

Island Models

Your classroom full of mapmakers and civil engineers now get the opportunity to become modelmakers as well. Using recycled materials, students will transform their two-dimensional drawings of islands into three-dimensional models. This activity might work well as a homework project if you don't have the class time for it.

What You Need:

for each student:

- individual island map
- a cardboard or Styrofoam™ base, at least 18" by 24" (Styrofoam™ allows the island to float)
- recycled materials (such as toilet paper tubes, yogurt containers, milk cartons, etc.)
- soft materials to help create natural features (such as cottonballs, fabric or foam)
- paint (optional)

for the class:

- scissors
- glue
- tape

To Get Ready:

Gathering recycled materials and cardboard bases for this activity will take some time. Consider asking parents to save their materials and bring them in.

If storage is a problem for you, assign this as a homework project, and reserve space in the cafeteria or on the stage for display of the final projects.



To Start, Ask:

If you were to start building a model of your imaginary island, what would you build first? Have you thought about what the inside of your building might look like?

Now, Try It:

- Think back to those imaginary islands. Using the maps that were drawn as reference, ask students to create three-dimensional models of their islands.
- Use the recycled and soft materials to create the various structures and natural features.
- As they design and create, encourage the students to stay true to their original island plans. The exercise of following a map to create a model is a good one for them to go through; it gives them the opportunity to concentrate on spatial relations and symbolic representation.
- Display the final products along with the maps. Invite students from other grades to see what your students have created!

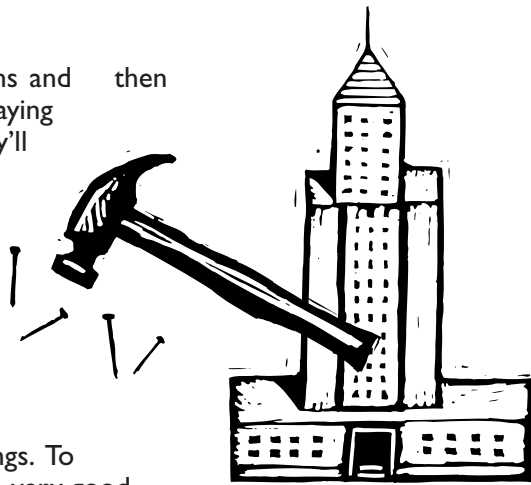


Ask Students Again:

Did you have any complications as you were building? What advice would you give to contractors who are about to start work on building the structures on your island true to size? Is there anything they need to be aware of?

If You Want to Try More:

Encourage students to draw building plans and then build the corresponding model. If they're staying true to a specific scale, such as 1"= 1', they'll be getting great practice with math and engineering.



Scientist Spotlight:

Model Builders are skilled technicians who create miniature three-dimensional models of structures using detailed drawings. To do their work, model builders must have a very good understanding of fractions, scale, and building materials.

Assess What Happened

Using the Field Journal Entry sheet (on p. i), invite students to respond to the following question.

If I were a model builder, I would feel _____ about my job because:

