SOIL

TAP ON THE PLANT LEAVES TO BEGIN

WE DEPEND ON SOIL FOR MOST OF OUR FOOD
BUT WHAT IS IT?



SOIL IS A COMBINATION OF LOOSE WEATHERED ROCK AND ORGANIC MATERIAL

THE ORGANIC MATERIAL IS CALLED HUMUS AND IS USUALLY VERY DARK IN COLOR

THE WEATHERED MATERIAL COMES FROM THE SOLID BEDROCK UNDERNEATH



MOST SOIL IS DIVIDED UP INTO LAYERS CALLED

HORIZONS


SOIL HORIZONS ARE DARKEST AT THE TOP
BECAUSE THEY HAVE THE MOST HUMUS

SOIL HORIZONS ARE LEAST WEATHERED (LARGEST PIECES) AT THE BOTTOM

SO HOW DOES ROCK...



...BECOME SOIL?

YES, THIS IS GRASS BUT OBVIOUSLY WE ARE TALKING ABOUT WHAT IS UNDER THE GRASS

1. SOLID ROCK IS WEATHERED

2. PLANTS GROW BETWEEN THE CRACKS



3. ORGANISMS FOLLOW PLANTS IN, EVENTUALLY DIE, DECAY AND CREATE HUMUS



SOIL PROGRESSION CAN BE IDENTIFIED BY THE VEGETATION







LEAST DEVELOPED

MOST DEVELOPED

SOIL PROGRESSION CAN ALSO BE IDENTIFIED BY THICKNESS

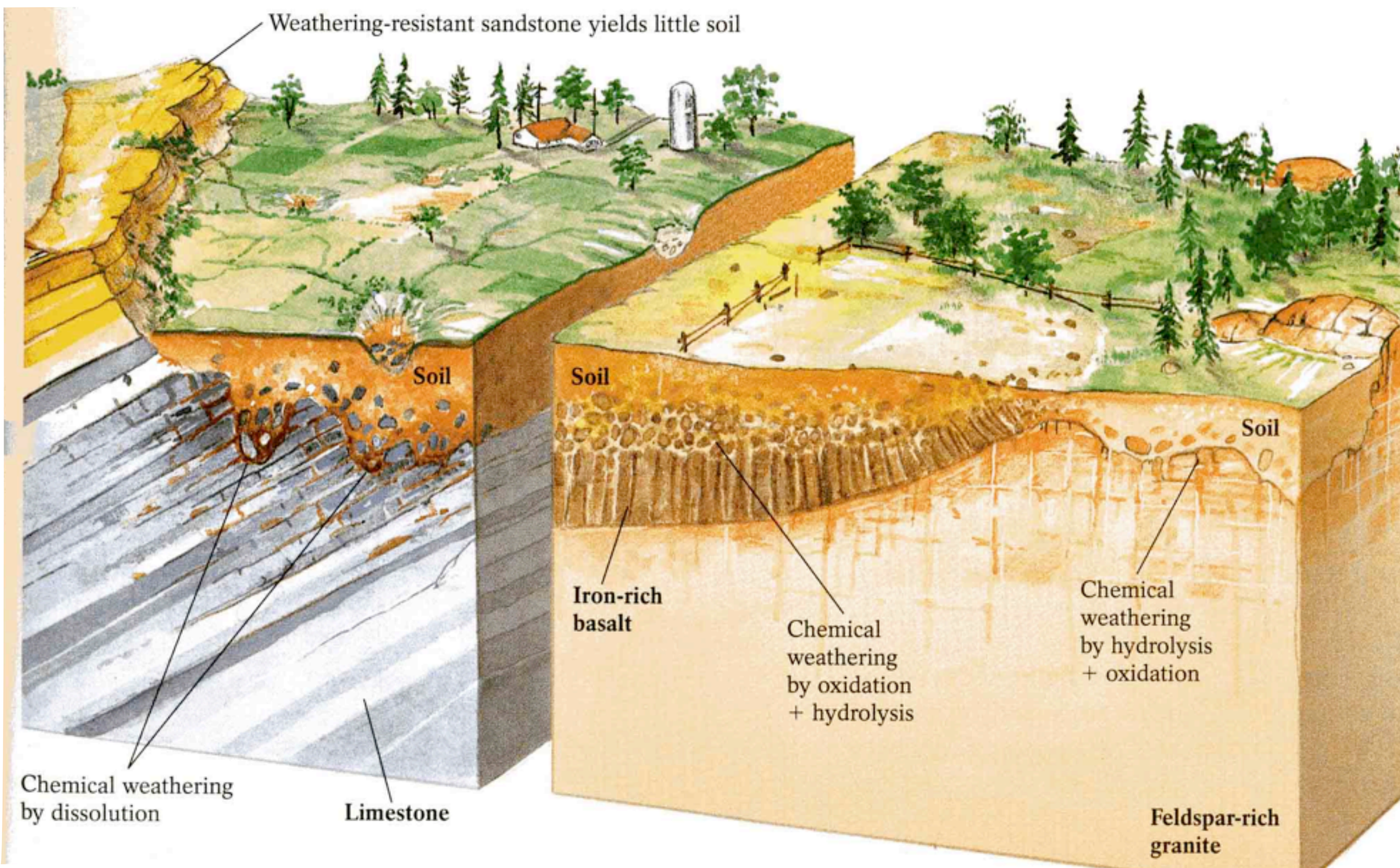


THE THICKER THE SOIL, THE MORE DEVELOPED IT IS


SOIL
PARENT MATERIAL
RESIDUAL SOIL IS SIMILAR TO THE BEDROCK UNDERNEATH, IT IS UNMOVED

TRANSPORTED SOIL DIFFERS FROM THE BEDROCK BENEATH IT, INDICATING THAT IT HAS TRAVELED FROM WERE IT WAS CREATED




Weathering-resistant sandstone yields little soil
Soil
Soil
Soil
Iron-rich basalt
Chemical weathering by oxidation + hydrolysis
Chemical weathering by hydrolysis + oxidation
Chemical weathering by dissolution
Limestone
Feldspar-rich granite

THE END