Appendices

Phonome Speech Dictionary

00	EHO	214
00	EH3	jacket
01	EH2	enlist
02	EH1	heavy
03	PA0	no sound
04	DT	butter
05	A2	made
06	A1	made
07	ZH	azure
08	AH2	honest
09	I3	inhibit
0A	I2	inhibit
0B	I1	inhibit
0C	M	mat
0D	N	sun
0E	В	bag
0F	V	van
10	CH	chip
11	SH	shop
12	Z	ZOO
13	AW1	lawful
14	NG	
		thing
15	AH1	father
16	001	looking
17	00	book
18	L	land
19	K	trick
1A	J	judge
1B	H	hello
1C	G	get
1D	F	fast
1E	D	paid
1F	S	pass
20	A	day
21	AY	day
22	Y1	yard
23	UH3	mission
24	AH	mop
25	P	past
26	O	cold
27	I	pin
28	U	move
29	Y	any
2A	T	tap
2B	R	red
2C	E	meet
2D	W	win
4 ال	v v	vv 111

2E	AE	dad
2F	AE1	after
30	AW2	safety
31	UH2	about
32	UH1	uncle
33	UH	cup
34	O2	for
35	O1	aboard
36	IU	you
37	U1	you
38	THV	the
39	TH	thin
3A	ER	bird
BB	EH	get
3C	E1	be
BD	AW	call
3E	PA1	no sound
3F	STOP	no sound

01 2D 32 31 0D ANGLE 2F 00 14 1C 23 18 10 2A 02 00 0D ANGRY 2F 00 14 1C 2B 29 100 1B 32 31 0D 1E 2B 09 1E ANIMAL 2F 00 0D 0B 09 0C 23 18 1000 39 15 23 37 12 00 0D 1E ANSWER 2F 00 0D 1F 3A 1000000 OC 0B 09 18 29 23 0D ANY 01 01 0D 29 11 02 18 02 00 0F 0A 0D APPROVAL 32 35 2B 37 0F 23 18 12 2A 2D 02 00 18 0F ARCH 15 2B 2A 10 13 39 3A 2B 2A 3C 29 0D ARGUMENT 15 2B 1C 22 36 37 37 0C 14 1D 35 34 2B 2A 3C 29 0D 02 00 0D 2A 15 1D 0B 09 1D 2A 3C 29 0D ARM 15 2B 0C ARMY 15 2B 0C 29 16 1F 0B 09 19 03 1F 2A 3C 29 0D 17 1F 02 00 0F 02 00 0D 2A 3C 29 0D ART15 2B 2A 18 05 05 29 2A 3C 29 0D AS 2F 00 12 19 0D 15 00 29 0D 2A 3C 29 0D AT 2F 00 2A 2 2A 36 37 37 ATTACK 32 2A 2F 00 19 20 2A 2D 02 00 0D 2A 29 ATTENTION 32 2A 02 00 0D 11 23 0D 3 39 2B 3C 29 ATTRACTION 32 2A 2B 2F 00 19 11 30 39 3A 2B 2A 29 23 OD AUTOMATIC 3D 2A 31 0C 2F 00 2A 4 1D 35 34 2B 40 1D 34 34 2B 2A 29 0B 19 5 1D 15 00 29 0F AWAKE 32 2D 06 21 29 19 50 1D 0B 29 1D 2A 29 BABY 0E 06 21 29 0E 29 6 1F 0B 09 19 03 1F BACK 0E 2F 00 19 60 1F 0B 09 19 03 1F 2A 29 BAD 0E 2F 00 1E 7 1F 02 00 0F 0A 0D BAG 0E 2F 00 1C 70 1F 02 00 0F 02 00 0D 2A 29 BALANCE 0E 2F 00 18 00 0D 2A 1F 8 05 05 29 2A **BALL 0E 3D 18** 80 05 05 29 2A 29 BAND 0E 2F 00 0D 1E 9 0D 15 00 29 0D BASE 0E 06 21 29 1F BASKET 0E 2F 00 1F 19 00 2A 90 0D 15 00 29 0D 2A 29 BATH 0E 2F 00 39 A 06 21 29 ABLE 06 29 0E 23 18 BE 0E 3C 29 ABOUT 32 0E 31 08 37 2A BEAUTIFUL 0E 22 36 37 2A 0B 1D 16 ACCOUNT 32 19 15 23 2D 0D 2A BECAUSE 0E 29 19 3D 12 ACROSS 32 19 2B 3D 1F BED 0E 02 00 1D ACT 2F 00 19 2A ADDITION 2F 00 1E 0B 09 11 23 0D BEE 0E 3C 29 ADJUSTMENT 2F 00 1E 1A 32 31 1F BEFORE 0E 29 1D 34 34 2B 2A 0C 02 00 0D 2A BEHAVIOR 0E 29 1B 06 09 29 0F 22 AFTER 2F 00 1D 2A 3A 36 37 3A BELIEF 0E 29 18 3C 29 1D AGAIN 32 1C 05 02 0D AGREEMENT 32 1C 2B 3C 29 0C 02 BELL 0E 02 00 18 00 OD 2A BENT 0E 02 00 0D 2A AIR 01 01 2B BERRY 0E 02 00 2B 29 ALL 3D 18 BETWEEN 03 29 2A 2D 3C 29 0D ALMOST 3D 18 0C 35 37 1F 2A BIG 0E 0B 09 1C AMONG 32 0C 23 32 14 BIRD 0E 3A 2B 1E AND 2F 00 0D 1E BIT 0E 0B 09 2A

CERTAIN 1F 3A 2A 0B 29 0D

CHAIN 2A 10 06 21 29 0D

BITE 0E 23 08 29 2A CHANCE 2A 10 2F 00 0D 1F BITTER 0E 0B 09 2A 3A CHANGE 2A 10 06 21 29 0D 1E 1A BLACK 0E 18 2F 00 19 19 CHEAP 2A 10 3C 29 25 BLOW 0E 18 35 37 CHEEP 2A 10 3C 29 25 BLUE 0E18 36 37 37 CHEESE 2A 10 3C 29 12 CHEST 2A 10 02 00 1F 2A BOARD 0E 35 34 2A 1E BOAT 0E 35 37 2A CHIEF 2A 10 3C 29 1D BODY 0E 15 23 1E 29 CHIN 2A 10 0B 09 0D BOILING 0E 35 23 09 21 18 0B 14 CHURCH 2A 10 3A 2B 2A 10 BONE 0E 35 37 0D CIRCLE 1F 3A 2B 19 23 18 BOOK 0E 16 16 19 CLEAN 19 18 3C 29 0D BOOT 0E 37 37 2A CLEAR 19 18 21 09 2B BOTTLE 0E 15 23 2A 23 18 CLOCK 19 18 15 23 19 BOX 0E 15 23 19 1F CLOTH 19 18 3D 39 BOY 0E 35 23 09 21 CLOUD 19 18 15 23 2D 1E BRAIN 0E 2B 06 21 29 0D COAT 19 35 37 2A BRAKE 0E 2B 06 21 29 19 COLD 19 34 34 18 18 1E BRANCH 0E 2B 2F 00 0D 2A 10 COLOR 19 32 18 3A BREAK 0E 2B 06 21 29 19 COME 19 32 23 0C BREATH 0E 2B 02 00 39 COMFORT 19 15 23 0C 1D 34 34 2B BRICK 0E 2B 0B 09 19 COMMITTEE 19 32 23 0C 0B 09 2A BRIDGE 0E 2B 0B 09 1E 1A BRIGHT 0E 2B 23 08 29 2A 3C 29 BROKEN 0E 2B 35 19 0A 0D COMMON 19 15 23 0C 32 0D BROTHER 0E 2B 32 23 38 3A COMPANY 19 32 23 0C 25 2F 00 0D 29 COMPLETE 19 32 23 0C 25 18 3C 29 BROWN 0E 2B 15 23 37 0D BRUSH 0E 2B 32 31 11 BUCKET 0E 32 31 19 00 2A COMPLEX 19 15 23 0C 25 18 02 00 19 BUILDING 0E 0A 0A 18 1E 0B 09 14 03 1F BURN 0E 3A 2B 0D CONDITION 19 32 0D 1E 0B 09 11 23 BURST 0E 3A 2B 1F 2A 0DBURY 0E 02 00 2B 29 CONSCIOUS 19 32 0D 11 32 1F CONTROL 19 32 0D 2A 2B 35 34 18 BUSINESS 0E 09 0A 12 0D 02 1F BUT 0E 32 31 2A COOK 19 16 16 19 BUTTER 0E 32 31 2A 3A COPY 19 15 23 25 29 BUTTON 0E 32 31 2A 32 0D **COUGH 19 3D 1D** BUY 0E 15 00 29 COUNTRY 19 32 0D 2A 2B 29 BY 0E 15 00 29 COVER 19 32 23 0F 3A BYE 0E 15 00 29 COW 19 15 23 37 CAKE 19 06 21 29 19 CRACK 19 2B 2F 00 19 CAMERA 19 2F 00 0C 3A 31 23 CREDIT 19 2B 02 00 1E 0B 2A CRIME 19 2B 15 00 29 0C CARD 19 15 2B 1E CARE 19 00 00 3A CRUEL 19 2B 36 37 37 18 CART 19 15 2B 2A CRUSH 19 2B 32 31 11 CAT 19 2F 00 2A CRY 19 2B 15 00 09 29 CAUSE 19 3D 12 CUP 19 32 31 25

CURRENT 19 3A 2B 02 00 0D 2A

CURTAIN 19 3A 2B 2A 09 0D

DRIVING 1E 2B 15 00 29 0F 0B 14

CURVE 19 3A 2B 0F DROP 1E 2B 15 23 25 CUSHION 19 16 36 11 23 0D DRY 1E 2B 15 00 09 29 DUE 1E 36 37 37 CUT 19 32 31 2A DAMAGE 1E 2F 00 0C 0B 1E 1A DUST 1E 32 31 1F 2A DANGER 1E 06 21 29 0D 1E 1A 3A EAR 3C 0A 2B EARLY 3A 2B 18 29 DARK 1E 15 2B 19 DAUGHTER 1E 3D 2A 3A EARTH 3A 2B 39 DAY 1E 06 09 29 EAST 3C 21 1F 2A DEAD 1E 02 00 1E EDGE 02 00 1E 1A DEAR 1E 21 09 2B EDUCATION 02 1E 1A 36 19 06 29 11 DEATH 1E 02 00 39 23 OD DEBT 1E 02 00 2A EFFECT 02 00 1D 02 00 19 2A DECISION 1E 29 1F 0B 07 23 0D EIGHT 05 05 29 2A DEEP 1E 3C 29 25 EIGHTEEN 05 05 29 2A 3C 29 0D EIGHTY 05 05 29 2A 29 DEER 1E 21 09 2B DEGREE 1E 29 1C 2B 3C 29 ELECTRIC 02 18 02 00 19 2A 2B 0B 09 DELICATE 1E 02 18 0B 19 0B 2A DEPENDENT 1E 29 25 02 00 0D 1E 02 ELEVEN 02 18 02 00 0F 0A 0D 00 0D 2A EMPTY 02 00 0C 25 2A 29 DESIGN 1E 29 12 15 00 29 0D END 02 00 0D 1E **DESTRUCTION 1E 29 1F 2A 2B 32 31** ENGINE 02 00 0D 0D 1E 2A 0B 0D 19 11 23 0D ENOUGH 29 0D 32 23 1D DETAIL 1E 3C 29 2A 06 21 29 18 EOUAL 29 19 2D 23 18 DEVELOPMENT 1E 3C 29 0F 02 18 15 ERROR 00 00 00 2B 3A 23 25 0C 02 00 0D 2A EVEN 29 0F 0A 0D DEW 1E 36 37 37 EVER 02 0F 3A DIFFERENT 1E 0B 09 1D 3A 02 00 0D EVERY 02 0F 3A 29 EXAMPLE 02 00 1C 03 12 2F 00 0C 25 DIRECTION 1E 3A 02 00 19 2A 11 32 EXISTENCE 02 00 1C 03 12 0B 09 1F 0D DIRTY 1E 3A 2B 2A 29 2A 02 00 0D 1F DISCOVERY 1E 0B 1F 19 32 23 0F 3A EXPERIENCE 02 00 19 03 1F 25 0B 2B 29 02 00 0D 1F DISGUST 1E 0B 09 1F 1C 32 31 1F 2A EXPERT 02 00 19 03 1F 25 3A 2A DISTANCE 1E 0B 1F 2A 00 0D 2A 1F EYE 15 00 09 29 DISTRIBUTION 1E 0B 1F 2A 2B 0B 09 FACE 1D 06 21 29 1F 0E 22 36 37 37 11 23 0D FACT 1D 2F 00 19 2A DIVISION 1E 0B 0F 0B 07 23 0D FALL 1D 3D 18 DO 1E 36 37 37 FALSE 1D 3D 18 1F DOG 1E 3D 1C FAMILY 1D 2F 00 0C 18 29 DOOR 1E 35 34 2B FAR 1D 15 23 2B DOUBT 1E 31 08 37 2A FARM 1D 15 2B 0C DOWN 1E 15 23 2D 0D FAT 1D 2F 00 2A DRAIN 1E 2B 06 21 29 0D FATHER 1D 15 23 38 3A DRAWER 1E 2B 3D 2D 3A FEAR 1D 21 0A 2B DRESS 1E 2B 02 00 1F FEATHER 1D 02 00 38 3A DRINK 1E 2B 0B 09 14 19 FEEBLE 1D 3C 29 0E 23 18

FEELING 1D 3C 29 18 0B 14

FEMALE 1D 3C 29 0C 06 21 29 18

FIELD 1D 3C 29 18 1E

FIFTEEN 1D 0B 09 1D 2A 3C 29 0D

FIFTY 1D 0B 09 1D 2A 29 FIGHT 1D 23 08 29 2A

FINGER 1D 0B 09 0D 14 1C 3A

FIRE 1D 15 00 21 2B FIRST 1D 3A 2B 1F 2A FIVE 1D 15 00 29 0F

FIXED 1D 0B 19 03 1F 2A FLAG 1D 18 2F 00 1C

FLAME 1D 18 06 21 29 0C FLAT 1D 18 2F 00 2A

FLIGHT 1D 18 23 08 29 2A FLOOR 1D 18 35 34 2B

FLOWER 1D 18 15 2D 3A

FLY 1D 18 15 00 29 FOLD 1D 34 34 18 18 1E FOOD 1D 37 37 1E

FOOLISH 1D 37 37 18 0B 11

FOOT 1D 16 16 2A FOR 1D 34 34 2B

FORCE 1D 34 34 2B 1F FORM 1D 34 34 2B 0C FORTY 1D 34 34 2B 2A 29

FORWARD 1D 34 34 2B 2D 3A 1E

FOUL 1D 15 23 2D 18 FOUR 1D 35 34 2B

FOURTEEN 1D 35 34 2B 2A 3C 29 0D

FOWL 1D 15 23 2D 18 FREE 1D 2B 3C 29

FRIEND 1D 2B 02 01 0D 1E FROM 1D 2B 32 23 0C FRONT 1D 2B 23 32 0D 2A

FULL 1D 16 18

FUNNY 1D 32 31 0D 29

FUTURE 1D 22 36 37 37 2A 10 3A

GAME 1C 06 21 29 0C

GARDEN 1C 15 2B 1E 0A 0D

GENERAL1E 1A 02 00 0D 3A 23 18

GET 1C 02 00 2A GIRL 1C 3A 2B 18 GIVE 1C 0B 09 0F GLASS 1C 18 2F 00 1F GLOVE 1C 18 32 23 0F

GO 1C 35 37 GOAT 1C 35 37 2A

GOLD 1C 34 34 18 18 1E

GOOD 1C 16 16 1E

GOVERNMENT 1C 32 23 0F 3A 0D 0C

02 00 0D 2A

GRAY 1C 2B 06 09 29 GREAT 1C 2B 06 29 2A GREEN 1C 2B 3C 29 0D GRIP 1C 2B 0B 09 25 GROUP 1C 2B 37 37 25 GROWTH 1C 2B 35 37 39 GUIDE 1C 15 00 29 1E GUN 1C 32 31 0D HAIR 1B 01 01 2B

HAND 1B 2F 00 0D 1E HANGING 1B 2F 00 14 0B 09 14

HAPPY 1B 2F 00 25 29 HARD 1B 15 2B 1E

HARMONY 1B 15 2B 0C 23 0D 3C

HAT 1B 2F 00 2A HATE 1B 06 21 29 2A HAVE 1B 2F 00 0F HE 1B 3C 29 HEAD 1B 02 00 1E

HEALTHY 1B 02 00 18 39 29 HEARING 1B 3C 09 2B 0B 14 HEART 1B 15 23 2B 2A

HEAT 1B 3C 21 2A HELP 1B 02 00 18 25 HERE 1B 21 0B 2B HIGH 1B 15 00 29

HISTORY 1B 0B 09 1F 2A 2B 29

HOLE 1B 35 37 18 HOOK 1B 16 16 19 HOPE 1B 35 37 25 HOUR 15 23 2D 3A HOUSE 1B 23 08 37 1F HOW 1B 15 34 37 HUG FC C5

HUMOR 1B 22 36 37 37 0C 3A HUNDRED 1B 32 31 0D 1E 2B 09 1E

HURRY 1B 3A 2B 29 I 15 00 09 29 ICE 23 08 29 1F IDEA 15 29 1E 21 29 31

IF 0B 09 1D ILL 0B 09 18

IMPORTANT 0B 09 0C 25 34 34 2B 2A

00 0D 2A

IMPULSE 0B 09 0C 25 32 31 18 1F

LIFT 18 0B 09 1D 2A

IN 0B 09 0D LIGHT 18 23 08 29 2A INCH 0B 09 0D 2A 10 LIKE 18 23 08 29 19 LIMIT 18 0B 0C 0B 2A INCREASE 0B 29 0D 19 2B 3C 29 1F INDUSTRY 0B 09 0D 1E 32 31 1F 2A LINE 18 15 00 29 0D 2B 29 LIP 18 0B 09 25 INTEREST 0B 09 0D 2A 3A 02 00 1F LIST 18 0B 09 1F 2A 2A LITTLE 18 0B 09 2A 23 18 IRON 15 29 3A 0D LIVING 18 0B 0F 0B 14 is 0B 09 29 12 LOCK 18 15 23 19 ISLAND 15 00 29 18 00 0D 1E LONG 18 3D 14 IT 0B 29 2A LOOK 18 16 16 19 JELLY 1E 1A 02 00 18 29 LOOSE 18 37 37 1F JEWEL 1E 1A 36 37 37 23 18 LOSS 18 3D 1F JOB 1E 1A 15 23 0E LOUD 18 15 23 2D 1E LOVE 18 32 23 0F JOIN 1E 1A 35 23 09 21 0D JOKE 1E 1A 35 37 19 LOW 18 35 37 JUDGE 1E 1A 32 31 1E 1A MACHINE 0C 31 11 3C 29 0D JUMP 1E 1A 32 31 0C 25 MAIL 0C 06 21 29 18 KEEP 19 3C 29 25 MAKE 0C 06 21 29 19 MALE 0C 06 21 29 18 KETTLE 19 02 00 2A 23 18 KEY 19 21 29 MAN 0C 2F 00 0D MANAGER 0C 2F 00 0D 02 1E 1A 3A KICK 19 0B 09 19 KIND 19 15 00 29 0D 1E MAP 0C 2F 00 25 MARK 0C 15 2B 19 KISS 19 0B 09 1F KNEE 0D 3C 29 MARKET 0C 25 2B 19 00 2A KNIFE 0D 23 08 29 1D MARRIED 0C 01 00 2B 29 1E KNOT 0D 15 23 2A MASS 0C 2F 00 1F KNOWLEDGE 0D 15 23 18 00 1E 1A MATCH 0C 2F 00 2A 10 KNOWS 0D 35 37 12 MATERIAL 0C 32 2A 0B 2B 29 23 18 LAND 18 2F 00 0D 1E MAY 0C 06 09 29 LANGUAGE 18 2F 00 14 1C 2D 0B 1E MEAL 0C 3C 21 18 MEASURE 0C 00 02 07 3A LAST 18 2F 00 1F 2A MEAT 0C 3C 29 2A LATE 18 06 21 29 2A MEDICAL 0C 02 00 1E 0B 19 23 18 MEET 0C 3C 29 2A LAUGH 18 2F 2F 1D MEETING 0C 3C 29 2A 0B 14 LAW 18 3D LEAD 18 29 21 1E MEMORY 0C 02 00 0C 34 34 2B 29 LEAF 18 3C 21 1D METAL 0C 02 00 2A 23 18 MIDDLE 0C 0B 09 1E 23 18 LEARNING 18 3A 2B 0D 0B 09 14 LED 18 02 00 1E MILITARY 0C 0B 18 0B 2A 00 00 3A LEED 18 29 21 1E MILLION 0C 0B 09 18 29 23 0D LEFT 18 02 00 1D 2A LEG 18 02 00 1C MIND 0C 15 00 29 0D 1E LET 18 02 00 2A MINE 0C 15 00 29 0D LETTER 18 02 00 2A 3A MINUTE 0C 0B 0D 00 2A LEVEL 18 02 00 0F 23 18 MIST 0C 0B 09 1F 2A LIBRARY 18 15 29 0E 2B 00 00 3A 29 MIXED 0C 0B 19 03 1F 2A MONEY 0C 23 32 0D 21 29

MONTH 0C 23 32 0D 39 ON 15 23 0D MOON 0C 37 37 0D ONE 2D 32 31 0D MORNING 0C 34 34 2B 0D 0B 09 14

MOTHER 0C 32 23 38 3A OPEN 35 25 0A 0D MOTION 0C 34 34 11 23 0D

MOUNTAIN 0C 15 23 2D 0D 2A 09 0D

MOUTH 0C 31 08 37 39 MOVE 0C 37 37 0F MUCH 0C 32 31 2A 10 MUSCLE 0C 32 31 1F 23 18 MUSIC 0C 22 36 37 37 12 0B 19

NAIL 0D 06 21 29 18 NAME 0D 06 21 29 0C NARROW 0D 01 00 2B 35 37 NATION 0D 06 29 11 23 0D

NATURAL 0D 2F 00 2A 10 3A 23 18

NEAR 0D 21 09 2B

NECESSARY 0D 02 00 1F 02 00 1F 00

00 3A 29

NECK 0D 02 00 19 NEED 0D 3C 29 1E

NEEDLE 0D 3C 29 1E 23 18

NERVE 0D 3A 0F NET 0D 02 00 2A NEW 0D 36 37 37 NEWS 0D 36 37 37 12 NIGHT 0D 23 08 29 2A NINE 0D 15 00 29 0D

NINETEEN 0D 15 00 29 0D 2A 3C 29

NINETY 0D 15 00 29 0D 2A 29

NO 0D 35 37

NOISE 0D 35 23 09 21 12 NORMAL 0D 34 34 2B 0C 23 18

NORTH 0D 34 34 2B 39 NOSE 0D 35 37 12 NOT 0D 15 23 2A NOTE 0D 35 37 2A NOW 0D 15 23 37

NUMBER 0D 32 31 0C 0E 3A

NUT 0D 32 31 2A OF 32 23 0F OFF 3D 1D OFFER 3D 1D 3A OFFICE 3D 1D 0B 1F OFTEN 3D 1D 02 00 0D

OIL 35 23 09 21 18 OLD 34 34 18 18 1E ONLY 35 34 0D 18 29

OPINION 35 37 25 0B 09 0D 29 23 0D OPPOSITE 15 23 25 32 1F 0B 2A

OR 34 34 2B

ORANGE 34 34 2B 0B 0D 1E 1A

ORDER 34 34 2B 1E 3A OTHER 32 23 38 3A OUR 15 23 2D 3A OUT 23 08 37 2A OVEN 32 0F 0A 0D OVER 35 34 0F 3A OWNER 35 37 0D 3A PAGE 25 06 21 29 1E 1A PAIN 25 06 21 29 0D PAINT 25 06 21 29 0D 2A PANE 25 06 21 29 0D PAPER 25 06 21 29 25 3A PART 25 15 2B 2A

PAST 25 2E 1F 2A PASTE 25 06 21 29 1F 2A

PAYMENT 25 06 09 29 0C 02 00 0D 2A

PEACE 25 3C 21 1F PEN 25 02 00 0D

PENCIL 25 02 00 0D 1F 31 18 PEOPLE 25 3C 29 25 23 18 PERSON 25 3A 1F 32 0D PICTURE 25 0B 09 19 2A 10 3A

PIG 25 0B 09 1C PIN 25 0B 09 0D PIPE 25 23 08 29 25 PLACE 25 18 06 21 29 1F PLAIN 25 18 06 21 29 0D PLANE 25 18 06 21 29 0D PLANT 25 18 2F 00 0D 2A PLAY 25 18 06 09 29 PLEASE 25 18 3C 21 12 POCKET 25 15 23 19 00 2A POINT 25 35 23 09 21 0D 2A

POISON 25 35 23 09 21 12 32 0D POLISH 25 15 23 18 0B 11 POLITICAL 25 35 37 18 02 2A 0B 19

23 1B

POOR 25 35 34 2B

POSSIBLE 25 15 23 1F 0B 09 0E 23 18

POT 25 15 23 2A

POTATO 25 32 2A 06 29 2A 35 37 RING 2B 0B 09 14 POUR 25 35 34 2B RIVER 2B 0B 0F 3A POWDER 25 15 23 2D 1E 3A ROAD 2B 35 37 1E POWER 25 15 23 2D 3A ROBOT 2B 35 37 0E 15 23 2A PRESENT 25 2B 02 12 02 00 0D 2A ROD 2B 15 23 1E PRICE 25 2B 23 08 29 1F ROLL 2B 35 23 18 PRINT 25 2B 0B 09 0D 2A ROOF 2B 37 37 1D PRISON 25 2B 0B 09 12 32 0D ROOM 2B 37 37 0C PRIVATE 25 2B 15 00 29 0F 09 2A ROOT 2B 37 37 2A PROCESS 25 2B 15 23 1F 02 00 1F ROUGH 2B 32 23 1D PRODUCE 25 2B 32 1E 36 37 37 1F ROUND 2B 15 23 2D 0D 1E PROFIT 25 2B 15 23 1D 0B 2A RUB 2B 32 31 0E PROPERTY 25 2B 15 23 25 3A 2A 29 RULE 2B 36 37 37 18 PROTEST 25 2B 32 2A 02 00 1F 2A RUN 2B 32 31 0D PUBLIC 25 32 31 0E 18 0B 09 19 SAD 1F 2F 00 1E PULL 25 16 16 18 SAFE 1F 06 21 29 1D PUMP 25 32 31 0C 25 SAIL 1F 06 21 29 18 PUNISHMENT 25 32 0D 0B 11 0C 02 SALE 1F 06 21 29 18 00 0D 2A SALT 1F 3D 18 2A PURPOSE 25 3A 2B 25 23 1F SAME 1F 06 21 29 0C PUSH 25 16 36 11 SAND 1F 2F 00 0D 1E PUT 25 16 16 2A SAY 1F 06 09 29 OUESTION 19 2D 02 00 1F 2A 10 23 SCALE 1F 19 06 21 29 18 SCHOOL 1F 19 37 37 18 0DOUICK 19 2D 0B 09 19 SCIENCE 1F 15 09 21 02 00 0D 1F QUIET 19 2D 15 00 21 0A 2A SCISSORS 1F 0B 09 12 3A 12 QUITE 19 2D 23 08 29 2A SCREW 1F 19 2B 36 37 37 RAIN 2B 06 21 29 0D SEA 1F 3C 29 RANGE 2B 06 21 29 0D 1E 1A SEAT 1F 3C 21 2A RAT 2B 2F 00 2A SECOND 1F 02 00 19 32 0D 1E SECRET 1F 3C 19 2B 09 2A RATE 2B 06 21 29 2A RAY 2B 06 09 29 SECRETARY 1F 02 00 19 2B 02 00 2A REACTION 2B 29 2F 00 19 11 23 0D 00 00 3A 29 READING 2B 3C 29 1E 0B 14 SEE 1F 3C 29 SEED 1F 3C 29 1E READY 2B 02 00 1E 29 REASON 2B 3C 29 12 32 0D SEEDY 1F 3C 29 1E 29 SEEM 1F 3C 29 0C RED 2B 02 00 1E REGULAR 2B 02 1C 22 36 18 3A SELECTION 1F 02 00 18 02 00 19 11 RELATION 2B 3C 18 06 29 11 23 0D 23 OD RELIGION 2B 3C 18 0B 1E 1A 23 0D SELF 1F 02 00 18 1D REQUEST 2B 3C 19 2D 02 00 1F 2A SEND 1F 02 00 0D 1E RESPECT 2B 3C 1F 25 02 00 19 2A SENSE 1F 02 00 0D 1F RESPONSIBLE 2B 02 1F 25 15 23 0D SEPARATE 1F 02 00 25 32 2B 06 21 2A 1F 0B 09 0E 23 18 SEPARATE 1F 02 00 25 3A 0A 2A REST 2B 02 00 1F 2A SERIOUS 1F 0B 2B 29 32 1F REWARD 2B 3C 2D 34 35 2B 1E SERVANT 1F 3A 0F 02 00 0D 3A RHYTHM 2B 0B 38 23 0C SEVEN 1F 02 00 0F 0A 0D

RIGHT 2B 23 08 29 2A

SEVENTEEN 1F 02 00 0F 02 00 0D 2A

3C 29 0D	SOME 1F 32 23 0C
SEVENTY 1F 02 00 0F 02 00 0D 2A 29	SON 1F 23 32 0D
SEX 1F 02 00 19 03 1F	SONG 1F 3D 14
SHADE 11 06 21 29 1E	SORT 1F 34 34 2B 2A
SHAKE 11 06 21 29 19	SOUND 1F 15 23 2D 0D 1E
SHAME 11 06 21 29 0C	SOUTH 1F 15 23 37 39
SHARP 11 15 2B 25	SPACE 1F 25 06 21 29 1F
SHE 11 3C 29	SPADE 1F 25 06 21 29 1E
SHEEP 11 3C 29 25	SPECIAL 1F 25 02 00 11 23 18
SHELF 11 02 00 18 1D	SPRING 1F 25 2B 0B 09 14
SHIP 11 0B 09 25	SQUARE 1F 19 2D 02 2B
SHIRT 11 3A 2B 2A	STAGE 1F 2A 06 21 29 1E 1A
SHOCK 11 15 23 19	STAMP 1F 2A 2F 00 0C 25
SHOE 11 37 37	STAR 1F 2A 15 23 2B
SHOE 11 37 37 SHORT 11 34 34 2B 2A	START 1F 2A 15 2B 2A
SHUT 11 32 31 2A	STATEMENT 1F 2A 06 29 2A 0C 00 0D
SIDE 1F 15 00 29 1E	2A
SIGN 1F 15 00 29 0D	STATION 1F 2A 06 29 11 23 0D
SIMPLE 1F 0B 09 0C 25 23 18	STEAL 1F 2A 3C 29 18
SISTER 1F 0B 09 1F 2A 3A SIX 1F 0B 09 19 03 1F	STEAM 1F 2A 3C 21 0C
SIX 1F 0B 09 19 03 1F	STEEL 1F 2A 3C 29 18
SIXTEEN 1F 0B 09 19 03 1F 2A 3C 29	STEM 1F 2A 02 00 0C
0D	STEP 1F 2A 02 00 25
SIXTY 1F 0B 09 19 03 1F 2A 29	STICK 1F 2A 0B 09 19
SIZE 1F 15 00 29 12	STICKY 1F 2A 0B 09 19 29
SKIN 1F 19 0B 09 0D	STIFF 1F 2A 0B 09 1D
SKIRT 1F 19 3A 2B 2A	STILL 1F 2A 0B 09 18
SKY 1F 19 15 00 09 29	STITCH 1F 2A 0B 09 2A 10
SLEEP 1F 18 3C 29 25	STONE 1F 2A 35 37 0D
SLIP 1F 18 0B 09 25	STOP 1F 2A 15 23 25
SLOPE 1F 18 35 37 25	STORE 1F 2A 34 34 2B
SLOW 1F 18 35 37	STORY 1F 2A 34 34 2B 29
SMALL 1F 0C 3D 18	STRAIGHT 1F 2A 2B 06 21 29 2A
SMASH 1F 0C 2F 00 11	STRANGE 1F 2A 2B 06 21 29 0D 1E
SMELL 1F 0C 02 00 18	1A
SMILE 1F 0C 15 00 09 23 18	STREET 1F 2A 2B 3C 29 2A
SMOKE 1F 0C 35 37 19	STRETCH 1F 2A 2B 02 00 2A 10
SMOOTH 1F 0C 37 37 38	STRONG 1F 2A 2B 3D 14
SNAKE 1F 0D 06 21 29 19	SUCH 1F 32 31 2A 10
SNEEZE 1F 0D 3C 29 12	SUDDEN 1F 32 31 1E 0A OD
SNOW 1F 0D 35 37	SUGAR 11 16 1C 3A
SO 1F 35 37	SUGGESTION 1F 32 31 1C 1E 1A 02
SOAP 1F 35 37 25	00 1F 2A 10 23 0D
SOCIETY 1F 34 34 1F 15 00 21 0A 2A	SUMMER 1F 32 31 0C 3A
29	SUN 1F 23 32 0D
SOCK 1F 15 23 19	SUPPORT 1F 32 31 25 34 34 2B 2A
SOFT 1F 3D 1D 2A	SURPRISE 1F 3A 2B 25 2B 15 00 29 12
SOLID 1F 15 23 18 0B 1E	SWEET 1F 2D 3C 29 2A

TONGUE 2A 32 23 14

TOOTH 2A 37 37 39

TOO 2A 37 37

TOP 2A 15 23 25

SWIM 1F 2D 0B 09 0C TOUCH 2A 32 23 2A 10 SYSTEM 1F 0B 1F 2A 02 00 0C TOW 2A 35 37 2D TABLE 2A 06 29 0E 23 18 TOWN 2A 15 23 37 0D TAIL 2A 06 21 29 18 TRADE 2A 2B 06 21 29 1E TAKE 2A 06 21 29 19 TRAIN 2A 2B 06 21 29 0D TRAY 2A 2B 06 21 29 TALK 2A 3D 19 **TALL 2A 3D 18** TREE 2A 2B 3C 29 TASTE 2A 06 21 29 1F 2A TRICK 2A 2B 0B 09 19 TROUBLE 2A 2B 23 32 0E 23 18 TAX 2A 2F 00 19 03 1F TEACHING 2A 3C 21 2A 10 0B 09 14 TRUE 2A 2B 36 37 37 TRY 2A 2B 15 00 09 29 TEN 2A 02 00 0D TENDENCY 2A 02 00 0D 1E 02 00 0D TURN 2A 3A 2B 0D 1F 29 TWELVE 2A 2D 02 00 18 0F TEST 2A 02 00 1F 2A TWENTY 2A 2D 02 00 0D 2A 29 THAN 39 2F 00 0D TWIST 2A 2D 0B 09 1F 2A THAT 38 2F 00 2A TWO 2A 36 37 37 THE 38 32 23 UMBRELLA 32 31 0C 0E 2B 02 00 18 THEM 38 00 02 0C 31 23 THEN 38 00 02 0D UNDER 31 31 0D 1E 3A UNIT 22 36 37 0D 0B 09 2A THEORY 39 21 0A 2B 29 THERE 38 00 05 00 2B UP 32 31 25 UPON 32 25 15 23 0D THEY 38 06 21 29 THICK 39 0B 09 19 US 32 31 1F USE 22 36 37 37 12 THIN 39 0B 09 0D THING 39 0B 09 14 USEFUL 22 36 37 37 1F 1D 16 18 THIRTEEN 39 3A 2B 2A 3C 29 0D VALUE 0F 2F 00 18 22 36 37 THIRTY 39 3A 2B 2A 29 VERSE 0F 3A 1F THIS 38 09 0A 1F VERY 0F 02 2B 29 THOUGH 38 34 34 37 VESSEL 0F 02 00 1F 23 18 THOUGHT 39 3D 2A VIEW 0F 22 36 37 37 THOUSAND 39 15 23 37 12 00 0D 1E VIOLENT 0F 15 21 23 18 02 00 0D 2A THREE 39 2B 3C 29 VOICE 0F 35 23 09 21 1F THROUGH 39 2B 36 37 WAIT 2D 05 05 29 2A THUMB 39 32 31 0C WAITING 2D 06 21 29 2A 0B 14 THUNDER 39 32 31 0D 1E 3A WALK 2D 3D 19 WALL 2D 3D 18 TICKET 2A 0B 09 19 00 2A TIGHT 2A 23 08 29 2A WAR 2D 35 34 2B TILL 2A 0B 09 18 WARM 2D 35 34 2B 0C WASH 2D 3D 11 TIME 2A 15 00 29 0C TIRED 2A 15 00 21 2B 1E WASTE 2D 06 21 29 1F 2A TO 2A 37 37 WATCH 2D 15 23 2A 10 WATER 2D 15 23 2A 3A TOE 2A 35 37 2D TOGETHER 2A 37 1C 02 00 38 3A WAVE 2D 06 21 29 0F TOMORROW 2A 37 0C 15 2B 35 37 WAX 2D 2F 00 19 03 1F

WAY 2D 06 09 29

WEAK 2D 3C 29 19

WEATHER 2D 02 00 38 3A

WE 2D 3C 29

WEEK 2D 3C 29 19

WEIGHT 2D 05 05 29 2A

WELL 2D 02 00 18

WEST 2D 02 00 1F 2A

WET 2D 02 00 2A

WHEEL 2D 3C 29 18

WHEN 2D 02 00 0D

WHERE 2D 00 05 00 2B

WHILE 2D 15 00 09 23 18

WHISTLE 2D 0B 09 1F 23 18

WHITE 2D 23 08 29 2A

WHO 1B 36 37 37

WHY 2D 15 00 09 29

WIDE 2D 15 00 29 1E

WILL 2D 0B 09 18

WIND 2D 0B 0D 1E

WINDOW 2D 0B 0D 1E 35 37

WINE 2D 15 00 29 0D

WING 2D 0B 09 14

WINTER 2D 0B 09 0D 2A 3A

WIRE 2D 15 00 21 2B

WISE 2D 15 00 29 12

WISH 2D 0B 09 11

WITH 2D 0B 09 39

WOMAN 2D 16 0C 01 0D

WOOD 2D 16 16 1E

WORD 2D 3A 2B 1E

WORK 2D 3A 2B 19

WORM 2D 3A 2B 0C

WOULD 2D 16 16 1E

WOUND 2D 37 37 0D 1E

WRITING 2B 23 08 29 2A 0B 14

WRONG 2B 3D 14

YEAR 22 21 09 2B

YELLOW 22 02 00 18 35 37

YES 22 00 02 1F

YESTERDAY 22 00 02 1F 2A 3A 1E 06

09 29

YOU 22 36 37 37

YOUNG 29 23 32 14

Appendices

7-Bit Hexa-Decimal Numbers and Associated Characters

00	NUL	20	SP
01	SOH	21	!
02	STX	22	"
03	ETX	23	#
04	EOT	24	\$
05	ENQ	25	%
06	ACK	26	&
07	BEL	27	•
08	BS	28	(
09	HT	29)
0A	LF	2A	*
0B	VT	2B	+
0C	FF	2C	•
0D	CR	2D	-
0E	SO	2E	
0F	SI	2F	/
10	DLE	30	0
11	DC1	31	1
12	DC2	32	2
13	DC3	33	3
14	DC4	34	4
15	NAK	35	5
16	SYN	36	6
17	ETB	37	7
18	CAN	38	8
19	EM	39	9
1A	SUB	3A	:
1B	ESC	3B	;
1C	FS	3C	<
1D	GS	3D	=
1E	RS	3E	>
1F	US	3F	?

7-Bit Hexa-Decimal Numbers and Associated Characters (continued)

40	@	60	
41	Ä	61	a
42	В	62	b
43	C	63	c
44	D	64	d
45	E	65	e
46	F	66	f
47	G	67	g
48	Н	68	h
49	I	69	I
4A	J	6A	j
4B	K	6B	k
4C	L	6C	1
4D	M	6D	m
4E	N	6E	n
4F	O	6F	0
50	P	70	p
51	Q	71	q
52	R	72	r
53	S	73	S
54	T	74	t
55	U	75	u
56	V	76	V
57	W	77	W
58	X	78	X
59	Y	79	у
5A	Z	7A	Z
5B	[7B	
5C		7C	
5D	\]	7D	ALT
5E		7E	ESC
5F		7F	DEL/RUB

Appendices

Tiny BASIC Language Summary

NEW expr Establishes a new start-of -program

address equal to the value of 'expr'. NSC

Tiny BASIC then executes its

initialization sequence which clears all variables, resets all hardware/software stacks, disables interrupts, enables BREAK capability from thee console, and performs the nondestructive RAM

search.

NEW Sets the end-of-program pointer equal to

the start-of- program pointer so that a new program may be entered. If a program already exists at the start-ofprogram address, it will be lost.

RUN Runs the current program

CONT Continues execution of the current

program from the point where execution was suspended (via a STOP, console

interrupt, or reset).

LIST (expr) Lists the current program (optionally

starting at the line number specified by

(expr).

REM anything Remark (no operation)

CLEAR Initializes all variables to 0, disables

interrupts, enables BREAK capability from the console, and resets all stacks (GOSUB, FOR-NEXT, DO-UNTIL).

[LET] var = expr Assigns expression value to variable.

[LET] STAT = expr Sets the STATUS word equal to the least

significant byte of 'expr'.

[LET] @factor = expr When the STAUS word is used to enable

interrupts at the hardware, processing will be deferred for one statement.

[LET] \$factor = "string" Sets the memory location pointed to by

'factor' equal to the least significant byte

of 'expr'.

Tiny BASIC Language Summary (continued)

[LET] factor = factor Assigns a string in RAM starting at the

address 'factor'. Strings are terminated by

carriage return.

PRINT expr Memory to memory string assignment,

(copy).

PRINT "string" Prints the value of 'expr'.

PRINT sfactor Prints the string.

IF expr [THEN] statements(s)

Prints the string starting at the memory

address 'factor'.

FOR var = expr TO expr Remainder of the program line is

executed if expr is true (non-zero).

[STEP expr] FOR loop initialization. FOR loops may

be nested up to four levels deep.

NEXT var FOR loop termination.

DO loop initiation. DO loops may be

nested up to eight levels deep.

UNTIL expr DO loop termination.

GO TO expr Transfer control to statement number

'expr'.

GOSUB expr Call subroutine at statement number

'expr'. Subroutine (including those

servicing interrupts).

RETURN Return from subroutine.

INPUT var Read value from console into variable.

INPUT sfactor Read string from console into memory

beginning at address 'factor'.

LINK expr Links to an assembly language

subroutine which begins at the address

'expr'.

Tiny BASIC Language Summary (continued)

Tiny BASIC Language Summary (c	Tiny BASIC Language Summary (continued)		
ON expr1, expr2	Interrupt processing definition. When interrupt number expr1 occurs, NSC Tiny Basic will execute a GOSUB beginning at line number expr2. If expr2 is zero, the corresponding interrupt is disabled at the software level. Interrupt numbers may be 1 or 2. Use of the ON statement disables console interrupts (BREAK function). Interrupts must also be enabled at the hardware level by setting the Interrupt Enable bit in the status register (using STAT=1, for example).		
DELAY exor	Delay for expr time units (nominally milliseconds, 1-1040). Delay 0 gives the maximum delay of 1040 milliseconds.		
STOP	Terminate programs execution. A message is printed and NSC Tiny BASIC return to COMMAND mode.		
OPERATORS			
Arithmetic operators:	Addition +		
	Subtraction - multiplication * division /		
Relational operators:	less than <		
•	greater than >		
	equal to =		
	not equal to <>		
	less than or equal to <=		
	greater than or equal to >=		
Logical operators:	logical AND AND		
	logical OR OR		
	logical NOT NOT		
@factor	Read a byte from memory/peripheral, or write a byte to memory/peripheral. Factor is the memory/peripheral address.		
FUNCTIONS			
STAT	Status Register contents.		
	<i>5</i>		

Top-Of-Program address (first available memory address after end-of-program TOP

byte).

Tiny BASIC Language Summary (continued)

INC (X), DEC (X)

Increment or decrement a memory

location (non-interruptible for

multiprocessing).

MOD(X,Y) Modulus function (remainder of x/y).

RND (X,Y) Random number generator (in interval

x,y).

COMMANDS (not to be used as statements)

NEW expr Establishes a new start-of-program

address equal to the value of expr. NSC

Tiny BASIC then executes its

initialization sequence which clears all variables, resets all hardware/software stacks, disables interrupts, enables BREAK capable from the console, and performs the non-destructive RAM search described in Section II. If the value of expr points to a ROM address, the NSC Tiny BASIC program which

begins at this address will be

automatically executed and program memory (including the end-of-program pointer used by editor) is not altered by

this command.

NEW NEW followed only by a carriage return

sets the end-of-program pointer equal to the start-of-program may be entered. If a program already exists at the start-ofprogram address, it will be lost.

RUN Runs the current program

CONT Continues execution of the current

program from the point where execution was suspended (via a STOP, console

interrupt or resets).

LIST expr Lists the current program (optionally

starting at the line number specified by

expr).