

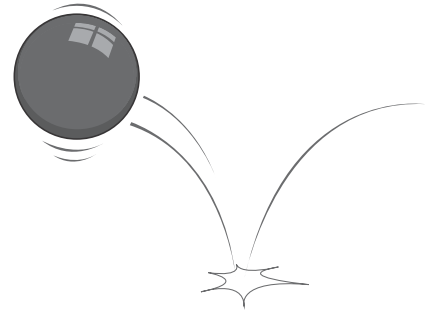
Name _____

Pick a Project

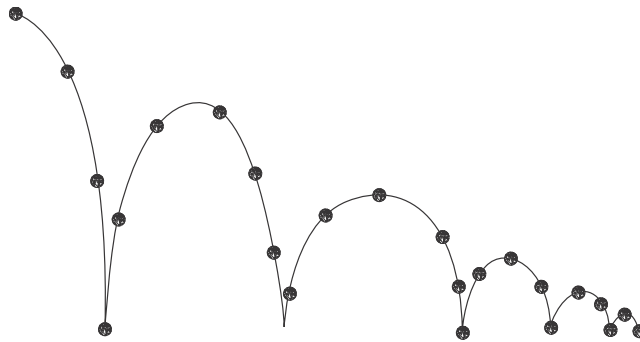
Project 3A

Bouncy Balls

Just after the Hula Hoop® and the Frisbee® were invented, along came the Super Ball®. Invented by Norman H. Stingley in 1965, the ball now commonly known as a bouncy ball is made in all different colors and shapes.



When you drop an ordinary ball, it bounces lower and lower each time until it stops bouncing. What makes bouncy balls special is that they bounce to almost the same height each time. So they bounce higher and longer, which makes them lots of fun to play with.



Your Project Make a Business Plan

You are going to start your own bouncy ball business! You know that you can make about 8 bouncy balls in 1 hour.

Write a business plan. Include the following information:

- The name of your business
- How many bouncy balls you can make in a 40-hour week, in one month, and in one year
- How much you are going to charge for each bouncy ball
- How much money you will earn in one week, one month, and in one year

Present your business plan to your class and explain how you decided on each number in your plan.

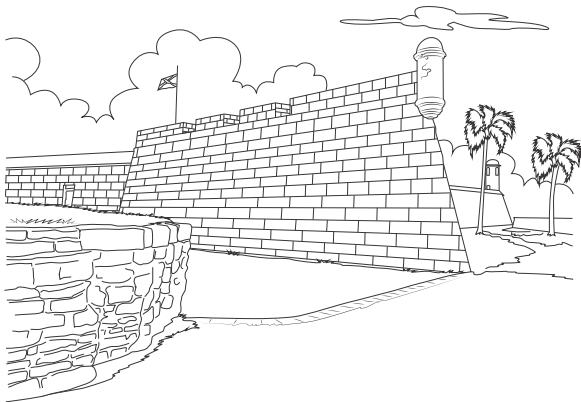
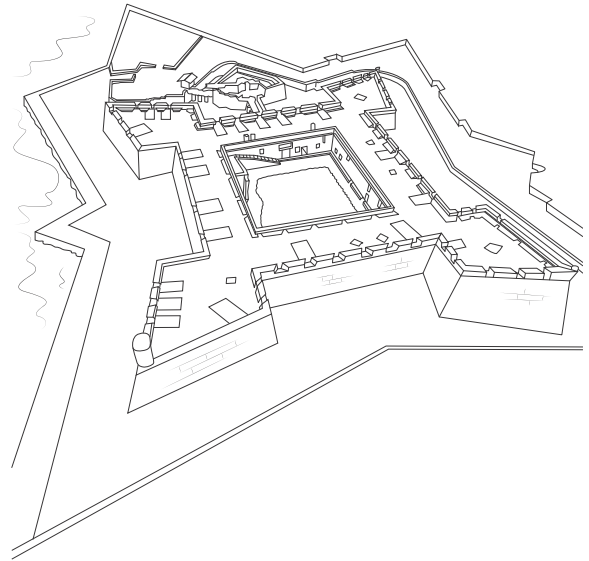
Name _____

Pick a Project

Project 3B

Oldest Fort

St. Augustine, Florida is the oldest city in the United States. A stone fort, named Castillo de San Marcos, was built in the 1600s to protect the city from invasion. Today, the fort is preserved as a national monument.

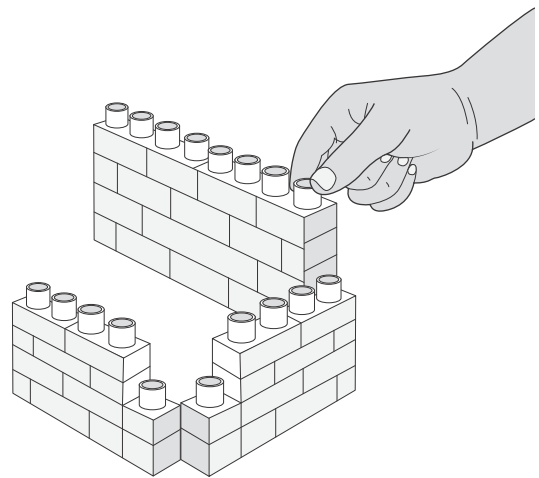


One reason the fort was so strong was that it was built from coquina blocks. Coquina is a type of stone formed in nature from sand and pieces of broken seashells. Builders spent 23 years placing the many coquina blocks along the walls of the fort.

Your Project Build a Model Fort

Gather simple objects that are shaped like coquina stones, such as blocks, erasers, or plastic bricks that snap together. Use the objects to build a model fort. You can make it look like Castillo de San Marcos or form another shape.

Suppose that you are going to show other groups of students at your school how to make a model identical to yours. Count the number of each item that you used to make your model. Then, make a table that shows the number of each item needed so that an after-school club of 8 students, a scout troop of 12 students, a social studies class of 20 students, and 2 art classes with a combined total of 25 students could all make exact replicas of your model.



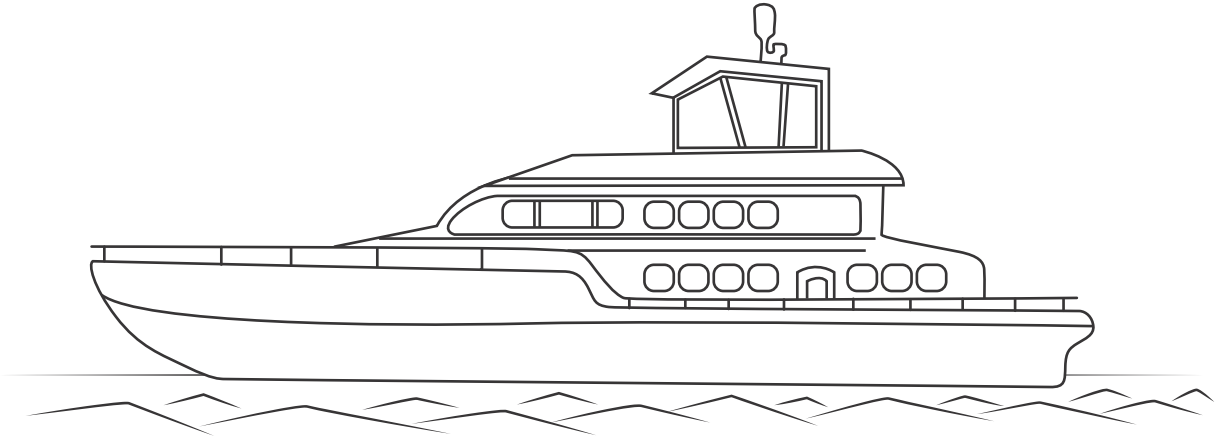
Name _____

Pick a Project

Project 3C

Fabulous Ferries

A ferry is a boat that carries people and goods for short distances across water. Most ferries follow a regular route, traveling back and forth several times each day, week, or month. Ferries that make stops are sometimes called water buses or water taxis.



Ferries help people get from one place to another. Some ferries carry people to places that they can only get to by water. People use ferries to get to and from work. They also use them to see new places. Thousands of ferries operate every day all across the United States.

Your Project Design a Prototype

Design and build a prototype of a ferry that can carry at least 12 pennies. Use simple materials, such as aluminum foil or wrapping paper, and soap, wax candles, or crayons. Test your prototype in water. Revise your design as needed.

Once you are happy with your prototype, draw a diagram of it on the front of an index card. Name your ferry. On the back, make a table that lists how many pennies the ferry could transport in 10, 50, and 100 trips. Also list how much your ferry company would earn if you charged each penny passenger \$2 for one trip.