

Appendix 3. Complexity ratings.

Concepts	Means			sds		
	Line drawings	Gray level	Colorized	Line drawing	Gray level	Colorized
1. accordion	4.35	4.41	4.06	0.62	0.76	0.93
2. airplane	4.12	4.12	3.94	0.86	0.74	1.31
3. alligator	4.06	4.18	3.94	0.81	0.65	0.81
4. anchor	2.35	2.59	2.41	0.87	0.76	0.88
5. ant	4.00	4.18	3.94	0.50	0.40	0.68
6. apple	1.06	1.18	1.35	0.06	0.15	0.99
7. arm	2.94	2.47	2.53	1.18	1.01	1.89
8. arrow	1.12	1.24	1.41	0.24	0.57	0.76
9. artichoke	2.82	2.71	2.94	0.90	1.10	1.31
10. ashtray	2.06	2.00	1.76	0.43	0.38	0.32
11. asparagus	2.53	2.41	2.41	1.14	0.88	0.88
12. axe	1.41	1.59	1.65	0.38	0.38	0.37
13. baby carriage	4.12	3.71	3.29	0.36	0.47	0.85
14. ball	1.94	1.59	1.59	0.93	0.63	1.13
15. balloon	1.06	1.18	1.24	0.06	0.15	0.32
16. banana	1.06	1.12	1.41	0.06	0.11	1.01
17. barn	4.00	4.29	3.71	1.00	0.35	1.10
18. barrel	2.35	2.65	2.24	0.87	0.99	1.07
19. baseball bat	1.41	1.18	1.47	0.26	0.15	0.64
20. basket	3.18	2.53	2.53	1.78	0.64	1.51
21. bear	3.82	3.82	3.82	0.40	0.90	0.78
22. bed	2.41	3.00	2.29	0.63	0.25	0.47
23. bee	4.35	4.41	4.18	0.49	0.38	0.53
24. beetle	4.18	3.94	3.88	0.78	1.06	1.36
25. bell	2.53	2.53	2.12	0.76	0.26	0.49
26. belt	2.00	2.24	1.65	0.50	0.69	0.37
27. bicycle	3.88	4.24	3.24	0.38	0.57	0.82
28. bird	3.24	3.71	3.71	0.44	0.60	1.22
29. blouse	2.94	3.12	2.59	0.81	0.74	1.01
30. book	1.71	1.88	1.59	0.60	0.49	0.38
31. boot	2.12	2.47	2.29	0.49	0.39	0.85
32. bottle	1.12	1.35	1.44	0.11	0.37	0.53
33. bow	2.71	2.59	2.18	0.85	0.51	0.90
34. bowl	1.53	1.35	1.29	0.51	0.24	0.35
35. box	1.41	1.29	1.18	1.01	0.22	0.28
36. bread	1.41	1.82	1.82	0.26	0.53	1.15
37. broom	1.94	2.00	1.88	0.56	0.38	0.49
38. brush	2.00	2.00	1.59	0.50	0.38	0.38
39. bus	4.35	4.24	3.82	0.74	0.44	0.78
40. butterfly	3.71	4.00	3.53	0.47	0.63	1.14
41. button	1.35	1.47	1.41	0.37	1.14	0.63
42. cake	2.06	2.29	2.24	1.00	0.85	0.57
43. camel	4.00	3.76	3.88	0.38	0.69	0.86
44. candle	2.00	2.29	2.06	0.75	0.47	0.68
45. cannon	4.35	4.12	4.00	0.49	0.24	0.63

46. cap	1.76	2.00	1.94	0.32	0.38	0.43
47. car	4.18	4.00	3.94	0.78	1.00	0.93
48. carrot	1.53	1.65	1.88	0.51	0.49	0.74
49. cat	3.06	4.18	3.35	0.56	0.65	1.49
50. caterpillar	3.35	3.41	3.53	0.62	0.63	1.39
51. celery	3.47	3.06	3.06	1.76	1.43	1.18
52. chain	2.59	2.24	2.13	1.26	0.32	0.52
53. chair	1.82	2.71	2.00	0.40	0.35	0.88
54. cherry	1.12	1.41	1.76	0.11	0.26	0.94
55. chicken	3.12	3.35	3.35	0.86	0.87	0.99
56. chisel	2.65	2.59	2.56	0.62	0.38	1.33
57. church	4.12	3.94	3.47	0.61	0.43	0.76
58. cigar	2.12	1.53	2.29	0.86	0.51	0.97
59. cigarette	1.29	1.41	1.65	0.35	0.26	0.49
60. clock	2.65	3.18	2.65	0.62	0.90	0.87
61. clothespin	2.41	2.59	2.18	0.38	0.51	0.65
62. cloud	3.06	2.06	2.29	1.56	1.06	1.72
63. clown	4.53	4.59	4.29	1.14	0.51	0.85
64. coat	2.76	2.94	2.41	0.69	0.56	0.76
65. comb	1.88	2.18	1.94	0.99	0.90	0.68
66. corn	2.77	3.00	2.88	1.36	0.75	0.74
67. couch	2.50	2.76	2.41	0.67	0.32	0.51
68. cow	3.71	4.53	4.12	1.22	0.39	0.61
69. crown	3.53	3.53	3.41	1.51	1.14	1.51
70. cup	1.47	1.47	1.76	0.26	0.26	0.57
71. deer	4.18	4.12	4.12	0.40	0.49	0.86
72. desk	3.00	3.06	2.29	0.43	0.43	0.35
73. dog	3.29	3.59	3.18	0.47	0.88	0.90
74. doll	3.88	4.00	3.59	1.11	0.50	1.01
75. donkey	3.82	3.94	4.06	0.53	0.56	0.68
76. door	2.00	2.41	1.82	0.50	0.63	0.65
77. doorknob	2.65	2.41	2.29	0.99	0.26	0.60
78. dress	2.41	2.47	2.35	1.01	0.26	0.74
79. dresser	2.94	2.82	2.41	0.81	0.78	0.38
80. drum	2.24	3.06	3.00	0.57	0.43	1.00
81. duck	3.35	3.71	3.65	0.37	0.60	0.87
82. eagle	4.29	4.53	4.29	0.60	0.39	0.60
83. ear	3.12	3.47	3.29	0.61	0.76	1.72
84. elephant	4.24	4.12	3.82	1.07	0.61	1.28
85. envelope	1.12	1.47	1.29	0.11	0.26	0.35
86. eye	3.41	3.71	3.41	2.26	1.72	1.88
87. fence	2.35	2.35	2.12	1.12	0.62	0.61
88. finger	2.65	3.18	2.41	0.99	1.40	1.38
89. fish	3.24	3.65	3.53	0.44	0.74	1.01
90. flag	1.41	1.76	1.65	0.38	0.57	0.74
91. flower	2.29	2.94	2.71	0.85	1.18	1.22
92. flute	3.29	3.00	2.88	1.60	1.38	1.49
93. fly	3.71	4.29	3.94	0.60	0.47	0.68
94. foot	2.82	3.00	2.59	0.90	1.13	1.38
95. football	2.24	1.82	1.94	0.44	0.78	0.93

96. football helmet	2.94	3.12	3.24	0.93	1.24	1.19
97. fork	1.35	1.59	1.47	0.37	0.51	0.64
98. fox	3.82	4.00	4.06	0.65	0.63	0.68
99. french horn	4.65	4.65	4.18	0.74	0.37	0.65
100. frog	3.41	3.65	3.41	0.63	0.49	1.38
101. frying pan	1.71	1.94	1.88	0.22	0.43	0.24
102. garbage can	2.47	2.41	1.94	0.76	0.26	0.56
103. girafe	3.94	4.00	3.88	0.68	0.75	1.11
104. glass	1.12	1.18	1.06	0.11	0.15	0.06
105. glasses	2.47	2.71	2.35	0.89	0.60	0.49
106. gloves	2.12	2.53	2.41	0.36	0.64	0.51
107. goat	3.59	4.00	4.00	0.38	0.50	0.63
108. gorilla	4.18	3.94	3.88	0.65	0.68	0.74
109. grapes	2.35	3.12	2.65	1.12	0.86	1.49
110. grasshopper	4.47	4.65	4.35	0.26	0.24	1.12
111. guitar	3.82	3.71	3.35	0.78	0.47	0.62
112. gun	3.59	3.82	3.94	1.01	0.40	0.68
113. hair	2.88	2.24	2.53	1.24	0.82	1.26
114. hammer	2.47	2.53	2.29	0.39	0.64	0.60
115. hand	2.94	3.53	3.06	0.93	1.01	1.68
116. hanger	1.00	1.82	1.12	0.00	6.15	0.11
117. harp	4.65	4.29	3.71	0.49	0.47	0.72
118. hat	1.82	1.88	1.65	0.53	0.36	0.24
119. heart	1.00	1.24	1.24	0.00	0.57	0.19
120. helicopter	4.47	4.59	4.65	0.39	0.38	0.24
121. horse	3.59	3.76	3.65	1.01	0.57	0.99
122. house	3.41	4.00	3.24	0.51	0.63	1.69
123. iron	3.53	3.41	3.06	0.39	0.88	1.31
124. ironing board	2.12	2.29	2.19	0.74	0.60	0.16
125. jacket	2.76	3.47	2.82	0.57	0.76	0.78
126. kangaroo	4.41	4.24	4.06	0.51	0.44	0.56
127. kettle	2.65	3.29	2.76	0.87	0.72	0.82
128. key	2.29	2.65	2.06	0.47	0.74	0.81
129. kite	2.53	3.24	3.00	1.14	0.69	1.38
130. knife	1.12	1.41	1.47	0.11	0.38	0.39
131. ladder	1.88	1.94	1.82	0.74	0.56	0.90
132. lamp	2.00	2.18	2.24	0.25	0.53	1.07
133. leaf	1.71	2.29	2.41	0.72	0.47	1.01
134. leg	2.88	2.53	2.76	1.11	1.26	1.32
135. lemon	1.12	1.06	1.41	0.24	0.06	1.01
136. leopard	3.94	4.12	4.00	1.81	0.74	0.75
137. lettuce	3.18	3.00	2.71	1.40	0.88	1.22
138. light bulb	2.82	3.00	2.59	0.90	0.50	1.13
139. light switch	2.47	2.65	2.47	0.26	0.74	0.64
140. lion	3.94	4.24	4.12	0.93	0.44	0.49
141. lips	1.53	2.18	2.24	0.39	1.28	2.07
142. lobster	4.65	4.47	4.18	0.24	0.51	0.40
143. lock	2.18	2.35	2.29	0.65	0.62	0.47
144. mitten	1.88	1.47	1.71	0.49	0.26	0.35
145. monkey	4.06	3.94	4.06	0.31	0.56	0.68

146. moon	1.35	1.12	1.65	0.74	0.24	1.49
147. motorcycle	4.82	4.88	4.53	0.15	0.11	0.64
148. mountain	2.65	2.94	2.76	0.74	1.68	1.07
149. mouse	3.47	3.76	3.41	0.39	1.07	1.26
150. mushroom	2.59	2.71	2.59	0.63	0.72	0.76
151. nail	1.35	1.06	1.29	0.37	0.06	0.35
152. nail file	2.24	1.94	2.18	1.69	0.56	1.28
153. necklace	1.82	2.65	1.35	0.53	9.87	0.37
154. needle	1.88	1.06	1.41	1.11	0.06	0.38
155. nose	2.06	3.12	2.47	1.68	1.36	1.51
156. nut	2.65	2.12	1.88	0.49	0.61	1.36
157. onion	1.88	1.88	2.29	0.99	0.99	1.35
158. orange	1.12	1.29	1.00	0.24	0.47	0.00
159. ostrich	4.18	3.94	3.88	0.53	0.81	0.61
160. owl	4.24	4.53	4.19	0.57	0.51	0.56
161. paintbrush	1.94	1.59	1.76	0.68	0.38	1.44
162. pants	1.76	2.35	2.12	0.32	0.49	0.49
163. peach	1.18	1.13	1.53	0.28	0.12	1.01
164. peacock	4.29	4.71	4.47	0.47	0.22	0.39
165. peanut	2.07	1.59	1.82	1.35	0.51	1.40
166. pear	1.12	1.18	1.47	0.11	0.15	1.01
167. pen	2.12	2.06	2.12	0.61	0.31	1.24
168. pencil	1.35	1.47	1.76	0.37	0.76	0.82
169. penguin	3.53	3.88	3.88	0.26	0.61	0.99
170. pepper	2.18	4.00	2.29	1.03	30.25	0.47
171. piano	4.82	4.59	4.06	0.15	0.38	1.31
172. pig	3.76	3.76	3.82	0.57	0.69	0.65
173. pineapple	3.18	3.29	3.00	1.65	1.22	1.13
174. pipe	1.88	2.18	2.24	0.49	0.65	0.69
175. pitcher	1.71	2.06	1.82	0.47	0.93	0.90
176. pliers	2.59	2.47	2.24	0.63	0.51	0.44
177. plug	2.59	2.82	2.65	1.26	0.40	0.49
178. pocketbook	2.59	2.82	2.47	0.63	0.40	0.51
179. pot	1.29	1.94	1.76	0.22	0.81	0.32
180. potato	1.29	1.06	1.06	0.47	0.06	0.06
181. pumpkin	2.00	2.06	2.53	0.63	0.31	1.14
182. rabbit	3.06	3.47	3.41	0.31	0.89	1.26
183. raccoon	4.29	4.24	4.12	0.47	0.44	0.61
184. record player	4.35	4.29	3.94	0.49	0.47	0.81
185. refrigerator	2.88	3.00	2.53	0.74	0.50	0.64
186. rhinoceros	4.12	4.24	4.12	0.74	0.44	0.49
187. ring	2.00	1.53	1.88	0.50	0.26	0.49
188. rocking chair	3.71	3.82	3.00	0.72	0.65	1.00
189. roller skate	4.29	4.12	3.65	0.47	0.74	1.24
190. rolling pin	1.59	1.53	2.12	0.38	0.39	1.49
191. rooster	3.82	4.35	4.12	0.90	0.37	0.74
192. ruler	1.24	1.53	1.47	0.32	0.39	0.26
193. sailboat	3.75	4.00	4.29	0.47	1.00	0.47
194. saltshaker	2.65	2.53	2.35	1.12	0.26	0.49
195. sandwich	2.94	3.00	2.65	0.81	0.63	1.12

196. saw	1.88	2.12	2.18	0.49	0.36	0.40
197. scissors	2.06	2.35	2.18	0.81	0.37	0.65
198. screw	2.59	3.12	2.88	1.51	0.99	1.11
199. screwdriver	2.24	1.88	2.24	0.69	0.49	0.69
200. sea horse	4.47	4.47	4.53	0.39	0.39	0.26
201. seal	3.41	3.06	3.06	1.13	1.06	1.43
202. sheep	3.65	3.88	3.65	0.49	0.49	0.99
203. shirt	2.76	3.06	2.35	0.69	0.43	0.62
204. shoe	3.00	3.00	2.41	1.13	0.75	1.01
205. skirt	1.06	1.71	1.65	0.06	0.72	0.49
206. skunk	4.47	4.12	4.24	0.64	0.49	0.44
207. sled	3.47	3.12	2.88	1.14	0.74	1.11
208. snail	2.94	3.56	3.29	0.56	1.06	1.22
209. snake	3.76	3.12	3.82	1.32	1.99	0.78
210. snowman	2.06	2.76	2.18	0.93	0.69	0.90
211. socks	1.35	1.94	1.81	0.24	0.43	0.56
212. spider	3.35	4.12	3.94	1.62	0.49	0.68
213. spinning wheel	4.76	4.00	3.82	0.32	0.50	1.03
214. spool of thread	3.29	2.59	2.35	1.60	0.63	1.24
215. spoon	1.06	1.41	1.06	0.06	0.26	0.06
216. squirrel	3.47	4.06	4.06	0.51	0.81	0.56
217. star	1.06	1.24	1.47	0.06	0.32	1.01
218. stool	2.18	2.65	2.24	0.53	0.24	0.32
219. stove	4.53	4.41	3.88	0.39	0.38	0.61
220. strawberry	2.00	1.71	2.12	0.88	0.47	0.86
221. suitcase	2.76	3.35	2.82	0.94	0.74	0.65
222. sun	1.47	1.29	1.71	0.76	0.35	1.60
223. swan	3.41	3.41	3.47	0.51	0.63	0.76
224. sweater	2.41	2.24	2.18	0.88	0.57	0.65
225. swing	2.24	2.82	1.76	1.07	24.78	0.32
226. table	1.53	2.00	1.24	0.39	1.00	0.19
227. telephone	3.18	3.29	3.06	1.03	0.35	0.68
228. television	3.18	3.53	3.24	1.40	0.89	1.57
229. tennis racket	2.88	2.47	2.35	0.86	0.51	0.37
230. thimble	2.59	2.53	2.12	1.51	0.76	0.86
231. thumb	2.59	2.76	2.29	1.13	1.82	1.47
232. tie	2.47	2.24	1.94	1.01	1.07	0.43
233. tiger	4.41	4.53	4.24	0.76	0.26	0.44
234. toaster	3.00	3.35	3.06	0.63	0.62	0.31
235. toe	2.12	2.24	2.18	0.86	1.07	1.53
236. tomato	1.24	1.18	1.47	0.32	0.28	1.01
237. toothbrush	1.65	1.53	1.41	0.37	0.26	0.51
238. top	2.53	1.88	2.12	1.26	0.49	0.36
239. traffic lights	4.00	3.53	3.06	0.50	0.39	0.81
240. train	4.76	4.88	4.47	0.32	0.11	1.01
241. tree	2.82	3.35	3.00	1.15	1.12	1.50
242. truck	2.65	2.88	3.06	0.99	0.74	1.06
243. trumpet	3.71	4.06	3.94	0.85	0.56	0.81
244. turtle	3.47	4.12	3.94	0.26	0.61	1.06
245. umbrella	2.59	3.00	2.41	0.76	0.88	0.51

246. vase	3.06	2.76	2.12	0.93	0.94	0.74
247. vest	2.47	2.94	2.82	0.51	0.68	1.28
248. violin	4.18	3.94	3.59	0.40	0.43	0.63
249. wagon	3.59	3.76	3.35	0.51	0.69	1.49
250. watch	3.24	3.06	2.65	0.94	0.81	0.99
251. watering can	2.29	3.06	2.65	0.72	0.68	0.87
252. watermelon	1.94	1.71	2.24	1.06	0.47	1.07
253. well	4.24	4.24	3.71	0.44	0.57	0.97
254. wheel	2.59	2.47	2.18	0.88	0.89	0.65
255. whistle	2.76	2.94	2.65	1.44	0.81	1.24
256. windmill	4.29	4.29	4.06	0.72	0.72	0.93
257. window	3.29	3.29	2.47	1.10	0.60	0.39
258. wine glass	1.41	1.53	1.35	0.26	0.51	0.37
259. wrench	1.82	1.88	2.18	0.65	0.36	1.15
260. zebra	4.18	4.29	4.00	0.78	0.47	0.50