

E.coli



E. coli

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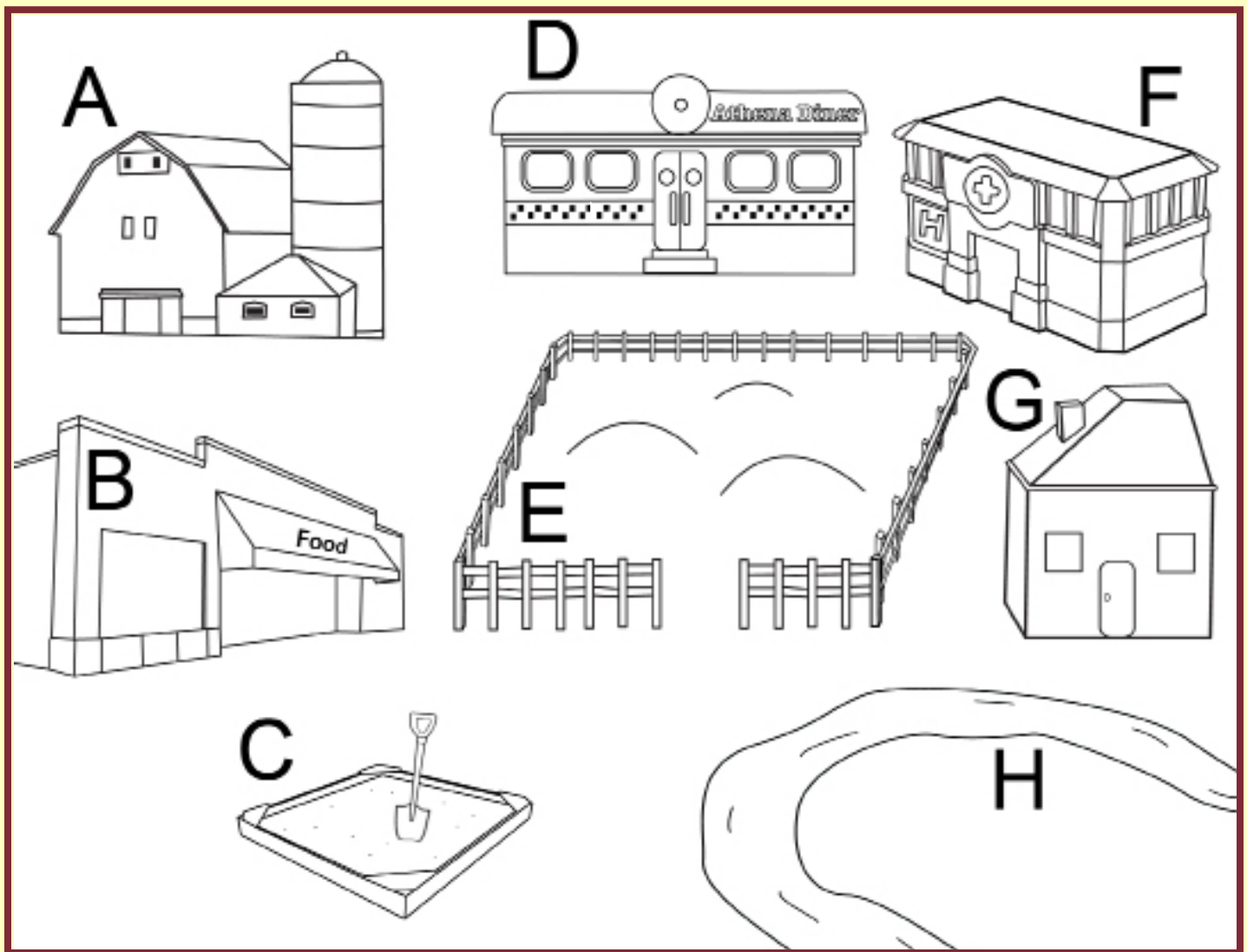
Start learning right now about *E. coli* bacteria. Take the following brief quiz to see how much you already know about common bacteria that can cause infections and illness. See the bottom of page 4 to check your answers.

1. What does the “E” in *E. coli* represent?
 - a. Everywhere
 - b. Eustachian
 - c. Europe
 - d. Escherichia
2. What is the shape of *E. coli* bacteria?
 - a. spherical
 - b. rod
 - c. spiral
 - d. disk
3. Most strains of *E. coli* are harmless to humans.
 - a. True
 - b. False
4. In what year was *E. coli* first identified?
 - a. 1795
 - b. 1885
 - c. 1905
 - d. 1945
5. What is the optimal growth temperature for most strains of *E. coli*?
 - a. 85 °F
 - b. 90 °F
 - c. 98 °F
 - d. 105 °F



Where in the World?

The map below shows a typical community. Some locations are possible sites for contracting harmful strains of *E. coli*. For each lettered site, state whether the location is likely or not likely to be a source of *E. coli* bacteria that could make people sick. Check your answers on the bottom of page 4.



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They are Everywhere!

The activity on the previous page showed that *E. coli* bacteria are common in many locations. Some of these places, such as hospitals and a sandbox, might be unexpected locations to find the bacteria. How can a child's sandbox be a site for hosting the bacteria? The problem arises when many dogs, cats, raccoons, and other animals see a sandbox as their personal litter box.

The bacteria that live in their intestinal tract is carried in their wastes and deposited into the sandbox. Children playing in the sandbox then touch the contaminated sand and place their hands in their mouths. A short time later, the child comes down with a severe case of diarrhea and nausea that is caused by the *E. coli* bacteria.



How can a hospital be a location where *E. coli* infections are passed? Human wastes in bedpans must be handled by workers who, if they fail to follow proper sanitizing guidelines, can then pass the bacteria onto other patients as they take other patients' temperatures or provide them with their meals. Handwashing and disinfecting protocols must be followed exactly to reduce the likelihood of spreading *E. coli* in a hospital setting.

Answers: Page 2 Answers: 1) d, 2) b, 3) a, 4) b, 5) c, which happens to be human body temperature. Page 3 Answers: All locations (A - H) are possible contamination sites.

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