

Unit 7.3 Unit Challenge Scenario

When there is a natural disaster, like a hurricane, animal shelters in the affected areas are often unable to care for their animals and must transport them to a safer area. Your community's Humane Society has recently taken additional dogs from several other shelters, and its only building is currently holding many more dogs than it was designed for. They have temporarily fixed this by finding foster homes for the dogs, but too many animals are still sharing too small of a space.

The Humane Society knows the importance of maintaining a good quality of life for their shelter animals. If the shelter would ever need to take in additional animals for a similar reason, they are not prepared. This is especially true if the overcrowding occurs when it is hot outside. The shelter is not air conditioned and the outdoor space that they have is not currently suitable as a place of shelter.

A group of area citizens is determined to develop a better solution for the future. Their plan involves placing extra dogs in individual crates outside of the main building. Since the shelter is most concerned about the heat, the dogs must be kept cool. The Society's director has also stressed that any additional shelters should be easy to use, reliable, and inexpensive. The citizen group is seeking suggestions for how these criteria can be met. Your science teacher is a member of this group, and she wants you and her other students to construct, test, and improve potential solutions to this problem.