

Activity Worksheet **Answer Key**

1. What are the steps to make an algae juice model?
 1. Wash our hands.
 2. Put a scoop (~1-2 tablespoons) of sodium alginate into the bowl containing calcium solution.
 3. After waiting ~30 seconds, use the sieve to place the juice spheres into the bowl of water.
 4. After rinsing, use a sieve to put the juice spheres on to plates or napkins.
 5. Eat the spheres and record our observations on this worksheet.

2. What happened when you added the juice and sodium alginate mixture to the calcium solution?

The juice sunk/floated and then a thin layer began to solidify around the liquid juice.

The outside of the juice sphere thickened to a gel and surrounded the middle.

The inside of the juice sphere was still soft and liquid.

3. Use your senses to describe how the juice sphere looked, smelled, felt and tasted.

It looked shiny, wet and smooth, like Jell-O. It felt smooth and soft, like a wet balloon.

It popped in my mouth. It smelled and tasted like juice and a little bit like the ocean.

4. Describe the sensation of how the juice model felt in your mouth.

First it was whole in my mouth and then I bit it and the insides came out like a gusher fruit snack.

At first, I felt the smooth and soft exterior and then I had to use my teeth to bite through the “cell wall” of the model. I felt the explosion of juice in the interior as it gushed into my mouth.

5. What parts of the algae cell are represented in the algae juice model?

Draw a picture and label the parts.

The cell wall is represented by the “skin” of the gelled juice.

The oils and starch are represented by the soft, liquid interior.