

## Appendix 2. Familiarity ratings

concepts	Means			Sds		
	Line drawings	Gray levels	Colorized	Line drawings	Gray levels	Colorized
1. accordion	2.35	2.24	2.06	1.24	0.82	0.56
2. airplane	3.82	3.65	3.59	1.28	1.49	1.13
3. alligator	1.82	1.76	1.94	1.03	0.82	0.56
4. anchor	2.29	2.12	2.24	1.10	0.99	0.94
5. ant	3.00	2.88	2.71	1.13	1.11	0.97
6. apple	4.71	4.47	4.59	0.47	0.39	0.38
7. arm	4.82	4.65	4.76	0.15	0.37	0.32
8. arrow	4.12	3.94	3.76	1.11	1.43	0.94
9. artichoke	2.76	2.82	2.88	1.07	0.90	0.86
10. ashtray	3.76	3.71	4.29	2.07	1.97	0.72
11. asparagus	2.76	2.41	2.82	1.19	1.13	0.65
12. axe	2.88	2.82	2.47	1.61	2.03	0.64
13. baby carriage	3.41	3.18	3.59	1.63	0.90	0.51
14. ball	3.59	3.94	3.94	2.13	0.93	0.43
15. balloon	3.53	3.53	3.29	1.51	1.51	0.97
16. banana	4.53	4.53	4.29	0.76	0.39	0.47
17. barn	2.82	2.65	2.35	1.28	1.74	0.99
18. barrel	2.71	2.00	2.12	1.72	1.00	0.74
19. baseball bat	2.76	3.06	2.18	1.07	1.93	1.15
20. basket	3.18	3.12	2.65	1.78	1.74	0.74
21. bear	2.06	2.18	1.94	1.43	0.90	0.56
22. bed	5.00	4.76	4.88	0.00	0.19	0.11
23. bee	2.94	2.35	2.29	1.56	0.99	0.97
24. beetle	1.41	1.82	1.88	0.63	0.78	0.49
25. bell	3.18	3.12	2.59	1.53	1.36	0.76
26. belt	4.65	4.24	4.12	0.62	0.94	0.74
27. bicycle	4.35	4.29	4.24	1.24	0.47	0.57
28. bird	4.35	4.12	3.76	1.24	0.61	1.07
29. blouse	4.53	4.00	3.94	0.64	1.13	1.06
30. book	5.00	4.76	4.76	0.00	0.19	0.19
31. boot	3.71	3.53	3.47	1.85	1.76	1.51
32. bottle	4.82	4.53	4.65	0.28	0.39	0.37
33. bow	2.88	2.76	2.53	2.36	1.32	1.39
34. bowl	4.47	4.35	4.00	0.51	0.74	1.50
35. box	3.71	3.94	3.65	0.97	0.68	1.12
36. bread	4.88	4.71	4.82	0.24	0.22	0.15
37. broom	3.47	3.35	3.41	1.51	1.99	0.76
38. brush	4.35	4.06	4.24	1.37	1.06	0.69
39. bus	4.41	4.12	4.18	0.76	0.74	0.65
40. butterfly	3.59	3.59	3.12	1.26	0.51	0.61
41. button	4.47	4.12	4.18	0.51	0.99	0.90
42. cake	4.00	4.18	4.24	1.50	0.65	0.44
43. camel	2.06	2.29	1.88	1.43	1.10	0.49
44. candle	4.12	3.71	4.12	1.11	1.22	0.74

45. cannon	1.71	1.71	1.65	0.97	0.85	0.74
46. cap	3.41	3.18	2.82	1.38	1.78	0.90
47. car	4.76	4.71	4.29	0.32	0.22	0.85
48. carrott	4.35	3.82	4.00	0.87	1.15	0.75
49. cat	4.47	4.65	4.35	1.39	0.24	0.87
50. caterpillar	2.47	1.94	2.24	0.89	0.81	0.82
51. celery	3.06	2.94	3.06	1.68	0.81	1.31
52. chain	3.47	2.76	2.29	1.39	0.82	0.60
53. chair	5.00	5.00	5.00	0.00	0.00	0.00
54. cherry	3.71	4.06	3.53	1.10	0.93	0.64
55. chicken	3.82	3.71	3.53	1.78	0.85	0.64
56. chisel	2.06	1.76	2.06	1.26	0.69	0.68
57. church	4.29	3.88	3.76	0.85	1.11	1.32
58. cigar	2.76	2.53	3.00	1.19	1.26	1.00
59. cigarette	4.65	4.29	4.65	0.37	0.72	0.37
60. clock	4.24	4.12	3.82	1.07	1.11	1.53
61. clothespin	4.12	3.88	3.82	1.36	0.74	0.40
62. cloud	2.18	1.75	3.29	3.15	1.27	2.35
63. clown	2.59	3.00	2.71	1.63	0.88	0.72
64. coat	4.65	4.06	3.76	0.37	0.68	0.69
65. comb	4.35	4.00	4.12	0.74	1.38	1.36
66. corn	3.00	3.24	2.82	2.27	0.82	0.65
67. couch	4.44	4.47	4.65	1.86	0.51	0.37
68. cow	3.94	4.06	3.24	1.31	0.43	1.07
69. crown	2.47	1.76	2.12	1.14	0.94	0.61
70. cup	4.82	4.47	4.59	0.28	0.64	0.38
71. deer	2.41	2.53	2.41	2.01	1.14	0.51
72. desk	4.47	4.71	4.71	0.89	0.35	0.35
73. dog	4.71	4.65	4.41	0.47	0.62	0.38
74. doll	3.88	3.53	2.94	1.86	1.01	0.81
75. donkey	3.00	3.06	2.71	1.63	1.18	0.72
76. door	5.00	4.76	4.82	0.00	0.57	0.15
77. doorknob	4.12	4.24	4.29	1.61	0.82	1.47
78. dress	4.24	3.65	4.12	1.07	1.24	0.86
79. dresser	4.47	4.18	4.47	1.14	0.90	0.51
80. drum	2.59	2.71	2.18	1.13	1.72	1.28
81. duck	3.65	3.47	3.59	1.37	0.89	0.51
82. eagle	2.18	2.29	1.82	1.28	1.22	0.90
83. ear	4.88	4.82	4.76	0.24	0.15	0.19
84. elephant	2.00	2.29	2.41	1.50	1.10	0.88
85. envelope	4.41	4.41	4.29	1.38	0.51	0.60
86. eye	4.88	4.76	4.82	0.11	0.32	0.15
87. fence	3.76	3.41	3.18	1.19	0.76	0.78
88. finger	5.00	4.47	4.94	0.00	0.89	0.06
89. fish	3.53	3.47	3.18	1.26	1.51	0.90
90. flag	3.06	3.18	2.35	1.43	1.53	0.49
91. flower	4.59	4.53	4.29	1.01	0.39	0.47
92. flute	1.06	2.47	2.35	0.06	1.14	1.37
93. fly	3.65	3.59	3.47	1.37	1.01	1.01
94. foot	4.88	4.53	4.88	0.24	0.64	0.11

95. football	2.35	2.00	1.76	1.37	0.88	0.69
96. football helmet	1.94	2.29	2.24	1.06	1.72	0.94
97. fork	4.94	4.82	4.88	0.06	0.15	0.11
98. Fox	2.53	2.35	2.35	1.51	0.99	0.99
99. French horn	2.41	2.35	1.88	1.88	1.24	0.86
100. frog	2.94	2.82	2.65	1.68	0.78	0.99
101. frying pan	4.59	4.71	4.65	0.51	0.35	0.24
102. garbage can	4.47	3.88	4.41	0.76	1.36	0.38
103. giraffe	1.88	1.94	2.12	1.24	0.93	1.11
104. glass	4.94	4.88	4.94	0.06	0.11	0.06
105. glasses	4.76	4.47	4.29	0.44	0.64	0.85
106. gloves	4.12	3.88	3.59	0.86	0.99	1.01
107. goat	2.71	2.65	2.47	1.47	0.74	0.76
108. gorilla	2.00	2.41	1.94	1.38	1.38	0.81
109. grapes	4.06	4.47	4.06	1.56	0.39	0.43
110. grasshopper	2.41	2.24	2.06	1.63	1.07	0.68
111. guitar	3.71	3.59	3.71	0.97	1.26	0.60
112. gun	2.47	2.71	2.82	1.39	1.72	0.65
113. hair	4.50	4.71	4.53	1.07	0.72	0.76
114. hammer	2.71	3.00	2.53	1.10	2.00	1.14
115. hand	5.00	4.71	4.82	0.00	0.60	0.28
116. hanger	4.59	4.24	4.12	0.51	1.44	0.74
117. harp	1.76	2.06	1.71	0.94	0.93	0.47
118. hat	3.71	3.59	3.65	1.10	1.38	0.37
119. heart	4.18	4.24	4.29	1.28	0.69	0.60
120. helicopter	2.82	3.12	2.53	1.53	0.99	0.89
121. horse	3.76	3.53	3.47	1.69	0.76	1.01
122. house	4.94	4.82	4.82	0.06	0.15	0.28
123. iron	4.00	4.00	3.82	0.88	1.00	0.90
124. ironing board	4.35	3.82	3.76	0.87	0.90	1.19
125. jacket	4.47	4.29	4.47	1.14	0.85	0.51
126. kangaroo	2.00	2.06	1.88	1.50	1.18	0.61
127. kettle	2.82	3.35	3.35	1.65	1.24	0.74
128. key	4.94	4.82	4.88	0.06	0.28	0.11
129. kite	2.88	2.47	2.65	1.36	1.14	0.99
130. knife	4.59	4.41	4.47	1.13	0.88	1.14
131. ladder	3.65	3.53	3.24	1.74	1.39	0.69
132. lamp	4.88	4.06	4.29	0.11	0.81	0.72
133. leaf	4.65	4.12	3.76	0.37	1.24	0.94
134. leg	4.94	4.82	4.76	0.06	0.15	0.32
135. lemon	4.35	4.35	4.12	1.37	0.37	0.49
136. leopard	1.59	1.82	1.94	0.63	1.03	0.93
137. lettuce	3.31	4.29	4.29	2.63	0.47	0.85
138. light bulb	4.41	4.24	4.53	1.13	1.19	0.26
139. light switch	4.35	4.59	4.35	1.24	0.51	0.87
140. lion	2.24	2.29	2.13	2.32	1.35	0.65
141. lips	4.94	4.82	4.76	0.06	0.15	0.32
142. lobster	2.18	2.24	2.06	1.15	0.94	0.68
143. lock	3.18	3.24	2.76	1.65	1.44	0.44
144. mitten	3.47	3.29	2.94	1.51	1.47	0.56

145. monkey	2.18	2.29	2.00	1.03	1.35	0.50
146. moon	4.47	4.41	4.29	1.14	0.38	1.22
147. motorcycle	4.12	4.00	3.88	1.36	0.63	0.61
148. mountain	2.82	3.12	2.82	1.15	0.99	0.90
149. mouse	3.29	3.35	2.88	1.35	1.37	0.74
150. mushroom	3.82	3.59	3.71	1.40	1.38	0.97
151. nail	3.29	3.12	3.06	1.60	1.74	0.56
152. nail file	3.94	2.94	3.65	2.31	1.56	1.49
153. necklace	4.12	3.82	3.94	1.61	1.03	1.06
154. needle	2.18	3.65	3.18	1.65	0.87	1.40
155. nose	5.00	4.82	4.82	0.00	0.15	0.15
156. nut	2.65	2.94	2.59	1.74	1.43	0.76
157. onion	3.88	4.06	4.18	1.61	1.06	0.53
158. orange	4.59	4.24	4.41	1.38	0.69	0.38
159. ostrich	1.76	1.82	1.71	0.94	0.78	0.35
160. owl	2.41	2.82	2.24	1.13	1.15	0.82
161. paintbrush	3.24	3.47	3.00	1.32	1.14	1.25
162. pants	4.94	4.88	4.82	0.06	0.11	0.15
163. peach	4.12	3.94	4.00	1.36	0.56	0.50
164. peacock	2.12	2.53	2.24	1.11	0.64	0.94
165. peanut	3.31	3.35	3.18	1.56	1.24	1.15
166. pear	4.24	4.35	4.29	2.07	0.62	0.60
167. pen	4.94	4.88	4.76	0.06	0.11	0.19
168. pencil	4.88	4.88	4.71	0.24	0.11	0.35
169. penguin	1.88	2.35	1.82	0.86	1.62	0.53
170. pepper	3.35	2.53	3.35	1.62	1.51	1.12
171. piano	3.71	3.76	3.35	1.85	0.94	0.99
172. pig	3.00	2.82	2.65	1.38	1.15	0.99
173. pineapple	3.24	3.82	3.18	1.07	0.90	1.03
174. pipe	3.00	2.82	2.94	1.75	1.53	0.81
175. pitcher	3.76	4.06	3.71	1.32	1.06	1.10
176. pliers	2.82	2.94	2.24	1.15	1.31	1.19
177. plug	3.47	3.53	3.88	2.14	2.14	1.11
178. pocketbook	4.35	4.00	4.35	0.87	0.50	0.49
179. pot	4.71	4.76	4.71	0.72	0.44	0.22
180. potato	4.35	4.35	4.53	1.74	0.74	0.39
181. pumpkin	2.94	2.65	2.53	1.18	1.37	0.51
182. rabbit	3.71	3.82	3.69	1.22	0.65	1.16
183. raccoon	1.76	1.76	1.53	1.19	0.69	0.39
184. record player	3.06	2.88	2.53	1.18	0.99	1.39
185. refrigerator	4.88	4.65	4.76	0.11	0.24	0.19
186. rhinoceros	1.94	1.94	1.76	1.43	1.06	0.82
187. ring	3.00	4.00	4.06	2.63	1.13	0.93
188. rocking chair	2.82	2.41	2.71	1.53	1.26	1.35
189. roller skate	3.00	3.00	2.76	1.25	1.38	1.44
190. rolling pin	3.06	3.00	2.41	1.18	1.75	0.51
191. rooster	3.59	3.53	3.12	2.01	0.89	0.61
192. ruler	4.76	4.41	4.47	0.32	1.01	0.51
193. sailboat	2.82	2.94	2.88	1.40	0.93	0.86
194. saltshaker	4.12	4.29	4.47	1.49	0.72	0.51

195. sandwich	4.53	4.29	4.47	0.76	0.72	0.76
196. saw	3.12	3.06	2.53	1.74	0.93	0.89
197. scissors	4.65	4.47	4.41	1.12	0.39	1.01
198. screw	3.18	2.71	3.06	1.65	1.35	0.56
199. screwdriver	3.00	3.24	2.82	1.25	1.32	0.53
200. sea horse	1.53	1.41	1.53	1.14	0.51	0.51
201. seal	1.71	1.88	1.88	0.85	1.11	0.61
202. sheep	3.24	3.41	2.65	1.44	1.13	0.87
203. shirt	4.71	4.35	4.71	0.35	0.37	0.22
204. shoe	4.88	4.53	4.82	0.24	1.39	0.15
205. skirt	4.12	3.59	3.94	1.74	1.76	0.56
206. skunk	1.76	1.59	1.59	1.07	0.51	0.51
207. sled	2.35	2.35	2.29	0.99	1.24	0.60
208. snail	3.29	3.29	3.06	1.47	1.10	1.06
209. snake	1.88	2.12	2.00	1.24	0.86	0.75
210. snowman	2.71	3.18	2.76	1.72	1.65	0.57
211. socks	4.88	4.53	4.76	0.24	0.64	0.19
212. spider	3.59	3.53	3.41	1.26	1.01	1.63
213. spinning wheel	1.53	1.53	1.59	0.64	0.51	0.38
214. spool of thread	3.00	3.47	3.35	1.38	1.64	0.74
215. spoon	4.94	4.82	4.82	0.06	0.15	0.28
216. squirrel	3.00	2.88	2.35	1.38	1.11	0.62
217. star	4.29	3.76	4.06	1.22	1.07	0.81
218. stool	4.12	4.18	4.41	1.24	0.65	0.38
219. stove	4.47	4.59	4.59	0.76	0.38	0.51
220. strawberry	3.88	4.18	3.88	1.61	0.78	0.74
221. suitcase	4.00	3.76	3.76	0.75	0.94	0.94
222. sun	4.82	4.82	4.24	0.15	0.15	1.07
223. swan	2.76	2.71	2.41	1.32	0.72	0.51
224. sweater	4.94	4.53	4.71	0.06	0.39	0.35
225. swing	3.18	2.88	2.88	2.40	1.99	1.11
226. table	5.00	4.94	4.47	0.00	0.06	0.89
227. telephone	4.65	4.76	4.71	0.37	0.44	0.22
228. television	4.76	4.71	4.82	0.57	0.22	0.15
229. tennis racket	4.00	3.88	3.47	1.33	1.11	1.14
230. thimble	2.65	2.82	2.71	1.24	1.65	1.22
231. thumb	4.82	4.76	4.65	0.15	0.32	0.37
232. tie	3.94	3.29	3.71	0.81	1.35	0.60
233. tiger	1.76	2.06	2.00	0.69	1.18	0.63
234. toaster	4.18	3.94	4.00	1.15	0.93	0.75
235. toe	5.00	4.76	4.88	0.00	0.19	0.11
236. tomato	4.59	4.65	4.59	1.38	0.24	0.26
237. toothbrush	4.94	4.82	4.82	0.06	0.15	0.15
238. top	2.41	1.82	2.00	1.76	0.78	1.13
239. traffic lights	4.53	4.24	4.47	0.76	0.94	0.39
240. train	4.35	4.24	4.00	0.37	0.69	1.38
241. tree	4.88	4.88	4.88	0.11	0.11	0.11
242. truck	4.59	4.24	4.29	0.51	0.44	0.35
243. trumpet	2.82	2.88	2.41	2.03	1.36	0.51

244. turtle	2.94	3.24	2.76	1.93	1.07	0.69
245. umbrella	4.53	4.41	4.18	0.76	0.38	0.78
246. vase	3.47	3.53	3.06	2.26	2.14	0.81
247. vest	3.71	3.65	3.29	1.35	0.62	1.22
248. violin	2.82	2.76	2.65	1.53	1.32	0.74
249. wagon	2.06	2.06	2.06	0.93	1.81	1.31
250. watch	4.88	4.88	4.76	0.24	0.11	0.32
251. watering can	3.59	3.59	3.06	1.38	0.63	0.56
252. watermelon	2.82	3.24	2.94	1.40	1.07	0.43
253. well	2.29	2.18	1.82	1.35	1.03	0.53
254. wheel	2.76	2.65	2.41	1.07	1.37	1.01
255. whistle	3.35	2.88	2.76	1.24	1.36	0.82
256. windmill	2.24	2.18	2.24	1.32	0.90	0.82
257. window	4.27	4.06	4.59	1.64	2.18	0.38
258. wine glass	4.53	4.53	4.53	1.01	0.51	0.64
259. wrench	3.00	2.71	2.35	1.00	1.97	0.74
260. zebra	2.00	2.12	1.76	1.50	1.11	0.69