

# Soil Color

**Understanding the importance of soil color and how to determine a soil color using the Munsell color book.**



**Natural  
Resources  
Conservation  
Service**

[nrcs.usda.gov/](https://nrcs.usda.gov/)



# Significance of Soil Color



- Used to distinguish soil horizons
- It can serve as an indicator of the amount and distribution of organic matter within a soil
- It can serve as an indicator of the degree of aeration or reduction
  - “Brighter” colors indicate better drained soils
  - “Gray” colors indicate wetter soils
  - Understand Redoximorphic features or mottling serve as an indicator of soil wetness

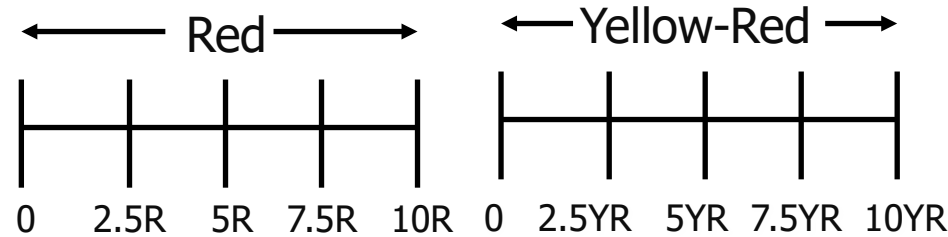




# Soil Color

## Hue

**Hue** refers to the spectral color or chromatic composition of light reflected by an object. In the Munsell soil color book, each page represents a different hue.



Munsell Soil Color Book, 7.5YR page





# Soil Color

**Value** refers to the amount of light reflected from the chip.

**Chroma** refers to the relative purity or strength of the spectral color.

## Value

The Lightness or Darkness of Color

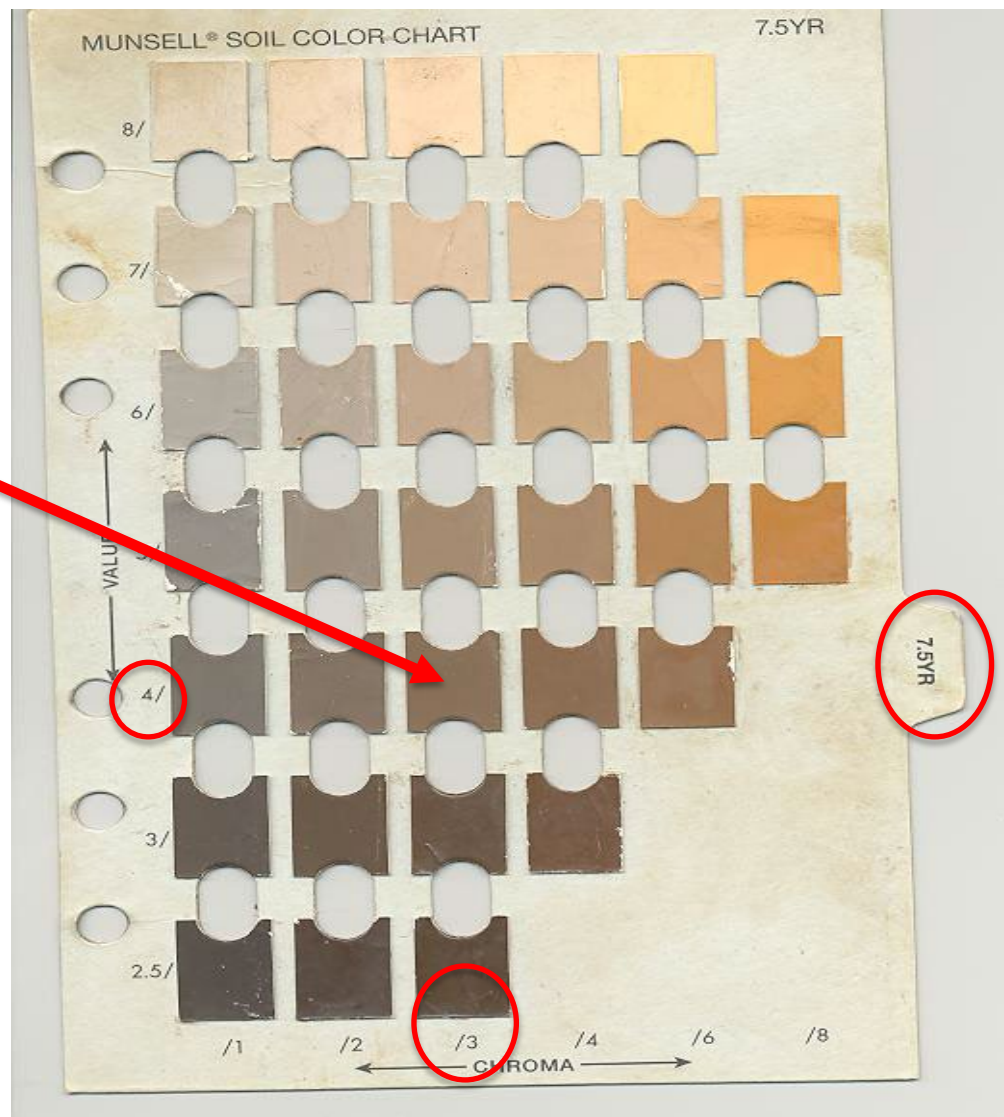
## Chroma



# Munsell Color Chart

**7.5YR 4/3**  
(Hue, value, chroma)

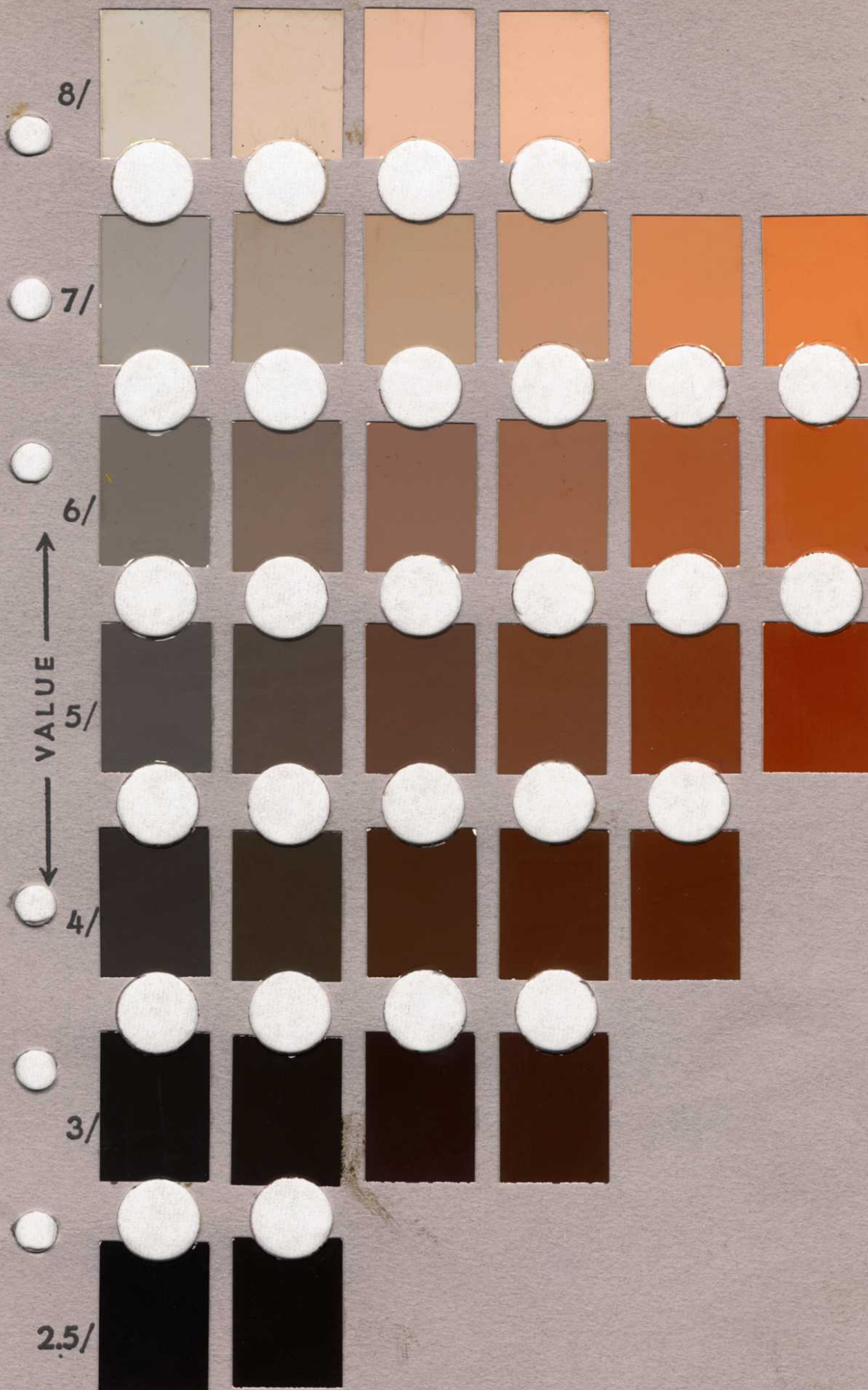
Example of reading a Munsell Chart  
(A soil sample matches the chip where the arrow is pointing)



# Additional Munsell Color Book Pages

# MUNSELL® SOIL COLOR CHART

5YR



/1

/2

/3

/4

/6

/8

CHROMA



# MUNSELL® SOIL COLOR CHART

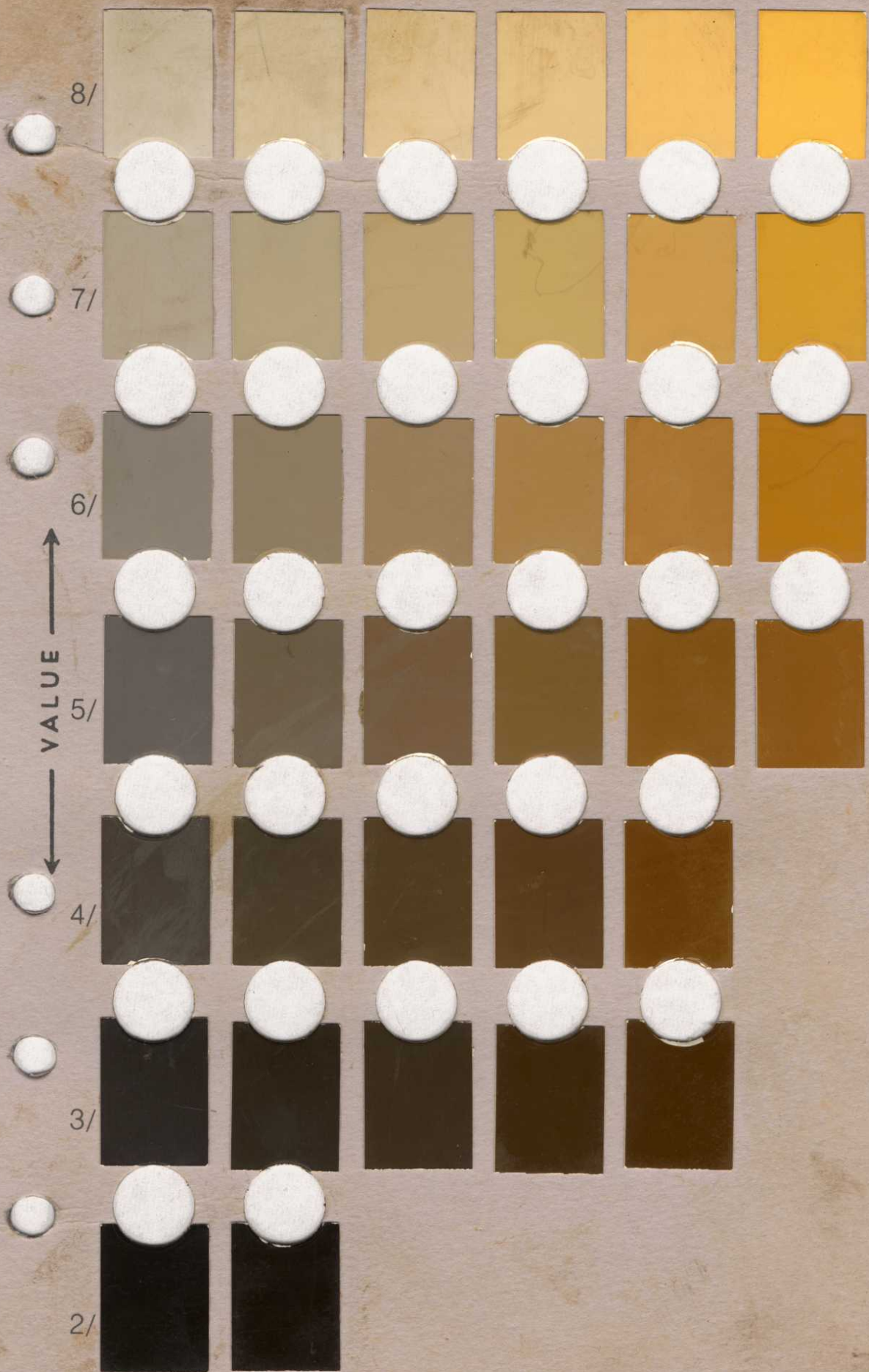
7.5YR





# MUNSELL® SOIL COLOR CHART

10YR



/1

/2

/3

/4

/6

/8

CHROMA