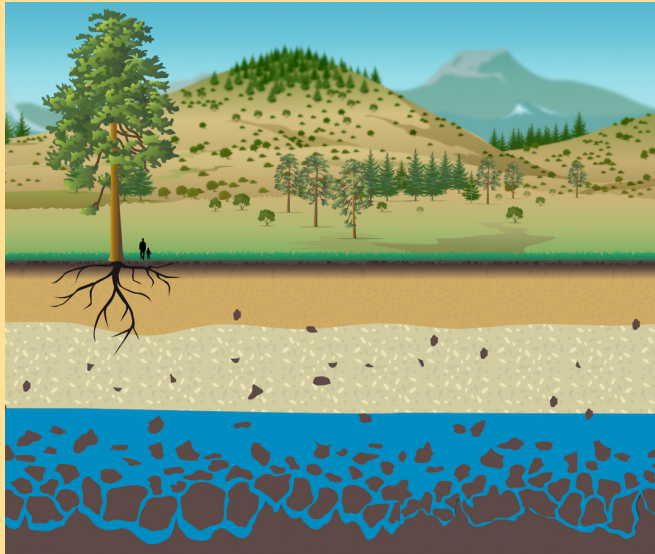


THE CRITICAL ZONE



The Critical Zone is the part of the Earth closest to the surface, where the majority of life exists. It is described as the area from the top of the tree canopy down to the bottom of the bedrock below Earth's surface.

The Critical Zone includes multiple layers of both living and nonliving parts that make life possible on Earth!

Word alert!

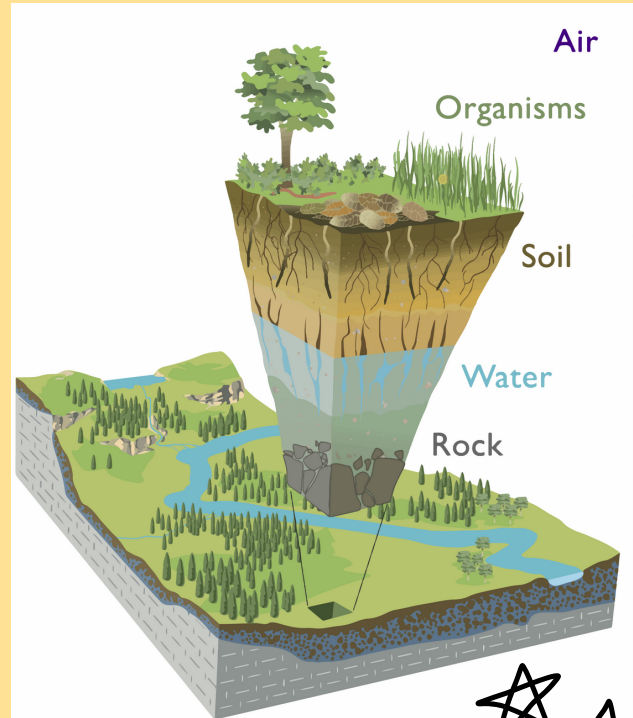
Surface – The outermost layer of the Earth's crust (i.e.: the ground we walk on every day). The surface is typically made of rocks and soil.

Subsurface – The layers of the Earth's crust which lie below the surface but may include all of the Earth's layers. It's an important part of the Critical Zone since we need soil to grow our foods.

Tree canopy - The top layer of the Critical Zone formed by the tallest plants. Plants link the deep Critical Zone (gravel or sand) to the air by pulling water from the ground and releasing it back to the air.

Bedrock – The layer of solid rock at the bottom of the Critical Zone. Oil develops from the breakdown of rocks, including bedrock. Those rock particles provide nutrients to the plants and support ecosystem sustainability.

Ecosystem - A biological community of interacting organisms and their physical environment including rocks, soil, water, and organic material.



Why does it matter?

The critical zone is a place where factors such as temperature, precipitation, and oxygen exist at the right amounts to support life. A healthy critical zone supports ecosystems that produce the food we eat, act as natural pollution control, and protect the natural resources that our economy depends on.

AWESOME ACTIVITIES!

Critical Zone Word Search

G U P A B D E N O S N M Q S D P V Y S O S P F R S
Q A V E E N B M R F K U E O U E A Q S C E T G T J
X Z J T D O X C Z M R I T T D R M Q O Q C H P D G
C M L E R N O Q B Z C Q A R S M F P W G R B Q W C
Y E M M O R O X T K D B M V I Y X A I V U C F T T
Z J R P C M S I N A G R O L M E S F C B O N Y V H
H X Z A K J Q A F D Z I X O I A N O N E S E W T F
G R O U N D W A T E R L D L I O V T C W E M R Z D
T N E M N O R I V N E O B R W S S K S E R A S A A
F F X C A G Y J D G F U Q X L D B M R U E K S P X

AIR

NUTRIENTS

BEDROCK

ORGANISM

EARTH

RESOURCES

ECOSYSTEM

SOIL

ENVIRONMENT

SURFACE

GROUNDWATER



Hmm...Where do you think these organisms live? Draw where you think they go in this critical zone

