

- Ames Room, 111
- anamorphosis, 70, 95
- animals
 - cats, 32, 365
 - country road and, 51
 - donkeys, 32
 - double image, 365
 - ducks, 9
 - elephants, 17, 32, 75
 - gorilla, 32
 - horses, 32, 240
 - mice, 32, 365
 - pachyderms, 17
 - polymorphic, 9
 - rabbits, 9, 75
- apple core and faces, 251
- arches, impossible, 205, 360
- Arcimboldo, Giuseppe, 41, 49, 75, 130, 173, 259
- arrows, 31, 96, 270, 306, 367

- balls, 68, 113, 144
- Baroque period, 30, 48, 77
- bats, 156
- Bezold effect, 193
- bicycles, 316, 352
- birds, 41, 212, 226, 347
- blocks, 36, 299
- boards, 172
- boat masts, 143
- books, 123
- boys, 313
- Brunnian link, 109
- buildings, 61, 182, 216, 232, 271, 296, 319

- camels and palm trees, 305
- cats and mice, 365
- chairs, 43
- Charlie Chaplin, 358
- checkerboards
 - alignment, 91, 112, 131
 - archways and, 205
 - background, 28
 - balls on, 144
 - circle inside, 225
 - dots, 206
 - hidden cubes, 151

- shading, 116, 343, 345, 364
- chess pieces, 22
- Chevreur illusion, 368
- chicken on table, 204
- circles
 - counting, 176
 - lines creating, 93, 179, 350
 - lines distorting, 189, 215, 255, 321
 - movement, 220, 234, 235, 287, 337, 352, 353
 - parallelism, 355
 - patchwork of, 80
 - perception distortion by, 161
 - shadows and shades, 241
 - size of, 129, 174
 - spirals from, 142, 184, 203
 - zigzags creating, 229, 292
- color
 - arrows, 31
 - backgrounds, 7, 88, 336, 343, 347, 364
 - Bezold effect, 193
 - blindness, 169
 - blocks, 36
 - complementary, 13, 212, 256, 294
 - contrasting, 29, 45, 229, 233, 235
 - flowers, 62
 - lines, 71, 87, 209
 - movement, 68, 86, 128, 228, 256, 331, 337, 354, 357
 - negative images, 62, 231
 - parallelism and, 269, 330
 - rainbows, 163
 - reading and, 178
 - residual images, 62, 63, 212, 300, 307, 310, 326, 358
 - shades (*See* color shades)
- color shades
 - background, 139, 168, 186, 193, 244, 291, 318, 322, 345
 - Bezold effect, 193
 - changing with light, 236
 - checkerboards, 116, 345
 - dots, 108
 - illumination and, 333
 - lines, 71, 218, 239
 - shadows, 68, 241
 - shapes, 119, 159, 314
 - variations, 29, 36, 88, 227, 282, 368
- concave or convex, 198, 267
- cone images, 70

cubes

- concave and convex, 148, 153
- hexagon becoming, 24
- hidden, 151, 175
- impossible, 65, 85, 103, 342
- light and, 279
- Necker, 65
- perspective, 127, 153
- trapezoids and, 159

cup lost, 82

deformation of a representation, 70, 95

Delboeuf illusions, 174

depth illusion, 108, 361

Devil's Forks, 84

diagonal lines, 55

diamonds, 244, 314, 318, 332

dice, 19

distortion, 91, 112, 225, 245

dizzying effect, 275

dogs, 125, 268

doors, 58

dots

- alignment, 272

- appearing, 134

- background color and, 282

- blinking, 35, 263

- color blindness, 169

- distortion, 190, 252

- hidden images, 268

- lines and, 245, 317

- movement, 27, 97, 141, 344, 361

- peripheral vision and, 221

- retinal persistence, 294, 300

- shading, 108, 139, 239, 282, 364

- size, 202

- squares created by, 202, 206

double images

- apple core and profiles, 251

- candlestick, 72

- chess pieces, 22

- Eiffel Tower, 327

- Einstein vs Monroe, 233

- faces, 38, 60, 72, 81, 132, 177

- skulls, 77, 284

- super heroes, 44

- vase and profiles, 304
- drawings
 - contradictions, 149
 - dogs, 125
 - double images, 196, 365, 367
 - hidden images, 160, 290, 315, 324, 370
 - perspective, 114, 197, 332, 342
 - spatial ambiguity, 149, 162, 208, 230, 238, 270, 299, 303, 341
 - trains, 18
- drawings impossible
 - arches, 360
 - bars and box, 253
 - cubes, 266
 - frames, 257, 301
 - letters, 335
 - machine, 136
 - metal structure, 247
 - paths, 140, 260
 - rings, 243
 - staircases, 53
 - symbol, 325
- eagles, 347
- egg yolks size, 78
- Ehrenstein illusion, 134
- Eiffel Tower, 327
- Einstein, Albert, 233
- elephants, 17
- essential message, 34, 52, 154
- eyes, 180, 181

- faces, 72, 79, 251. *See also* portraits
- faucets, 59, 357
- fishbowls, 310, 326
- Fisherman without Fish*, 324
- floating, 6, 33, 47, 115, 204
- flowers, 62, 93, 331
- focal point, 5, 58, 120, 274
- frames, 21, 48, 257
- frescoes, 30, 48
- Freud, Sigmund, 81
- fruit baskets, 130

- gears, 42, 224
- girl and woman, 11
- Guevara, Che, 231

- hats, 76
- helicopters, 262
- hexagons, 24, 110, 279, 346
- hidden images
 - animals, 217, 268, 290, 315, 324
 - bandits, 183
 - cup, 82
 - faces, 133, 165, 283
 - family, 164
 - mallet, 66
 - Napoleon, 351
 - police officer, 370
 - Tom Thumb, 264
 - toothbrush, 104
 - umbrella, 14
 - windmill, 160
- horizons, 23, 158, 242
- houses, 23, 89, 182, 230

- illumination, 235, 333
- impossible objects. *See* drawings; drawings impossible
- Ishihara test, 169

- Jastrow illusion, 359
- Jaws*, 249
- Jesus, 307

- Kanizsa Triangle, 50
- Kitaoka, Akiyoshi, 147, 361
- kitchen array, 49

- labyrinth, 341, 348
- ladies, 11, 196, 308, 363
- landscape, 38, 98
- length determination
 - arrows, 12
 - birds perching, 226
 - boat masts, 143
 - curves, 359
 - helicopters, 262
 - lines, 10, 12, 55, 118, 124, 161, 328, 338
 - Ponzo illusion, 146
 - squares, 195
 - tables, 94
- letters, 152, 252, 335. *See also* reading

lightbulbs, 329

lines

- alignment, 67, 223
- angles and, 57
- arrows, 12, 99
- background effect on length, 328
- blurred vs, 20
- broken, 64, 223, 297, 349
- circles, 185, 229, 239
- color, 10, 67, 71, 87, 106, 269, 322
- contrasting colors, 33, 356
- depth, 277
- devil's forks, 84
- diagonal in shapes, 55
- distortion, 194, 225, 245, 255, 295, 317, 321
- dots, 134, 297, 356
- elephants, 17
- focus point, 123
- geometric ambiguity, 199
- horizontal, 118, 155, 254
- images (*See* hidden images)
- impossible, 208, 299
- length, 55, 76, 118, 143, 161, 226, 328, 338
- letter shapes, 152
- movement, 67, 86, 337, 344, 352, 353
- obliques, 46
- parallelism, 117, 145, 170, 280, 298, 339
- perspective, 46, 270, 338
- phantom, 209
- Ponzo illusion, 146
- shading, 73, 218, 345
- shapes, 93, 103, 122, 172, 179, 215, 225, 295, 311
- visual distortion, 57, 99, 117, 145

lips, 13

logic and perspective, 21, 102

luminosity, 45, 71, 139, 186, 193, 236, 333

machines, 136

man on bottle, 261

man's face and hooded back, 132

maze, impossible, 341

men, 228, 312, 366

mice and cats, 365

Mirage in the Desert, 305

mirrors, buildings in, 271, 319

money, 121

- Monroe, Marilyn, 13, 233
- mosaic, 201, 279
- motion sickness, 86
- Mount Rushmore, 135
- movement
 - bats, 156
 - colors and, 6, 69, 256, 287, 337, 354, 357
 - dots, 361
 - eyes, 180
 - flowers, 331
 - gears, 42, 224
 - lines, 69, 220, 337, 357
 - patterns, 33, 69, 138, 141, 228
 - point of reference, 86
 - shading, 141
 - shapes, 180, 191, 234, 302
 - symbols, 74
 - waves, 344
 - wheels, 147, 171
- Müller-Lyer illusion, 12
- Münsterberg illusion, 106

- Napoleon, 351
- Necker cube, 65
- neon effect, 239

- Ocampo, Octavio, 240

- paintings
 - depth, 120
 - frescoes, 30, 48
 - hidden images, 164, 351
 - misleading representations, 25, 309
 - perspective, 51, 288
 - trompe l'oeil, 30, 150, 182, 232, 369
- parachute, impossible, 238
- parallelism
 - background, 145, 339, 355
 - checkerboards, 131
 - color, 67, 330
 - deformation, 117, 170, 269
 - dots and, 252, 272
 - lines and, 12, 46, 99, 170, 210, 298
 - shapes and, 112, 219
 - zigzags, 106
- patterns

- 2-D vs 3-D, 198, 246
- boards and, 57
- circles, 80
- colors, 47, 69, 91, 276
- depth, 267, 277
- dizzying effect, 275
- double image, 367
- foreground vs background, 276
- movement, 67, 69, 128, 147, 191, 220, 274, 287
- parallelism, 57, 219, 298, 339
- perspective and, 158
- spiral creation, 184, 203
- peace symbols, 74, 325
- pencils, 162
- Penrose triangle, 107, 187
- people. *See* faces; portraits
- peripheral vision, 221, 228, 353
- perspective
 - aerial or protruding, 127
 - archways, 205
 - bicycle, 316
 - chair, 43
 - cubes, 103, 151, 153, 211
 - cylinders, 166
 - depth, 120, 121, 316
 - horizon line and, 37
 - impossible, 19, 21, 90, 136
 - length, 39, 94
 - lines and, 39
 - patterns and, 158
 - shadows and, 144
 - shapes and, 111
 - trains on bridge, 18
 - vans, 207
 - viewing angle, 70
- photographs
 - background and foreground, 248, 261
 - beach image, 293
 - buildings, 56, 105, 121
 - depth of field, 213, 248, 249, 278, 316
 - earth and sky, 281
 - foot on car, 248
 - fountain, 59
 - people, 54, 278, 363
 - perspective, 115, 204, 207, 213, 242, 248, 265, 293, 316
 - pipe in field, 37

- reflections, 281, 296, 334
- scale, 26, 121, 213, 248, 261
- slanted, 23
- sun, 26, 213
- trompe l'oeil, 61
- picnic in the forest, 82
- pictorial ambiguity, 81, 177
- Poggendorff illusion, 223, 349
- polymorphic animals, 9
- Ponzo illusion, 146
- pool and people, 155
- portraits
 - bearded man, 126
 - created from other items, 41, 49, 75, 130, 173, 259
 - distorted, 95
 - Don Quixote, 240
 - double images, 11, 60, 72, 196, 233, 259, 308, 312, 340
 - women in, 188
- presidents, 135
- psychedelic images, 128, 138
- pyramids, 73, 199, 314

- Quixote, Don, 240

- rainbows, 163
- reading
 - brain hemispheres, 178
 - colors and, 178
 - extra letters, 34, 52, 83, 154, 157, 289, 323, 362
 - hidden text, 181
 - letter order, 258
 - letters counting, 214
 - shapes, 152, 181
- rectangles, 190, 218
- reflections, 265, 281, 296, 334
- Renaissance period, 120
- retinal persistence, 263, 294, 300, 307, 326, 329
- rings, 191, 215, 243
- road from a wall, 25, 309
- rope, 208

- sailors, 320
- Sander illusion, 55
- sculptures, 49
- shading, 71, 116, 127, 256, 345, 368
- shadows, 27, 36, 42, 74, 115, 144, 204, 241, 354

shapes

- 2-D and 3-D, 24, 40, 65, 103
 - abstract, 366
 - apparition, 227, 307
 - arcs, 192
 - arrows, 31
 - background, 273, 286, 295, 336, 350
 - brightness, 279, 343
 - checkerboard and, 225
 - circles, 109, 142
 - colors, 112
 - comparison with, 124
 - corners creating, 50, 101, 110, 175, 179, 285
 - cubes, 113, 148, 151
 - cylinders, 166
 - Devil's Forks, 84
 - distortion, 194, 237, 250, 255, 286, 321, 346
 - double images, 306
 - hexagons, 110, 346
 - impossible, 102, 107, 187, 200, 253, 257
 - length determination, 10, 76, 94, 111, 192, 262, 359
 - lines and, 24, 189, 215, 274
 - misinformation, 122, 125, 172, 320
 - movement, 142, 156, 171, 228, 302, 331
 - nonexistent, 50, 101
 - parallelism, 131, 272
 - peripheral vision and, 64, 190
 - perspective, 127, 167
 - pyramids, 199
 - reading, 181
 - rosettes, 227
 - shading, 119, 336
 - shadows, 302
 - size of, 39, 78, 129, 201, 254
 - spirals and, 15, 203
 - squares, 35, 101, 131, 142
 - stripes and, 203
 - triangles, 50, 107, 187
- shark and man, 249
- shelves, 149
- signposts, 99
- size determination, 78, 129, 174, 201, 202, 222, 254
- skulls, 77, 311
- soldiers, 164, 340
- spatial information, 53, 96, 100, 113, 195
- spies in a row, 39

spinning, 5, 8, 86
spirals, 8, 15, 87, 142, 184, 292
spots, 300
squares
 alignment, 330
 arrows and, 194, 195, 306
 corners creating, 285
 cubes, 211
 distortion, 185, 237, 250, 267, 286, 295
 dots and, 202, 206
 labyrinth or, 348
 orange, 71
 parallelism, 330
 position and size, 222
 retinal persistence, 300
 shades, 119, 168, 236
staircases, 16, 53, 113, 197
street and house, 23
strips, 57, 124
structures, 122, 140, 260, 301, 303
subjective illusions, 134, 179
sun, 26, 213, 229
super heroes, 44
surrealism, 105

target, 241
test, Ishihara, 169
3-D, 40, 73, 108, 167, 198, 199, 246, 325
Tom Thumb, 264
toothbrush lost, 104
towers, 230, 319
trains, 18
trapezoids, 159
triangles, 50, 107, 187, 333, 336
trompe l'oeil, 30
 buildings, 89, 182, 216, 232
 Canut Wall in France, 61
 ceiling, 150
 country road, 51
 dome, 369
 philosopher, 92
 tunnel, 137
Troxler effect, 190
tunnel or arbor, 137
twins, 313, 363

umbrella, 14

Van Ebbinghaus-Titchener illusion, 129

vanishing point, 277, 288, 369

vans, 207

Vaserely illusion, 209

vases, 304

visual ambiguity, 103, 123, 166

wallpaper, 246, 276

walls, 25, 106, 309

water, 56, 141, 242, 357

waves, 344

wheels, 42, 86, 114, 147, 171, 325, 352

White House, 121

windmills, 160, 240

women, 11, 60, 72, 355

Wundt illusion, 280

zigzags, 117, 229, 273, 292, 295

Zöllner illusion, 46, 210