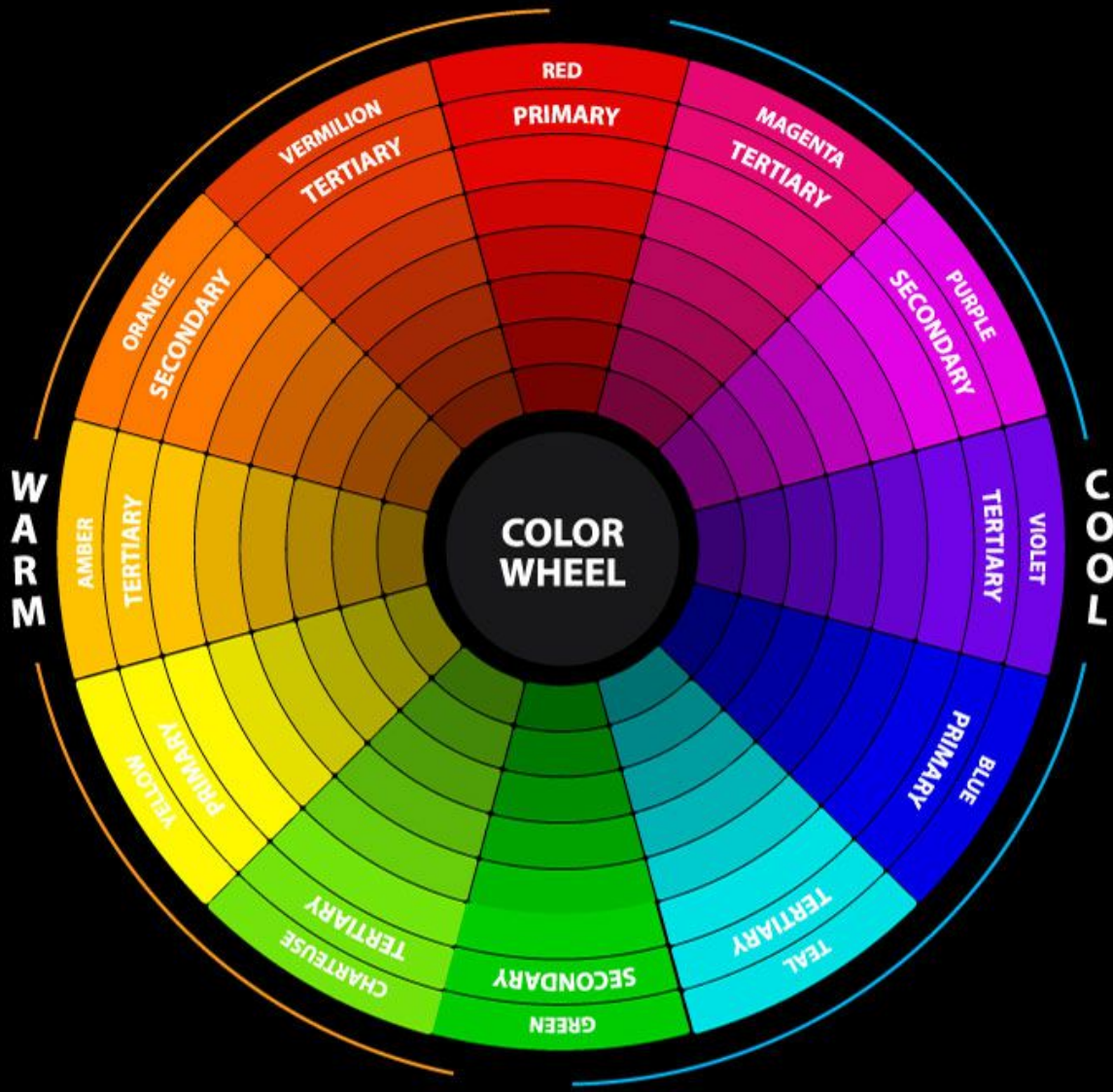


COLOR THEORY

QUICK REFERENCE GUIDE



COLOR SYSTEMS

CMYK SUBTRACTIVE

CREATED WITH INK
WHEN WE MIX COLORS USING PAINT, OR THROUGH THE PRINTING PROCESS, WE ARE USING SUBTRACTIVE COLOR METHOD. SUBTRACTIVE COLOR MIXING MEANS THAT ONE BEGINS WITH WHITE AND ENDS WITH BLACK; AS ONE ADDS COLOR, THE RESULT GETS DARKER AND TENDS TO BLACK.



RGB ADDITIVE

CREATED WITH LIGHT
IF WE ARE WORKING ON A COMPUTER, THE COLORS WE SEE ON THE SCREEN ARE CREATED WITH LIGHT USING THE ADDITIVE COLOR METHOD. ADDITIVE COLOR MIXING BEGINS WITH BLACK AND ENDS WITH WHITE; AS MORE COLOR IS ADDED, THE RESULT IS LIGHTER AND TENDS TO WHITE.



ANALOGOUS

COLORS THAT ARE ADJACENT TO EACH OTHER ON THE COLOR WHEEL



COMPLEMENTARY

COLORS OPPOSITE EACH OTHER ON THE COLOR WHEEL



TRIADIC

THREE COLORS SPACED EQUALLY APART ON THE WHEEL



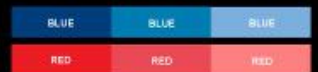
SPLIT COMPLEMENT

A COLOR AND THE TWO COLORS NEXT TO ITS COMPLEMENT ON THE COLOR WHEEL



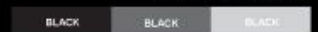
MONOCHROMATIC

COLORS OF SINGLE HUE



GRAYSCALE

INTENSITY OF BLACK



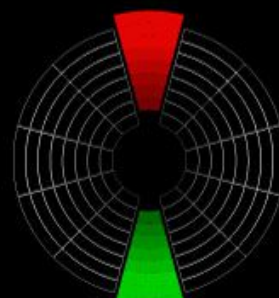
COLOR RELATIONSHIPS



ANALOGOUS



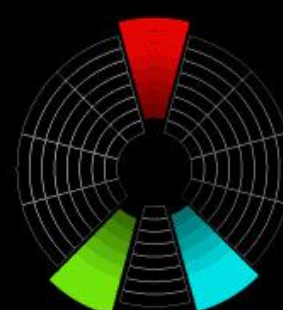
TRIADIC



COMPLIMENTARY

COLOR MEANINGS

| | |
|------------|---|
| RED | INTENSE, FIRE, BLOOD, ENERGY, DANGER LOVE, PASSIONATE, STRONG. |
| RED VIOLET | ROYALTY, POWER, NOBILITY, WEALTH, AMBITION DIGNIFIED, MYSTERIOUS. |
| BLUE | SKY, SEA, DEPTH, STABILITY, TRUST, MASCULINE, TRANQUIL. |
| GREEN | NATURE, GROWTH, FERTILITY, FRESHNESS, HEALING, SAFETY, MONEY |
| YELLOW | SUNSHINE, JOY, CHEERFULNESS, INTELLECT, ENERGY, ATTENTION. |
| ORANGE | WARM, STIMULATING, ENTHUSIASM, HAPPINESS, SUCCESS, CREATIVE, AUTUMN. |

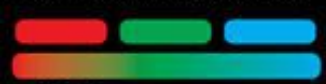


SPLIT COMPLIMENTARY

COLOR THEORY

A VISUAL PRIMER POSTER BY SETH WILSON
FOR SANTA CRUZ COUNTY REGIONAL OCCUPATIONAL PROGRAM

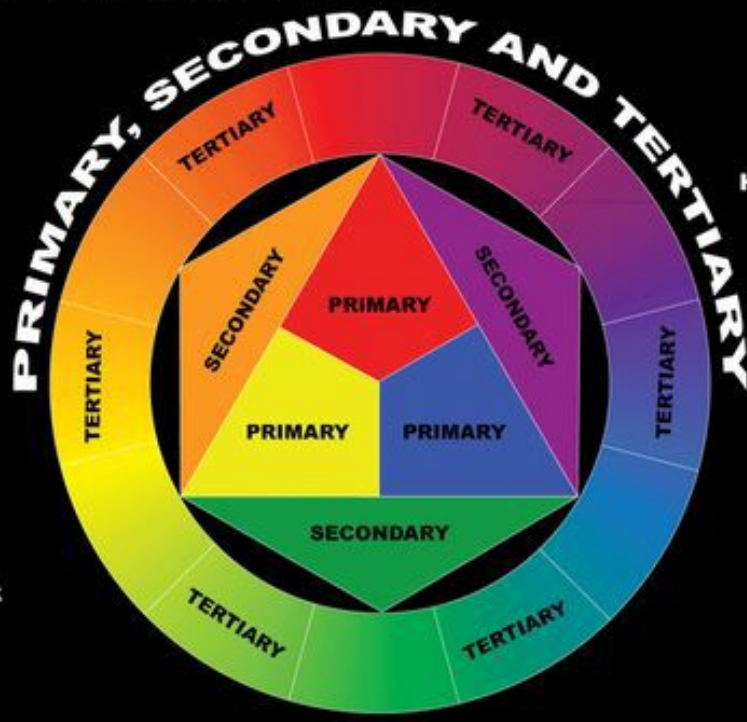
COLOR MIXING



RGB
Red, Green, Blue
Light Generated Model

RGY
Red, Green, Yellow
Pigment Generated Model

CMYK
Cyan, Magenta, Yellow, Black
Print Process Model



COLOR MODES



HSB
Hue (color), Saturation (how much color), Black (tint and shade)

GREY SCALE
Black and White only

WEB SAFE RGB
Hexadecimal compatible

PRIMARY



Pigment generated colors are derived from these primary colors: red, yellow and blue.

PRIMARY



Light generated colors are derived from these primary colors: red, green and blue.

SECONDARY



Mixing primary colors creates other colors. For example:
blue + yellow = green
blue + red = violet

TERTIARY



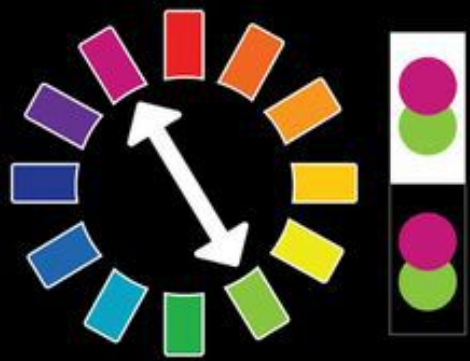
A secondary color wheel can expand to tertiary and beyond.

COLOR HARMONY

ANALOGOUS



COMPLEMENTARY



TRIAD



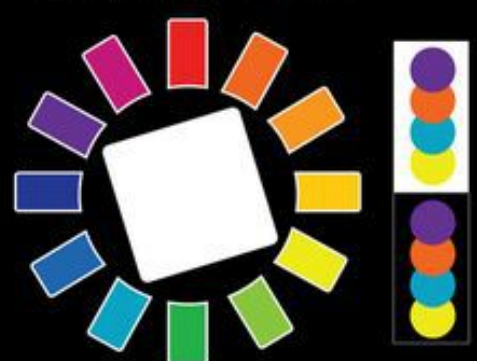
TETRADIC



SPLIT COMPLEMENTARY



QUADRILATERAL



COLOR MIXING GUIDE

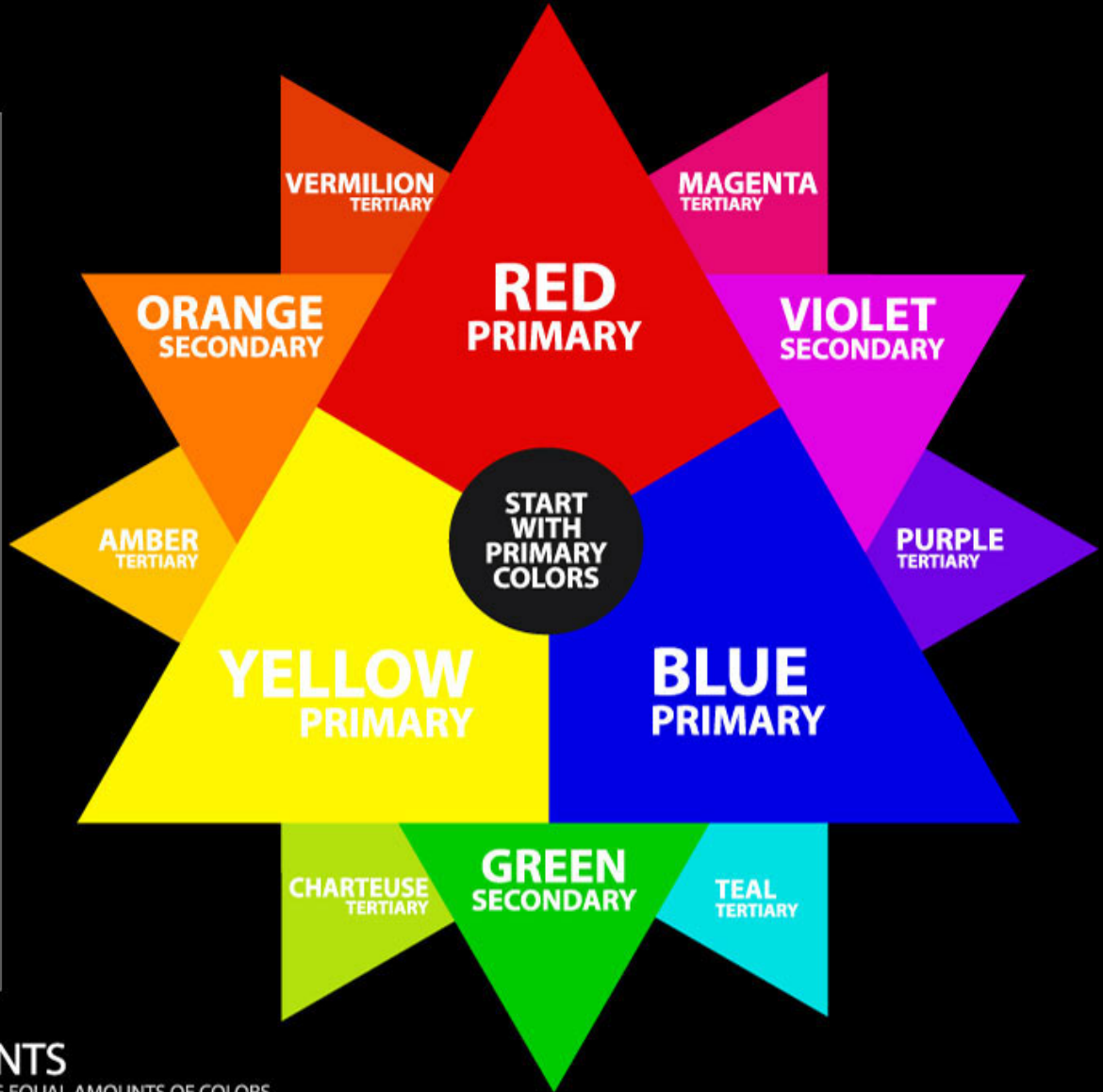
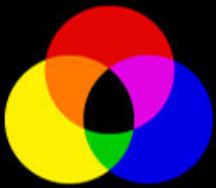
FOR ARTISTS, DESIGNERS AND PAINTERS

RYB

(RED, YELLOW, BLUE) IS A SET OF PRIMARY COLORS IN SUBTRACTIVE COLOR MIXING SYSTEM. THEY ARE MOST COMMONLY USED IN ART, DESIGN AND PAINTING.

IN THE 18TH CENTURY, THE RYB BECAME THE FOUNDATION OF THE COLOR VISION THEORIES AS THE FUNDAMENTAL SENSORY QUALITIES THAT ARE BLENDED IN THE PERCEPTION OF ALL PHYSICAL COLORS AND EQUALLY IN THE PHYSICAL MIXTURE OF PIGMENTS OR DYES.

IN SUBTRACTIVE COLOR MIXING, LIKE PAINT, ALL THE COLORS COMBINED CREATE BLACK.



EQUAL AMOUNTS

COLORS PRODUCED BY MIXING EQUAL AMOUNTS OF COLORS
* EQUAL MEANS THAT RATIOS ARE ALWAYS THE SAME 1:1



PROPORTIONAL AMOUNTS

COLORS PRODUCED BY MIXING PROPORTIONAL AMOUNTS OF COLORS
* PROPORTIONAL MEANS A VARIATION OF THE QUANTITIES OF CONSTANT MULTIPLE, FOR EXAMPLE 1:2.



TINTS



MIX WITH WHITE TO CREATE TINTS

TONES



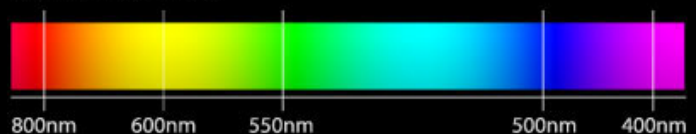
MIX WITH GRAY TO CREATE TONES

SHADES



MIX WITH BLACK TO CREATE SHADES

COLOR SPECTRUM



COLOR THESAURUS

NAMES OF COLOR SHADES

SHADES OF
9
COLORS

| A | B | C | D | E | F | G | H | I |
|----------------------|--------------------|---------------------|---------------------|-------------------|----------------------|--------------------|---------------------|---------------------|
| YELLOW | ORANGE | RED | PINK | VIOLET | BLUE | GREEN | BROWN | GRAY |
| 1 YELLOW #FFF200 | ORANGE #FC6600 | RED #D30000 | PINK #FC0FC0 | VIOLET #B200ED | BLUE #0018F9 | GREEN #3BB143 | BROWN #7C4700 | GRAY #828282 |
| 2 MELLOW #F8DE7E | GOLD #F9A602 | SALMON #FA8072 | RUBY #E0115F | HIBISCUS #B43757 | DENIM #131E3A | FOREST #0B6623 | CEDAR #4B3A26 | FOSSIL #787276 |
| 3 CYBER #FFD300 | GOLDENROD #DBA520 | SCARLET #FF2400 | ULTRA #FF6FFF | MAUVE #784B84 | PIGEON #7285A5 | SAGE #9DC183 | CINNAMON #622A0F | MINK #88807B |
| 4 ROYAL #FADA5E | PUMPKIN #FF7417 | BARN RED #7C0A02 | THULIAN #FDE6FA1 | MULBERRY #C64B8C | SKY #95C8D8 | OLIVE #708238 | BRUNETTE #3A1F04 | PEARL RIVER #D9DDDC |
| 5 TROMBONE #D2B55B | FIRE #FDA50F | IMPERIAL #ED2939 | MAGENTA #FF0090 | LAVENDER #E4A0F7 | INDEPENDENCE #4D516D | LIME #C7EA46 | TAWNY #7E481C | ABALONE #D6CFC7 |
| 6 BANANA #FCF4A3 | OCHRE #CC7722 | INDIAN RED #CD5C5C | ROSE PINK #FF66CC | ORCHID #AF69EE | AIR FORCE #598BAF | HUNTER #3F704D | UMBER #362312 | HARBOR GRAY #C7C6C1 |
| 7 TUSCANY #FCD12A | AMBER #FFBF00 | CHILI #C21807 | LAVENDER #FBAED2 | LILAC #B660CD | BABY BLUE #89CFEF | JADE #00A86B | TORTILLA #997950 | SMOKE #8EBDB8 |
| 8 LEMON #EFFD5F | DIJON #C49102 | FIRE BRICK #B22222 | CREAMY #FF69B4 | ELECTRIC #8F00FF | NAVY #000080 | ARTICHOKE #8F9779 | CHOCOLATE #2B1700 | THUNDER #8DB7AB |
| 9 BUMBLEBEE #FCE205 | TANGERINE #CF9812A | MAROON #800000 | FUCHSIA #FF00FF | AFRICAN #B284BE | STEEL #4682B4 | FERN #4F7942 | SYRUP #492000 | PEWTER #999DA0 |
| 10 FLAX #EEDC82 | TIGER #FD6A02 | REDWOOD #A45A52 | FRENCH ROSE #F64A8A | GRAPE #6F2DA8 | CAROLINA #57A0D2 | JUNGLE #29AB87 | GINGERBREAD #5C2C06 | STEEL #777B7E |
| 11 CREAM #FFFDD0 | HONEY #EB9605 | RASPBERRY #D21F3C | CERISE #DE3163 | AMETHYST #9966CB | TURKISH #5097A4 | LAUREL #A9BA9D | CARAMEL #613613 | STONE #877F7D |
| 12 PEACH #FFE5B4 | CARROT #EF7215 | CANDY APPLE #FF0800 | CARNATION #FFA6C9 | BYZANTINE #702963 | MAYA #73C2FB | MOSS #8A9A5B | WALNUT #43270F | IRON #48494B |
| 13 LAGUNA #F8E473 | APRICOT #EF820D | CARMINE #960019 | BRICK #FB607F | FANDANGO #B5338A | CORNFLOWER #6693F5 | MINT #98FB98 | PECAN #48260D | RHINO #B9BBB6 |
| 14 MUSTARD #FFDC56 | BRONZE #B1560F | PERSIAN #CA3433 | AMARANTH #F19CBB | HELIO #DE73FF | OLYMPIC #008ECC | PINE #01796F | WOOD #402F1D | TROUT #97978F |
| 15 ECRU #CEB180 | CIDER #B3672B | U.S. FLAG #BF0A30 | TAFFY #F987C5 | FLORAL #B47EDE | SAPPHIRE #0F52BA | TEA #D0FOC0 | HICKORY #351E10 | SEAL #818380 |
| 16 CORN #E4CD05 | CLAY #813F0B | FERRARI #FF2800 | BUBBLE GUM #FE5BAC | THISTLE #D7BFDC | AZURE #0080FE | ARMY #4B5320 | ESPRESSO #4B382A | LAVA #808588 |
| 17 PINEAPPLE #FEE12B | RUST #8B4000 | BURGUNDY #8D021F | HOT PINK #F81894 | ROYAL #7852A9 | EGYPTIAN #1134A6 | EMERALD #50C878 | PEANUT #795C32 | SHADOW #363636 |
| 18 FLAXEN #D5B85A | AMBER 2 #883000 | CRIMSON #B80F0A | PUNCH #EC5578 | LOLLIPOP #81007F | YALE #0E4C92 | KELLY #4CBB17 | MOCHA #3B270C | ASH #544C4A |
| 19 EGG NOG #F9E29C | SPICE #793802 | SANGRIA #5E1914 | LEMONADE #FDB9C8 | PLUM #8D4585 | PRUSSIAN #003151 | SACRAMENTO #043927 | COFFEE #4B3619 | ANCHOR #3E424B |
| 20 SEPIA #E3B778 | BURNT OR. #964000 | MAHOGANY #420D09 | FLAMINGO #FCA3B7 | EGGPLANT #311432 | SPACE #1C2951 | SEA #2E8B57 | RUSSET #7F461B | CHARCOAL #222021 |
| YELLOW #FFF200 | ORANGE #FC6600 | RED #D30000 | PINK #FC0FC0 | VIOLET #B200ED | BLUE #0018F9 | GREEN #3BB143 | BROWN #7C4700 | GRAY #828282 |

COLOR PSYCHOLOGY

WHAT COLORS COMMUNICATE

12

COLORS AFFECT HOW WE ACT AND FEEL SUBCONSCIOUSLY. PROVIDED ARE 12 HUES WITH MEANINGS AND USES IN ART, DESIGN AND LIFE.

INFLUENCE

COLOR IS THE FIRST THING PEOPLE WILL NOTICE ABOUT YOUR WORK OR PRODUCT.

STUDIES HAVE SHOWN THAT



OF THE SNAP JUDGEMENTS ARE INFLUENCED BY THE COLOR ALONE.

FACTS

FIRST COLOR THAT WE DISTINGUISH AFTER BIRTH IS COLOR RED, HOWEVER, COLOR BLUE IS THE FAVORITE ONE AMONG HUMANS WORLDWIDE.

PEOPLE WHO ARE COLD PREFER WARM COLORS LIKE RED AND YELLOW WHILE PEOPLE WHO ARE HOT PREFER COOL COLORS LIKE BLUE AND GREEN.

THE LOWER THE MEAN SATURATION OF SUBJECT, THE MORE COMFORT IS FELT WHEN BEING AROUND IT.

PROPERTIES

COLOR

COLOR IS PROPERTY POSSESSED BY ANY OBJECT. EACH OBJECT REFLECTS OR EMITS LIGHT AND IS PRODUCING DIFFERENT SENSATIONS ON THE EYE. OBJECTS REFLECT LIGHT IN DIFFERENT WAVELENGTHS WHICH WE RECOGNIZE AS COLOR.

| COLOR | WAVELENGTH |
|--------|--------------|
| RED | 700 - 635 nm |
| ORANGE | 635 - 590 nm |
| YELLOW | 590 - 560 nm |
| GREEN | 560 - 520 nm |
| CYAN | 520 - 490 nm |
| BLUE | 490 - 450 nm |
| VIOLET | 450 - 400 nm |

COLOR PROPERTIES

COLOR PROPERTIES ALLOW US TO DISTINGUISH AND DEFINE COLORS.

HUE IS ACTUAL COLOR OR COMBINATION OF COLORS (RED, YELLOW, ORANGE)



VALUE IS HOW LIGHT OR DARK IS IT (TINTS AND SHADES)



CHROMA POINTS TO THE COLOR'S INTENSITY OR SATURATION.



| | EMOTION | INDUSTRY | USED TO |
|-------------|--|---|---|
| RED | EXCITEMENT ENERGY PASSION COURAGE ATTENTION | ENTERTAINMENT FOOD SPORT FIRE PROTECTION CHILDREN PRODUCTS | STIMULATE CREATE URGENCY DRAW ATTENTION CAUTION ENCOURAGE |
| ORANGE | OPTIMISTIC INDEPENDENT ADVENTUROUS CREATIVITY FUN | ART ENTERTAINMENT FOOD SPORTS TRANSPORTATION | STIMULATE COMMUNICATE FUN DRAW ATTENTION EXPRESS FREEDOM FASCINATE |
| YELLOW | ENTHUSIASM OPPORTUNITY SPONTANITY HAPPINESS POSITIVITY | FOOD SPORTS TRANSPORTATION TRAVEL LEISURE | STIMULATE ENCOURAGE RELAXATION AWAKE AWARENESS ENERGIZE AFFECT MOOD |
| LIME GREEN | GROWTH HARMONY FERTILITY KINDNESS DEPENDABILITY | ENVIRONMENT LEISURE ALTERNATIVE ENERGY ENTERTAINMENT EDUCATION | RESTORE ENERGY PROMOTE GROWTH NUTURE REJUVENATE |
| KELLY GREEN | SAFETY HARMONY STABILITY RELIABILITY BALANCE | ENVIRONMENT BANKING REAL ESTATE FARMING NON PROFIT | RELAX BALANCE REVITALIZE ENCOURAGE POSSESS |
| SKY BLUE | FREEDOM SELF EXPRESSION TRUSTWORTH WISDOM JOY | ENTERTAINMENT COMMUNICATION CHILDRENS PRODUCTS TECHNOLOGY AEROSPACE | DRAW ATTENTION INSPIRE TRUST SUGGEST PRECISION COMMUNICATE CONSCIOUSNESS STIMULATE PRODUCTIVITY |
| ROYAL BLUE | TRUST RESPONSIBILITY HONESTY LOYALTY INNER SECURITY | SECURITY FINANCE TECHNOLOGY HEALTH CARE ACCOUNTING | REDUCE STRESS CREATE CALMNESS RELAX SECURE CREATE ORDER |
| VIOLET | IMAGINATION SPIRITUALITY COMPASSION SENSIVITY MYSTERY | HUMANITARIAN PSYCHIC RELIGION | ENCOURAGE CREATIVITY INSPIRE COMBINE WISDOM AND POWER CREATE IMPRESSION OF LUXURY INTUITION |
| PINK | COMPASSION LOVE IMMATURE PLAYFUL ADMIRATION | CHILDRENS PRODUCTS WOMANS PRODUCTS BEAUTY FASHION | COMMUNICATE ENERGY INCREASE PULSE MOTIVATE ACTION FASCINATE ENCOURAGES CREATIVITY |
| BROWN | RELIABILITY STABILITY HONESTY COMFORT NATURAL | AGRICULTURE CONSTRUCTION TRANSPORTATION LEGAL FOOD | STABILIZE IMPLY COMMON SENSE SUPPRESS EMOTIONS CREATE WARMTH |
| GRAY | NEUTRAL PRACTICAL CONSERVATIVE FORMAL QUIET | ALL INDUSTRIES * MOSTLY USED IN COMBINATION WITH OTHER COLORS | CREATE SENSE OF COMPOURE DEPRESS ENERGY ASSOCIATE TIMELESS COMMUNICATE MATURATION |
| BLACK | POWER CONTROL AUTHORITY DISCIPLINE ELEGANCE | ALL INDUSTRIES * MOSTLY USED IN COMBINATION WITH OTHER COLORS | HIDE FEELINGS INTIMIDATE RADIATE AUTHORITY CREATE FEAR ASSOCIATE WITH MYSTERY |

MEANING OF COLORS

RED

VARIATIONS

| | |
|---------|----------|
| MAROON | SCARLET |
| CRIMSON | MAHOGANY |

MEANING OF RED

POSITIVE

ACTION, ENERGY, SPEED, ATTENTION, ENERGIZING, STIMULATING, EXCITING, POWERFUL, PASSIONATE, STIMULATING, DRIVEN, COURAGEOUS AND STRONG, SPONTANEOUS, DETERMINED.

NEGATIVE

AGGRESSIVE, TIRING, ANGRY, QUICK TEMPERED, RUTHLESS, FEARFUL, INTOLERANT, RESENTFUL, VIOLENT, BRUTAL, STRAIN.

GREEN

VARIATIONS

| | |
|---------|------|
| EMERALD | FERN |
| NEON | ARMY |

MEANING OF GREEN

POSITIVE

GROWTH, VITALITY, RESTORATION, RELIABILITY, DEPENDABILITY, BALANCED, CALM, NATURE, PRACTICAL, SYMPATHETIC, COMPASSIONATE, NURTURING, GENEROUS, KIND, LOYAL, ADAPTABLE, HARMONY, PEACE.

NEGATIVE

POSSESSIVE, MATERIALISTIC, INDIFFERENT, ENVIOUS, SELFISH, GREEDY, INCONSIDERATE, INEXPERIENCED, BOREDOM, STAGNATION.

BLUE

VARIATIONS

| | |
|-----------|------|
| TEAL | NAVY |
| TURQUOISE | SKY |

MEANING OF BLUE

POSITIVE

LOYALTY, TRUST, INTEGRITY, RELIABILITY, RESPONSIBILITY, CONSERVATISM, PERSEVERANCE, IDEALISTIC, ORDERLY, AUTHORITY, DEVOTION, CONTEMPLATION, INTELLIGENT, EFFICIENT, LOGIC.

NEGATIVE

RIGID, DECEITFUL, SPITEFUL, DEPRESSED, SAD, PASSIVE, SUPERSTITIOUS, EMOTIONALLY UNSTABLE, CONSERVATIVE, PREDICTABLE, WEAK, UNFORGIVING, UNFAITHFULNESS, UNTRUSTWORTHY, UNFRIENDLY.

YELLOW

VARIATIONS

| | |
|------|---------|
| GOLD | MUSTARD |
| DUON | AMBER |

MEANING OF YELLOW

POSITIVE

OPTIMISM, CHEERFULNESS, ENTHUSIASM, FUN, HUMOR, CONFIDENCE, ORIGINALITY, CREATIVITY, CHALLENGING, ACADEMIC, ANALYTICAL, WISDOM, LOGIC.

NEGATIVE

CRITICAL, JUDGMENTAL, OVERLY ANALYTICAL, IMPATIENT, IMPULSIVE, EGOTISTICAL, PESSIMISTIC, COMPLEX, SPITEFUL, COWARDLY, DECEITFUL, NON-EMOTIONAL, FEAR, ANXIETY, IRRATIONALITY.

ORANGE

VARIATIONS

| | |
|-------|-------|
| FIRE | CLAY |
| TIGER | HONEY |

MEANING OF ORANGE

POSITIVE

SOCIABLE, OPTIMISTIC, ENTHUSIASTIC, CHEERFUL, CONFIDENT, INDEPENDENT, FLAMBOYANT, EXTROVERTED, ADVENTUROUS, CREATIVE, WARM-HEARTED, INFORMAL, PASSION, SENSUALITY, FUN.

NEGATIVE

SUPERFICIAL, INSINCERE, DEPENDENT, EXHIBITIONIST, PESSIMISTIC, INEXPENSIVE, UNSOCIABLE, FRUSTRATION, IMMATURITY.

PURPLE

VARIATIONS

| | |
|---------|--------|
| MAGENTA | VOILET |
| PLUM | WINE |

MEANING OF PURPLE

POSITIVE

UNUSUAL, SPIRITUAL, INDIVIDUAL, CREATIVE, INVENTIVE, PSYCHIC, INTUITIVE, HUMANITARIAN, SELFLESS, MYSTERY, FANTASY, FUTURE, VISION, TRUTH, QUALITY.

NEGATIVE

IMMATURITY, IMPRACTICAL, CYNICAL, ARROGANT, FRAUDULENT, CORRUPT.