Antibody Builder



Activity Outline

Invitations

- "Would you like to use Duplos to make an antibody?"
- "Would you like to learn how your immune system works?"

Model the activity

- 1. Introduce the virus model. "Viruses have shapes on their surface, and this is a model of a small part of a virus surface."
- 2. Introduce the antibody model. "Our bodies fight viruses by making antibodies that match the shapes on the virus surface. This is a model of an antibody."
- 3. Demonstrate the shapes matching. "What do you notice?"

Introduce the activity materials

• Show the model viruses and the materials to make model antibodies.

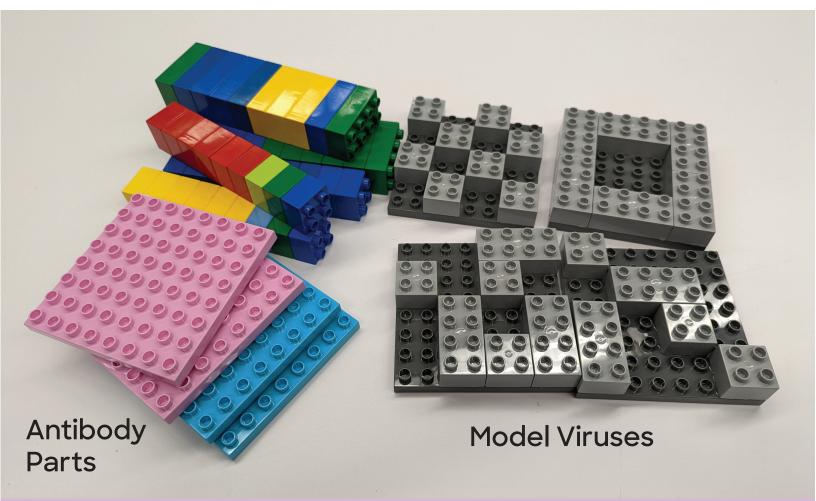
Challenges

- Try making antibodies for each virus; some are more complex than others.
- Create your own vaccine (or virus) and challenge someone to create a matching antibody.

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Setup



Experience Goals

- Design an antibody to match a model virus surface.
- Test the antibody and make careful observations to see how well it fits.
- Iterate if necessary, to design an improved antibody that fits even better.