The 6502 Instruction Set

Load and Store Group

LDA	Load Accumulator	N,Z
LDX	Load X Register	N,Z
LDY	Load Y Register	N,Z
STA	Store Accumulator	
STX	Store X Register	
STY	Store Y Register	

Arithmetic Group

ADC	Add with Carry	N,V,Z,C
SBC	Subtract with Carry	N,V,Z,C

Increment and Decrement Group

INC	Increment a memory location	N,Z
INX	Increment the X register	N,Z
INY	Increment the Y register	N,Z
DEC	Decrement a memory location	N,Z
DEX	Decrement the X register	N,Z
DEY	Decrement the Y register	N,Z

Register Transfer Group

TAX	Transfer accumulator to X	N,Z
TAY	Transfer accumulator to Y	N,Z
TXA	Transfer X to accumulator	N,Z
TYA	Transfer Y to accumulator	N,Z

Logical Group

AND	Logical AND	N,Z
EOR	Exclusive OR	N,Z
ORA	Logical Inclusive OR	N,Z

Compare and Bit Test Group

CMP	Compare accumulator	N,Z,C
CPX	Compare X register	N,Z,C
CPY	Compare Y register	N,Z,C
BIT	Bit Test	N,V,Z

Shift and Rotate Group

ASL	Arithmetic Shift Left	N,Z,C
LSR	Logical Shift Right	N,Z,C
ROL	Rotate Left	N,Z,C
ROR	Rotate Right	N,Z,C

Jump and Branch Group

JMP	Jump to another location
BCC	Branch if carry flag clear
BCS	Branch if carry flag set
BEQ	Branch if zero flag set
BMI	Branch if negative flag set
BNE	Branch if zero flag clear
BPL	Branch if negative flag clear
BVC	Branch if overflow flag clear
BVS	Branch if overflow flag set

Stack Group

TSX	Transfer stack pointer to X	N,Z
TXS	Transfer X to stack pointer	
PHA	Push accumulator on stack	
PHP	Push processor status on stack	
PLA	Pull accumulator from stack	N,Z
PLP	Pull processor status from stack	All

Status Flag Change Group

CLC	Clear carry flag	C
CLD	Clear decimal mode flag	D
CLI	Clear interrupt disable flag	I
CLV	Clear overflow flag	V
SEC	Set carry flag	C
SED	Set decimal mode flag	D
SEI	Set interrupt disable flag	I

Subroutine and Interrupt Group

JSR	Jump to a subroutine	
RTS	Return from subroutine	
BRK	Force an interrupt	B
RTI	Return from Interrupt	All
NOP	No Operation	