 - image sharpening aspects
 - haze burning, 294
 - High Pass sharpening, 295
 - JPEG workflow
 - defined, 289
 - differences with raw workflow, 298
 - JPEG/TIFF versus raw format, 287
 - JPEG/TIFF workflow, 289. *See also* raw workflow.
 - JPEG/TIFF workflow phases
 - image capturing and reviewing, 289
 - image processing, 291
 - printing, 296
- K**
- kayaking photography
 - flat water, 154
 - white water, 154
 - keystone effect, 8, 48
 - keystoning
 - for real estate photography, 335
 - steps to deal with it, 261
 - keyword cataloging system, 307
 - keywording, 288
 - keywording system for image management, 306
- L**
- lacrosse photography, 163
 - landscape mode, for exposure setting, 22
 - landscape photography
 - industrial, 205–206

- natural, 205
 - rural, 205–206
 - tripod use, 29
 - urban, 205–206
 - landscape photography, technical considerations
 - depth of field, 206, 207
 - DSLR camera using, 206–207
 - focusing aspects, 207
 - f-stop, 208
 - hyper-focal distance, 206
 - point-and-shoot camera, using, 206–207
 - shutter speed, 208
 - zoom lens, 207
 - laptop alternatives for travel photography
 - FlashTrax, 217
 - Sima Image Tank, 216
 - large product photography considerations
 - background, 412
 - lighting factor, 412
 - large product shooting steps, 412
 - LCD screen
 - as Viewfinder, 447
 - drawbacks, 446
 - for exposure evaluation, 447
 - for occasional photography, 328
 - for travel photography, 218
 - LCD viewer, 39
 - leading lines
 - curved lines, 37
 - defined, 36
 - straight lines, 37
 - lens
 - angular aspects, 40
 - artistry, 45, 55
 - choices, 45
 - cropping, 77
 - focal length, 45
 - for sports photography, 143
 - lens choice, 9
 - lens opening and shutter speed settings. *See also* exposure setting modes
 - lens opening. *See* aperture
 - light controlling for real estate photography, 334
 - light direction
 - back lighting, 98
 - determining of, 91, 96
 - for nature photography, 183
 - front lighting, 96
 - side lighting, 96
 - light falloff problem, 202
 - light modifiers for portrait photography, 120
 - light ratings for films
 - daylight, 19
 - infrared, 19
 - tungsten (studio), 19
 - lighting aspects
 - conference photography, 414
 - for insurance photography, 363
 - for large product photography, 412
 - for photographing clothing, 417
 - for small product photography, 410
 - lighting conditions, 19, 23
 - lighting conditions, settings for
 - back lighting, 24
 - flat lighting, 24
 - high-contrast lighting, 24
 - point-and-shoot cameras, 24
 - Li-ions. *See* lithium-ion batteries
 - lithium-ion batteries, 16, 88
 - low-angle shots, 39
 - low-contrast filters for insurance photography, 364
- ## M
- macro lens, 50
 - macro mode for exposure setting, 22
 - macro photography
 - comparison with close-up photography, 66, 72
 - creativity factor, 71
 - depth of field, 71
 - lighting, 73
 - of miniature kingdoms, 72
 - textures, 72
 - understanding of, 59
 - macro photography lighting forms
 - accessory flash, 73
 - off-camera flash, 73
 - reflector, 73
 - ring light, 73
 - magnification
 - diopeter designation, 70
 - of telephoto lens, 50
 - manual mode for exposure setting, 21
 - masking, 271, 279
 - masking and selections, 279
 - Mask-Pro, 282
 - master catalog, 308
 - master images catalog, 310
 - media to card readers
 - FireWire card reader, 251
 - pro and cons, 251
 - medium range lens, 46
 - medium zoom lens, 144
 - megapixel cameras, 4, 18
 - megapixel file, 19
 - megapixel images, 5
 - memory for
 - field research photography, 369
 - insurance photography, 360
 - nature photography, 181
 - real estate photography, 334
 - memory cards, 16
 - memory effect, 16
 - mini studio setting at low budget
 - clamps using, 381
 - fabric used, 381
 - props used, 381
 - reflectors, 382
 - mini studios, 378
 - mini-pods for nature photography, 183
 - mirror lens, 47

470 Index ♦ **M–P**

mobile photography platforms
 cars, 227
 pick-up trucks, 227
 sport utility vehicles (SUVs), 227
 monopods
 for nature photography, 183
 use of, 30
 motion following in sports photography,
 140
 motion freezing
 in sports photography, 142
 using flash, 143
 motorcycle racing photography, 163
 motorcycle stunt events photography, 164
 moving water photography considerations
 shutter speed, 422
 tripod settings, 424
 multimedia presentation. *See* digital presentation
 multiplier effect, 46

N

nature photography
 aquarium photography, 199, 201
 basics, 179
 bird photography, 187, 195
 captive animals, 179, 197
 equipment considerations, 180
 insect photography, 184
 nature preserves, 179, 191
 plants and flowers photography, 185
 quickshooting aspects, 181
 remote camera, setting of, 196
 spiders and insects, 183
 underwater photography, 201
 wild animals photography, 189, 192
 wild creatures, 179
 wildlife sanctuaries, 179, 191
 zoo photography, 199
 nature photography equipment
 beanbags, 183
 mini-pods, 183
 monopods, 182
 tripods, 183
 nature photography ethics, 203
 nature photography requirements
 high-budget constraints, 7
 long zoom range, 7
 nature preserves photographing, 179, 191,
 195
 newsletter photography composing aspects
 camera angles, varying of, 353
 horizontal versus vertical images, 355
 picture direction, 355
 shooting on location, 354
 newsletter photography considerations
 composition and direction, mixing of,
 357
 event site, visiting of, 356
 event timing, 357
 event visualizing, 356
 shot listing aspects, 356
 shooting on location, 351

newsletter photography checklist, 351
 appropriate work center contacting, 352
 shooting script, preparing of, 352
 newsletter photography traps
 awards photos, 356
 grip-n-grin, 356
 group photos, 356
 head shots, 356
 Ni-Cads. *See* nickel-cadmium batteries
 nickel-cadmium batteries, 16
 nickel-metal-hydride batteries, 16, 88
 nighttime shooting. *See* automobile lights
 photography
 nondestructive dodging and burning,
 272
 nondestructive editing, 295. *See also* gray fill
 nondestructive image sharpening, 295. *See also*
 destructive image shapening
 normal lens, 46
 nude photography, 129

O

occasional photographer challenges, 323
 occasional photography equipment
 accessory items, 325
 batteries, 324
 camera bag, 325
 camera memory, 325
 memory card, 325
 occasional photography camera settings
 flash settings, 327
 focus settings, 327
 for exposure compensation, 327
 ISO setting, 326
 LCD display, 328
 resolution, 326
 occasional photography considerations
 background, 328
 sun's position, 328
 occasional photography checklist
 post-shoot checklist, 330
 pre-shoot checklist, 326
 shooting checklist, 328
 off-camera flash, 73
 online printing options for picture stories
 Image Station, 246
 Shutterfly, 246
 outdoors shooting, 179

P

paintball photography, 165
 painting photography, 385
 panoramic image stitching steps
 cloning tool, use of, 85
 image alignment, 85
 master file, creating of, 84
 using image editing software, 84
 panning, 62, 141
 panoramic camera, 78
 panoramic image, creating
 creative challenges handling, 78
 easy way, 81

- standard way, 79
- technical challenges, handling of, 78
- panoramic photograph shooting aspects
 - camera exposure, 83
 - camera mounting, 83
- panoramic photography, 77
 - camera lens positioning, 79
 - high-resolution assembling, 83
 - software options, 82
 - using digital point-and-shoot cameras, 79
- panoramic photography software system
 - Kaidan, 80
 - lpix, 80
- panoramic shot subjects, 78
- panoramic stitching software
 - Panorama Maker, 84
 - PhotoStitch, 84
- PC card adapter
 - for image capturing, 252
 - types, 252
- photo editing software, 306
- photo floods, 118
- photograph
 - composition, 34
 - framing, 35
 - leading line, 36
- photograph taking
 - angles, 38
 - composition aspects, 34
 - horizontal versus vertical orientation, 38
 - rule of thirds, 33
 - shot orientation, 33
- photographic accessories. *See* digital camera accessories
- photographic composition, 34
- photographic lighting, 117
- photographic tool
 - framing, 35
 - leading line, 36
- photographing nature. *See* nature photography.
- photography types
 - architectural photography, 8
 - nature photography, 7
 - sports photography, 7
 - underwater photography, 8
- photography workflow, developing of, 333, 341
- Photoshop, 84
 - as cropping tool, 262
 - curve controlling features, 269
 - for artist photography, 385
 - for bad weather photography, 85
 - for dealing with the keystoning effect, 261
 - for exposure correction purposes, 264
 - for graphic artist photography, 383
 - for image capturing, 250
 - for image rotating, 261
 - for JPEG format processing, 293
 - for raw format processing, 301
 - for red-eye cleaning, 443
 - graphic artist photography, 377
 - raw file format options, 256
 - Tools palette, 443
- Photoshop action setting steps, 311
- Photoshop Elements 2.0 functions
 - Quick Fix Dialog, 458
 - Selection Brush, 458
- Photoshop features
 - 16-bit editing capability, 455
 - action, 311
 - bicubic interpolation, 284
 - digital color filters, 274
 - dodging and burning, 272
 - File Browser, 454
 - Filter Gallery, 457
 - for handling of noise problems, 279
 - for panoramic photography, 82
 - haze burning, 277
 - High Pass filter, 278
 - Histogram palette, 455
 - improved image management, 454
 - keywording, 308
 - lens blur, 457
 - masking, 271
 - masking and selection, 279
 - Mask-Pro plug-in, 282
 - Match Color command, 455
 - nondestructive dodging and burning, 272
 - nondestructive editing, 270
 - Photo Filter option, 293
 - Pixel Smartscale, plug-in, 285
 - RAW file conversion, 455
 - Shadow/Highlight command, 456
 - spotting and image repair, 275
 - Unsharp Mask filter, 277
 - upressing, 284
- picture frame. *See* framing
- picture stories
 - assembling and presentation of, 245
 - creating, 233
 - digital camera using, 241
 - image mixing aspects, 237
 - key components, 233
 - online printing options, 245
 - planning, 233
- picture story elements
 - beginning photo, 236
 - continuation images, 236
 - detail photos, 237
 - finishing shot, 237
 - shot establishing, 235
 - shot list, creating of, 234
 - storyboard, creating of, 234
- picture story shooting steps
 - beginning shot shooting, 242
 - close-up photo shooting, 242
 - continuation image shooting, 242
 - detail photos shooting, 243
 - establishing shot shooting, 241
 - finishing shot shooting, 243
- Pixel Smartscale, 285
- plants and flowers photography considerations
 - backdrop creating, 186
 - composition improving, 186

Continued

472 Index ♦ P–R

- plants and flowers photography considerations
 - (*continued*)
 - extreme focal lengths, 186
 - low-angle shots, taking of, 186
 - reflector/diffuser, carrying of, 185
 - point-and-shoot camera features
 - lenses, 5
 - lightweight packaging, 6
 - point-and-shoot camera settings
 - exposure compensation, 24
 - exposure priority, 24
 - ISO settings, 24
 - resolution, 4
 - point-and-shoot cameras
 - for field research photography, 368
 - for insurance photography, 364
 - for landscape photography, 207
 - for nature photography, 187, 197
 - for product photography, 413
 - for wild animal photography, 189
 - telephoto lens, 47
 - zoom offering, 45
 - point-and-shoot versus DSLR, 3, 5
 - polarizing filter for
 - aquarium photography, 201
 - automobile photography, 345–346
 - field research photography, 371
 - portable CD drives for travel photography, 218
 - portable printer
 - for insurance photography, 361
 - powering sources, 362
 - portrait, 106
 - portrait lighting, 105
 - portrait lighting options
 - flood lights, 118
 - garage work lighting, 118
 - photographic lighting, 117
 - portrait lighting variations
 - broad lighting, 116
 - Rembrandt lighting, 117
 - short lighting, 116
 - portrait mode, for exposure setting, 22
 - portrait photography, 22. *See also* seated portrait shooting
 - background choices, 119
 - camera requirements, 107
 - candid, 106
 - formal portraits, 105
 - glamor, 106
 - informal portraits, 105
 - lighting aspects, 105, 114
 - zone focusing, 65
 - portrait photography camera requirements
 - remote controlling capability, 108
 - studio lighting capability, 107
 - tripod mounting capability, 107
 - portraiture photography, 106, 128, 130
 - PowerPoint software, 399
 - PR photo. *See* public relations photography
 - prefocus aspects for
 - nature photography, 181, 197
 - sports photography, 140
 - pre-focusing, 60
 - pre-set controls for nature photography, 180
 - preview image, 255, 308
 - printing images, 287
 - printing phase of JPEG workflow, 296
 - product photography of
 - clothing, 416
 - computer screens, 415
 - large products, 412
 - small products, 410
 - television pictures, 415
 - product shooting steps, small, 410
 - program mode for exposure setting, 21
 - PSD format, 296
 - public relations photography
 - of ceremonial shots
 - awards ceremonies, 392
 - groundbreaking ceremonies, 390
 - ribbon cutting, 390
 - using symbols, 394
 - public relations photography considerations
 - depth of field, 391
 - flash unit, 391
 - of camera angle, 391
 - wide-angle focal length, use of, 391
- Q**
- quality light
 - finding of, 92
 - for digital photography, 91
- R**
- racquetball photography, 166
 - rafting photography, white water, 154
 - RAM, 11
 - raw file format
 - 16-bit file conversion, 254, 256
 - 8-bit files, 256
 - advantages and disadvantages, 253
 - color bit depth, 254
 - defined, 253
 - exposure compensation, 255
 - file conversion requirement, 255
 - large file resolution, 255
 - maintaining original data, 254
 - software requirement, 256
 - white balance aspect, 254
 - raw workflow image capturing and reviewing steps
 - backup files, creating of, 299
 - capturing and reviewing of images, 298
 - files, renaming, 298
 - image conversion, 299
 - raw workflow image processing steps
 - file cropping, 300
 - image rotation, 301
 - levels adjustment, 301
 - raw workflow. *See also* JPEG/TIFF workflow
 - comparison with JPEG workflow, 298
 - file processing steps, 298
 - raw workflow phases
 - image capturing and reviewing, 298
 - image processing, 300

- real estate photography basics
 - equipment used, 333
 - exterior photographing, aspects of, 336
 - interior photographing, aspects of, 339
 - photographing tips, 334
 - real estate photography equipment
 - batteries, 333
 - memory, 334
 - tripod, 334
 - real estate photography tips
 - clutter elimination, 334
 - keystoning, 335
 - light control aspects, 334
 - reflective surfaces, 334
 - rechargeable batteries
 - lithium-ion, 16
 - nickel-cadmium, 15
 - nickel-metal-hydride, 16
 - red-eye reduction, 442
 - reflection for automobile lights photography, 429
 - reflector for
 - graphic artist photography, 382
 - field research photography, 369
 - formal portrait photography, 109
 - insurance photography, 360
 - plants and flowers photography, 185
 - portrait photography, 120
 - swimsuit photography, 132
 - reflector/diffuser combo for field research photography, 370
 - Rembrandt lighting, 117
 - remote camera for nature photography, 197
 - removable storage medium
 - CD, 12
 - CDRW, 12
 - DVD, 12
 - research photography. *See* field research photography
 - resolution
 - defined, 4
 - for digital photography, 18
 - for JPEG workflow, 297
 - for panoramic photography, 82
 - resolution setting for occasional photography, 326
 - reverse S approach, 239
 - rim lighting
 - concept, 98
 - for field research photography, 371
 - ring lights, 73
 - rule of thirds, 33, 34
 - running photography, 166
 - rural landscapes
 - color considerations, 209
 - composition, 206
 - lighting considerations, 208
 - weather aspects, 209
- S**
- scenic photography using tripod, 29
 - sculling/crew photography, 171
 - seated portrait shooting, 413. *See also* portrait photography
 - selection steps, 279. *See also* masking and selections
 - selective focus factors
 - aperture settings, 66
 - depth of field, 66
 - focal length, 66
 - focusing distance, 66
 - selective focusing, 65
 - sepia tone, 383
 - shallow depth of field, 64, 71
 - sharpening of image. *See* image sharpening technique
 - ship shots, 229
 - shooting exteriors project, 338
 - shooting from
 - airplane, 222
 - car, 226
 - cruise ship, 228
 - train, 224
 - shooting in the sunlight, methods for
 - composition, setting, 439
 - exposure, planning, 439
 - image, visualizing, 439
 - lens, setting, 439
 - shot, examining a, 439
 - shot, taking a, 439
 - shooting interiors project, 340
 - shooting platforms for train travel photography, 224
 - short lighting, 116
 - shot anticipating in sports photography, 138
 - shot list for digital presentation, 402
 - shot listing, 234
 - shot prefocusing in sports photography, 140
 - shutter, 3
 - shutter lag, 60
 - shutter priority (TV), 24
 - shutter priority mode, for exposure setting, 22
 - shutter speed
 - for aerial photography, 224
 - for automobile lights photography, 428
 - for digital photography, 20, 23, 29
 - for fireworks photography, 425, 427
 - for landscape photography, 208
 - for moving water photography, 422
 - for product photography, 416
 - for sports photography, 138
 - for train travel photography, 224
 - panning approach, 62
 - quantifying examples, 63
 - settings, 57, 59
 - selecting of, 61
 - side lighting
 - defined, 96
 - for industrial landscapes, 211
 - for product photography, 411
 - skateboarding photography, 168
 - skiing photography
 - cross-country skiing, 169
 - downhill skiing, 170

474 Index ◆ S–T

- slaved flash units, 99
 - slow shutter speeds, 61
 - small product photography considerations
 - background, 410
 - lighting factor, 410
 - product positioning, 410
 - title cards or labels, 412
 - tripod, use of, 412
 - white balance, 412
 - softball photography, 171
 - spider photography. *See* nature photography,
 - insects photography
 - sports mode for exposure setting, 22
 - sports photography, advice for
 - adventure racing, 147
 - archery, 145, 146
 - auto racing (hot rod, funny car), 149
 - auto racing (NASCAR-style), 148
 - auto racing (small track), 148
 - badminton, 147
 - baseball, 149
 - basketball, 150
 - biathlon, 151
 - billiards and pool, 152
 - bobsledding, 152
 - bowling, 153
 - boxing, 153
 - bullfighting, 154
 - canoeing/kayaking (flat water), 154
 - canoeing/kayaking/rafting (white water), 154
 - cheerleading, 154
 - cricket, 155
 - curling, 155
 - cycling, 155
 - equestrian, 156
 - fencing, 157
 - fishing, 158
 - football (American-style), 158
 - golf, 160
 - gymnastics, 161
 - hockey (field), 163
 - hockey (ice), 162
 - lacrosse, 163
 - motorcycle racing, 163
 - motorcycle stunt events, 164
 - paintball, 165
 - racquetball, 166
 - running, 166
 - sculling/crew, 167
 - skateboarding, 168
 - skiing (cross-country), 169
 - skiing (downhill), 170
 - softball, 171
 - swimming and diving, 171
 - tennis, 171
 - track and field, 173
 - volleyball, 176
 - wakeboarding, 177
 - weightlifting, 177
 - wrestling, 177
 - sports photography
 - indoor sports shooting, 144
 - using digital cameras, 137
 - sports photography
 - action capturing, 137
 - motion following, 140
 - motion freezing, 142
 - panning, use of, 141
 - prefocusing cameras with shutter lag, 140
 - shot anticipating, 138
 - shot prefocusing, 140
 - stopping motion, 142
 - sports photography lens
 - medium zoom lens, 144
 - telephoto, 143
 - wide-angle zoom lens, 144
 - sports photography requirements
 - fast shutter speed, 7
 - high-speed motor drives, 7
 - long focal lengths, 7
 - spot metering, 96
 - spotting and image repair aspects, 275
 - spotting scope and digiscoping, 53
 - Stairstep Interpolation, 82
 - stealth photography
 - candid shots, shooting of, 126
 - points to remember, 126
 - stopping motion in sports photography, 142
 - storyboard for digital presentation, 402
 - storyboarding, 233–234
 - straight lines, 48
 - studio lighting, 107
 - sunrise lighting effect, 92
 - sunset lighting effect, 92
 - supplemental flash, ways of using
 - diffusers, 100
 - hot shoe mount accessory flash, 99
 - reflectors, 100
 - slaved flash units, 99
 - supplemental light, 91
 - supplemental lighting
 - for improving photograph quality, 98
 - for nature photography, 197
 - SUV. *See* mobile photography platforms, sport
 - utility vehicles
 - swimming and diving photography, 171
 - swimsuit photography, 129, 131
- T**
- tabletop studio building tools
 - posing blocks, 380
 - posing cloth, 380
 - remote control, 379
 - stands or display cases, 381
 - tripod, 379
 - tabletop studio, creating of, 375, 378
 - tarps
 - for field research photography, 369
 - teleconverter
 - for bird photography, 188
 - tele-converters, 70
 - telephoto lens
 - comparison with wide-angle lens, 54
 - compression, 55
 - compression characteristics, 56
 - cost, 50

- depth of field, 50, 55
- features, 55
- for bird photography, 187
- for sports photography, 143
- for train travel photography, 225
- magnification, 50
- portraiture, 50
- reach, 50
- tracking problems, 50
- vibration, 50
- telephoto lens aspects of creative use
 - compression, 52
 - isolation, 52
 - selective focus, 51
- tennis photography, 171
- TIF file format, 252
- TIF file, 296
- tight composition
 - creating of, 67
 - for awards ceremony photography, 393
 - for exterior photography, 336
 - for graphic artist photography, 380
 - for product photography, 413
- tonal range, 23
- tonal range aspects, 273
- track and field photography, 173
- train photographing, 224
- train travel, photography of
 - antique trains, 225
 - old trains, 225
 - train engine, 224
- train travel, photography considerations
 - shooting platforms, 224
 - shooting of train curves, 226
 - shutter speeds, 224
 - telephoto lens, use of, 225
 - train design and construction details, 225
 - train speed, 225
- travel photography, 213
 - from airplane, 222
 - from car, 226
 - from cruise ship, 228
 - from train, 224
 - mobile photography platforms, 227
 - security aspects, 219
- travel photography considerations
 - digital cameras, 215
 - trip planning, 213
- travel photography equipment
 - digital cameras, 215
 - laptops, 216
 - portable CD drives, 218
- travel photography resources
 - brochures, 214
 - guidebooks, 214
 - visitor guides, 214
 - web searching, 214
- travel photography visual cues
 - foods, 221
 - landmarks, 221
 - local customs and dress, 222
 - signs, 221

- tripod for
 - artist and graphic artist's photography, 376
 - graphic artist's photography, 379
 - moving water photography, 424
 - nature photography, 183
 - product photography, 412
 - real estate photography, 334
- tripod-based shooting, 57
- tripod features
 - camera material, 30
 - extension posts, 30
 - heads, 30
 - sections, 30
- tripod features
 - camera weight, 29
 - ISO settings, 30
- U**
- underwater cameras, 215
- underwater photography, 8
- underwater photography considerations
 - backscatter problem, 203
 - digital cameras, use of, 201
 - light falloff problem, 202
 - light reflection, 203
- Unsharp Mask filter controls
 - amount, 277
 - radius, 277
 - threshold, 277
- Unsharp Mask filter sharpening technique 277. *See also* High Pass filter sharpening technique
- unusual images
 - fireworks, 424
 - moving water, 422
 - of automobile lights, 428
- upressing, 284, 291, 297
- urban landscapes
 - composition, 206
 - lighting considerations, 210
 - shape considerations, 210
- USB 2.0, 250

- V**
- variations, 269
- vertical images for digital presentation, 405
- vertical orientation.
- vertical shot, 38
 - orientation, 33
 - shooting, 33
- volleyball photography, 176
- W**
- wakeboarding photography, 177
- warming or cooling filters. *See* digital color filters
- waterproof digital camera for travel photography, 215
- weightlifting photography, 177
- white balance (WB)
 - defined, 254
 - for field research photography, 372
 - for interior photography, 339
 - for product photography, 412
 - settings, 19

476 Index ♦ **W-Z**

- white water
 - canoeing photography, 154
 - kayaking photography, 154
 - rafting photography, 154
 - wide-angle focal length distortion
 - at frame edges, 48
 - in straight lines, 48
 - keystoning, 48
 - wide-angle focal length, 48
 - wide-angle lens
 - comparison with telephoto lens, 54
 - compression characteristics, 56
 - creative use of, 49
 - distortion, 55
 - distortion aspects, 48
 - features, 55
 - for automobile photography, 349
 - for interior photography, 340
 - for landscape photography, 207
 - for plants and flowers photography, 186
 - for sports photography, 144
 - wide-angle zoom focal lengths, 145
 - wild animal photography considerations, 192
 - based on sight, 195
 - based on smell, 194
 - based on sound, 195
 - based on touch, 195
 - blinds, use of, 193
 - daylight shooting, 189
 - for nocturnal creatures, 189
 - point-and-shoot cameras, use of, 189
 - shooting at dusk, 189
 - using DSLRs, 189
 - waiting and positioning aspects, 193
 - wild creatures, photographing of, 179
 - wildlife preserves, 193
 - wildlife sanctuaries, photographing of, 179, 191
 - window-lit portrait shooting steps, 133
 - winter dressing
 - feet, 87
 - head, 86
 - hands, 87
 - workflow. *See also* photography workflow; digital workflow
 - defined, 287
 - determining type, 288
 - for real estate photography, 341
 - workflow developing steps
 - CD burning, 342
 - image processing, 343
 - image transferring, 342
 - processed image copying, 343
 - workflow types
 - JPEG/TIFF workflow, 287, 289
 - raw format workflow, 287
 - raw workflow, 298
 - wrestling photography, 177
- Z**
- zone focusing, 64
 - zone focusing factors
 - depth of field, 64
 - f-stop, 64
 - shutter speed, 64
 - zoo photography considerations, 199
 - zoom for sports photography, 144
 - zoom lenses for landscape photography, 207
 - zoom range, 8, 46
 - zooming aspects, 45
 - zooming with shutter open, 442