TOOL IDENTIFICATION QUIZ

Production: Jenny Liang 2015, Kivanc Yildiz 2010
Drawings: Ruby Qi, Ann Ke, Judy Liu & Karina Wu 2013
Revised & Expanded 2012, 2015

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Why and How

A knowledge of tool and instrument names will enhance your success in electronics and improve your life. Although tool identification quizzes were standard fifty years ago in all technical studies subjects, today they have been largely abandoned. Mastering this information is fun and fulfilling. In a secondary school such as ours, where the large majority speak English as a second language, this unit is especially valuable. Our guide groups tools by use: bending, clamping, cutting… The drawings appear alphabetically since students report that this approach aids memorization. A practice quiz booklet accompanies the guide. Names are replaced by blank lines. Students prepare for the quiz by testing themselves. During the actual quiz the tools and instruments are held aloft and shown randomly. Simultaneously, the teacher records the answer on an overhead projector transparency. Students mark each others quiz.

Background

This booklet first appeared in 2010 and underwent extensive revision and expansion in 2015. Six student artists generously contributed drawings. Thirty-nine drawings by Ruby Qu are included. Chantal Lo made a substantial contribution. Ann Ke, Judy Liu and Karina Wu also contributed. A separate electronic file of Ruby Qu’s full size drawings in 8.5 inch by 11 inch format is available at www.swcelectronics.com. Please acknowledge these artists when using their drawings. Our appreciation is also extended to Jenny Liang who spent many hours revising and expanding this guide.

Trevor Gibbens
A. Bending
1. ___________________  
2. ___________________  
3. ___________________

B. Clamping
4. ___________________  
5. ___________________  
6. ___________________  
7. ___________________  
8. ___________________  
9. ___________________  
10. ___________________
C. Cutting and Punching

11. ________________
12. ________________

13. ________________
14. ________________
15. ________________
16. ________________

17. ________________
18. ________________
19. ________________
20. ________________

21. ________________
22. ________________
23. ________________
24. ________________
D. Drilling

29. __________________ 30. __________________ 31. __________________ 32. __________________

33. __________________ 34. __________________ 35. __________________

E. Instruments

36. __________________ 37. __________________
F. Files

40. ___________________________  41. ___________________________  42. ___________________________

43. ___________________________  44. ___________________________  45. ___________________________ (___________)
G. Hammers and Mallets
46. _______________ 47. _______________ 48. _______________ 49. _______________
50. ___________________ 51. ___________________ 52. ___________________

H. Measuring and Layout
53. _______________ 54. _______________ 55. _______________ 56. _______________
57. ___________________ 58. ___________________ 59. ___________________
60. _______________ 61. _______________ 62. _______________ 63. _______________
I. Pliers

64. ___________________  65. ___________________  66. ___________________

67. ________________________  68. _______________________

69. ________________________  70. ________________________

71. ________________________  72. ________________________

J. Ratchet, Sockets and Wrenches

69. ____________________________ ( _________ )  70. ____________________________ ( _________ )  71. ____________________________ ( _________ )

72. ______________  73. _________________________  74. _________________________
K. Saws

75. ______________
76. ______________
77. ______________

78. ______________
79. ______________

L. Safety Equipment

80. ______________
81. ______________
82. ______________
M. Screwdrivers

83. ________________

84. ________________

85. ________________

86. ________________

87. ________________

88. (______________)

89. ________________

90. ________________

91. ________________

92. ________________
N. Soldering
93. ______________ 94. _______________

O. Miscellaneous
95. ____________ 96. _____________ 97. _____________ 98. ______________

99. _______________ 100. _______________
1. Hand Seamer  
2. Resistor Bender  
3. Small Tube Bender  
4. C-Clamp  
5. Jorgensen Clamp  
6. Drill Press Vice  
7. Panavise  
8. Bar Clamp (Fast-Acting Bar Clamp)  
9. Pressure-Adjusting Clamp  
10. Wooden Cam Clamps  
11. 90° Notcher  
12. Aviation Snips (Aircraft Snips)  
13. Diagonal Cutters  
14. Edge Deburrer  
15. Electrician’s Wire Stripper  
16. Countersink Deburrer  
17. Flush Cutters Mini Tube Cutter  
19. Nibbler  
20. No. 5 Junior Whitney Punch  
21. Pop Riveter  
22. Revolving Hole Punch a. Flash-Over Protection Guard  
23. Scissors  
24. Tube Cutter  
25. Utility Knife  
26. Wire Stripper  
27. X-Acto Knife  
28. XX Whitney Punch  
29. Drill Gauge  
30. Drill Index  
31. Forstner Bit  
32. Geared Hand Drill  
33. High-Speed Steel Twist Drill Bit  
34. Saw Tooth Bit  
35. Saw Tooth Bit  
36. Analog Multimeter a. Arbor b. Hole Saw  
37. Capacitance Meter  
38. Digital Multimeter a. Flash-Over Protection Guard  
39. LED Tester  
40. Double-Cut Half-Round Smooth File  
41. File Card  
42. Flat Bastard File  
43. Round Needle File  
44. Rasp  
45. Round File (Rat Tail File)  
46. Ball Peen Hammer  
47. Carpenter’s Beech Mallet  
48. Claw Hammer  
49. Rubber Hammer  
50. Sheet Metal  
51. Soft-Faced Hammer  
52. Warrington Hammer  
53. 30-60-90° Set Square  
54. 45-90° Set Square  
55. Automatic Centre Punch  
56. Awl  
57. Combination Square (with Spirit Level)  
58. Compass  
59. Hermaphrodite Caliper  
60. Protractor
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<td>61.</td>
<td>Scale</td>
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<td>62.</td>
<td>Try-Square</td>
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<td>63.</td>
<td>Dial Caliper</td>
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<td>64.</td>
<td>Bent Nose Pliers</td>
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<td>Lineman's Pliers</td>
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<td>66.</td>
<td>Round Nose Pliers</td>
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<td>Serrated-Jaw Pliers</td>
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<td>68.</td>
<td>Smooth-Jaw Needle Nose Pliers</td>
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<td>69.</td>
<td>Allen Wrench (Hex Key)</td>
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<td>70.</td>
<td>Combination Wrench (With Open and Box End)</td>
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<td>71.</td>
<td>Crescent Wrench (Adjustable Wrench)</td>
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<td>72.</td>
<td>Die Wrench (Die Stock)</td>
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<td>73.</td>
<td>Jacobs Chuck Key (Canadian, 1907)</td>
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<td>74.</td>
<td>Ratchet a. Extension</td>
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<td>75.</td>
<td>Back Saw</td>
<td>91. Stubby Phillip's Screwdriver</td>
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<td>76.</td>
<td>Coping Saw</td>
<td>92. Torx Screwdriver</td>
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<td>77.</td>
<td>Crosscut Saw</td>
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<td>78.</td>
<td>Hacksaw</td>
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<td>79.</td>
<td>Jeweler's Saw</td>
<td>93. Soldering Pencil</td>
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<td>Dust Mask</td>
<td>94. Solder Vacuum</td>
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<td>Hearing Protectors</td>
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<td>82.</td>
<td>Hard Hat</td>
<td>95. Chip Lifter</td>
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<td>96. Glue Gun</td>
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<td>84.</td>
<td>Electrician's Slotted Screwdriver</td>
<td>98. Stapler</td>
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<td>85.</td>
<td>Megapro Tamperproof Screwdriver</td>
<td>99. Staple Remover</td>
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<td>86.</td>
<td>Nut Driver</td>
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<td>Phillip's Screwdriver</td>
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<td>Robertson Screwdriver</td>
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<td>Slotted Screwdriver</td>
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<td>Stubby Multibit</td>
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