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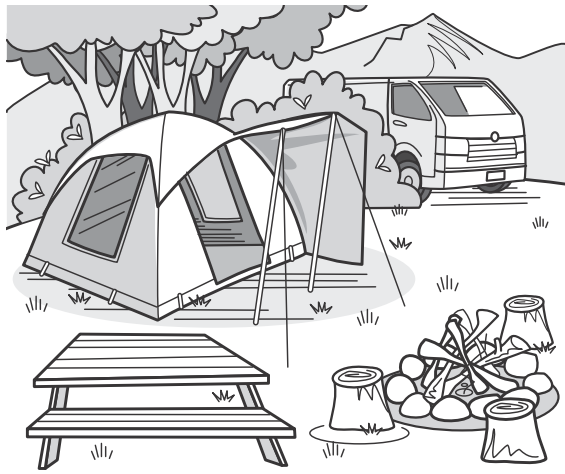
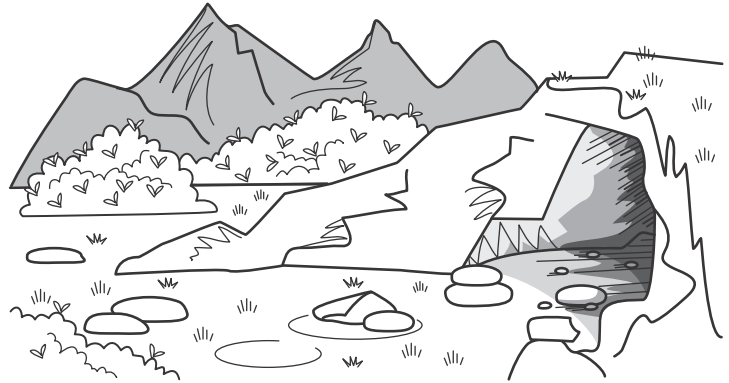
Pick a Project

Project 7A

## Mammoth Cave National Park

Mammoth Cave National Park is in Kentucky, and it is known to have one of the longest cave systems in North America.

Once you arrive at the park, there is plenty to do. You can take cave tours, hike, swim, and fish among other things.



While visiting or vacationing at Mammoth Cave National Park, people can stay at a nearby hotel or stay at one of the campgrounds. Some people stay in campers while others stay at camp sights and sleep in tents.

### Your Project Model a Campground

Some campers must bring everything they need to some campgrounds. Other campgrounds provide some supplies, such as campfire pits, cooking grills, bathrooms, showers, and even electricity. Design a campground in which each campsite can hold at most 6 campers. Make a model of your campground. Try to come up with an interesting and unusual design.

Decide how you want to show people in each campsite. First, use your model to show the campground as completely full. Then, use your model to represent addition and subtraction problems. Describe a situation to go along with each problem. For example, "There were 30 people at the campground, and then 6 people left ( $30 - 6 = 24$ ).\" Or \"There were 12 people at the campground, and then 8 more people came ( $12 + 8 = 20$ ).\"

Write your own problems, and model them.

Name \_\_\_\_\_

Pick a Project

Project 7B

## College Basketball Arenas

Many universities and colleges have basketball teams for both women and men. The first women's and the first men's intercollegiate basketball games were both held in 1896.

Basketball is played on a court inside of a building that is called an arena. Some universities have arenas that can hold a lot of people. The Carrier Dome at Syracuse University in New York has seats for over 33,000 fans!

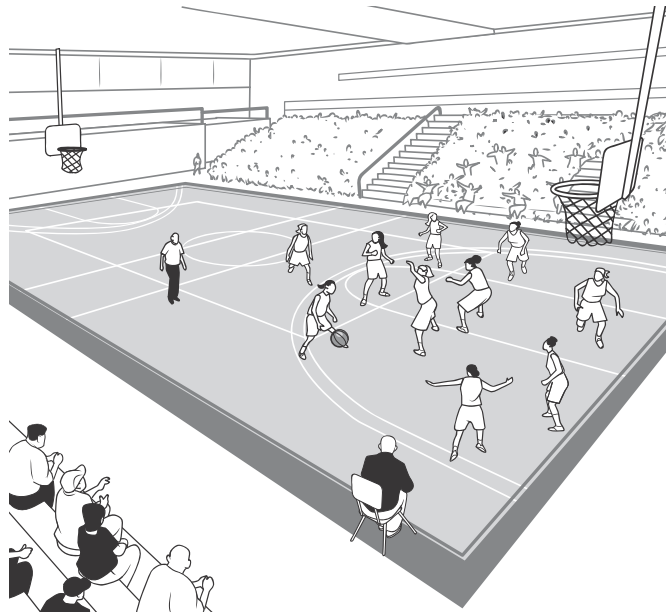


### Your Project Create a Basketball Poster

Do research to find the name of 4 colleges or universities that have women's or men's basketball teams.

Make a poster. List the following:

- The name of the college or university
- The name of the arena where the team plays
- The number of fans that each arena can hold
- Tell if that number is prime or composite.
- Round the number of fans that each arena can hold to the nearest thousand.



List the arenas in order from the arena that can hold the fewest number of fans to the arena that can hold the greatest number of fans. Find the difference between the number of seats in the largest and smallest arenas.

Name \_\_\_\_\_

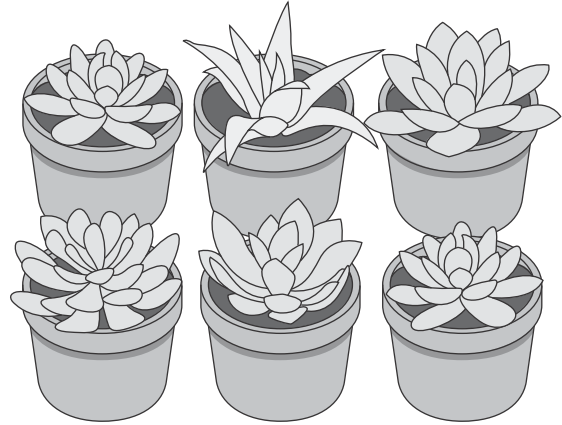
Pick a Project

Project 7C

## Arranging Arrays

Stores that sell plants will display them in different ways.

Sometimes potted plants are organized in arrangements so that there are the same number of potted plants in each row and column. These plants are arranged in arrays.



Plants can be displayed in just 1 long row of potted plants or in several rows of potted plants with the same number of plants in each row and column. The different arrays make the potted plants look interesting and are easy for customers to see.



### Your Project Design a Plant Array for a Store Display

You own a plant store and will design several displays of potted plants.

You have the following:

24 pots with tomatoes

56 pots with ferns

72 pots with daisies

45 pots with cactuses

Show two ways that you could display each type of plant. Use arrays for your displays. None of your arrays should have just 1 long row. Label the type of plant that you will display in each array.

Finally, present your plan for your displays to your class. Explain how the number of rows and columns show the total number of pots in each display.