Delivery Capsules

How can they help us make vaccines?
1. Place the sieve into the bowl of calcium chloride solution.

2. Gently squeeze the bottle of sodium alginate so that individual droplets of liquid fall into the sieve.

3. Lift the sieve out of the bowl.

4. Feel the droplets. Are they still liquid? Try squeezing one. What happens?

To the right is an image of the tiny capsules that deliver COVID-19 vaccine ingredients to our cells. The image is magnified 1 million times.

How do these look similar to your capsules? How do they look different?
The active ingredient in many COVID-19 vaccines is a molecule called mRNA. Without protection, the mRNA would break down before it got to our cells. So, scientists protect it inside a delivery capsule.