

SOIL ABC'S – make sure you also read the case studies found in this section (10.5 & 10.6) of Chapter 10!

- A. Another term for the downward movement of water besides infiltration is:
- B. Most of the world's crops are on what types of soils?
- C. What type of soil would have good nutrient holding capacity and poor infiltration quality?
- D. Identify three ways nutrients are removed from soil:
 - 1)
 - 2)
 - 3)
 - 4)
- E. Identify four ways nutrients are added to the soil:
 - 1)
 - 2)
 - 3)
 - 4)
- F. How does the soil's porosity differ from the soil's permeability?
- G. What is humus (no it's not made from chickpeas):
- H. Which horizon is known as the leaf litter layer? Explain what negative impacts would occur if this layer was removed.
- I. The soil type that is ideal for the growth of most commercial crops is?
- J. What is a solution to soil pH being too low?
- K. What two natural processes expedite the movement of soil (erosion)? What are the anthropogenic sources of increased erosion rates?
- L. Briefly describe the following main types of soil erosion:
 - 1) **Sheet erosion** –
 - 2) **Rill erosion** –
 - 3) **Gully erosion** –

M. Due to geologic process on the earth's surface, soil naturally renews itself. Explain why some scientists consider soil a non-renewable resource.

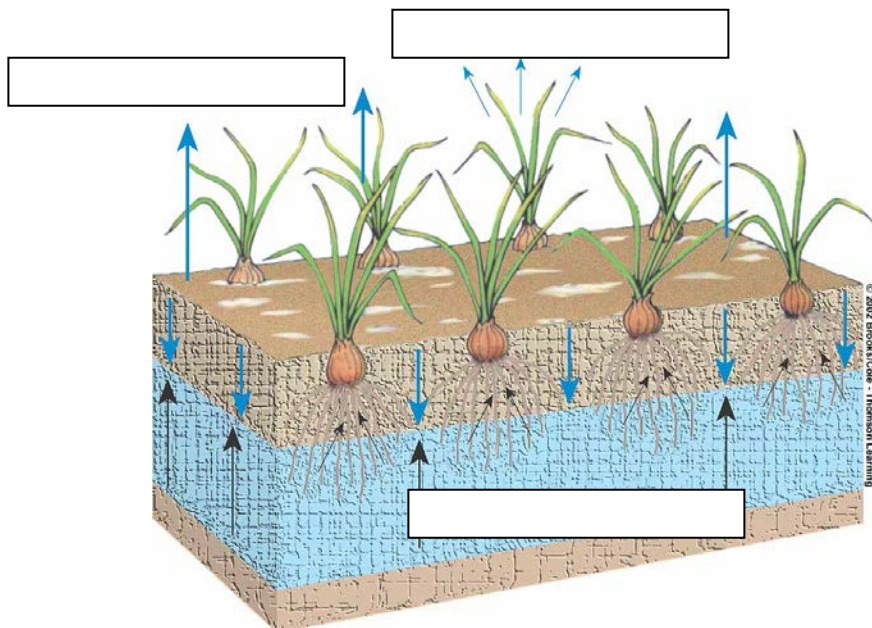
N. What area of the US has suffered the greatest loss of topsoil? What does this mean for us on an economic level?

O. What is desertification? Identify four human activities that lead to desertification.

P. Besides measuring productivity, how could you tell if an area was experiencing desertification problems?

Q. What are two human impacts that will occur due to desertification?

R. **LABEL THE DIAGRAM BELOW AND ANSWER QUESTIONS:**



S. How does salinization in soil occur?

T. Farmers often will then apply an increase in water to leach the salts deeper in the soil. However, this practice raises the water table and therefore envelops deep roots of plants in saline water - killing them. This practice is known as:

U. Give 3 solutions to prevent soil salinization:

- 1)
- 2)
- 3)

SOIL CONSERVATION:

V. Describe how conservation-tillage farming differs from conventional-tillage farming.

W. Identify & describe four physical solutions to reducing soil erosion:

X. Identify 4 methods of maintaining soil fertility without the use of commercial inorganic fertilizers.

- 1)
- 2)
- 3)
- 4)

Y. What are inorganic fertilizers made of?

Z. If too many inorganic fertilizers are used what could this lead to?

