## Traditional Pigments by Color

White Lead white – basic lead carbonate

Chalk – calcium carbonate

<u>Black</u> Carbon black - includes ivory black, bone black, charcoal, vine black, lamp black

# <u>Blue</u>

Azurite - basic copper carbonate - naturally occurring Blue verditer or blue bice - basic copper carbonate - manufactured Ultramarine - lapis lazuli Smalt - cobalt glass Indigo - extracted from woad plant

## Red

Cinnabar - mercuric sulfide - naturally occurring Vermilion - mercuric sulfide - manufactured Red earth - includes red ochre, Venetian red, Pozzuoli earth, Indian red, Pompeian red Madder lake - dye from madder plant precipitated onto a substrate Kermes lake - dye from European/Asian insect precipitated onto a substrate Cochineal lake - dye from American insect precipitated onto a substrate Dragon's blood - resinous exudation from fruit of rattan palm

## Yellow

Lead tin yellow Massicot - yellow monoxide of lead Orpiment - yellow sulfide of arsenic Yellow lakes - dyes extracted from plants precipitated onto substrate

# <u>Orange</u>

Minimum (red lead) - manufactured - opaque Realgar - orange sulfide of arsenic

### <u>Green</u>

Malachite - basic copper carbonate - naturally occurring Green verditer or green bice - basic copper carbonate - manufactured Terra verde - naturally occurring Verdigris - copper acetate Copper resinate - verdigris dissolved in Venice turpentine green often created from mixture of yellow and blue

# Purple created from mixture of red and blue

Earth pigments Yellow ochre Red ochre Raw siena Burnt siena Raw umber Burnt umber