2. Researchers are investigating the effectiveness of using a fungus to control the spread of an insect that destroys trees. The researchers will create four different concentrations of fungus mixtures: 0 milliliters per liter (ml/L), 1.25 ml/L, 2.5 ml/L, and 3.75 ml/L. An equal number of the insects will be placed into 20 individual containers. The group of insects in each container will be sprayed with one of the four mixtures, and the researchers will record the number of insects that are still alive in each container one week after spraying.

   (a) Identify the treatments, experimental units, and response variable of the experiment.

   Treatments:

   Experimental units:

   Response variable:

   (b) Does the experiment have a control group? Explain your answer.

   (c) Describe how the treatments can be randomly assigned to the experimental units so that each treatment has the same number of units.