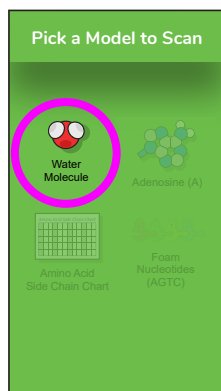


Training Activity: *Water Molecule*

QR Code
coming
soon



- 1 Open the app and select the water molecule



- 2 Line up your model with the white guide. Open the targeting help menu if having trouble.

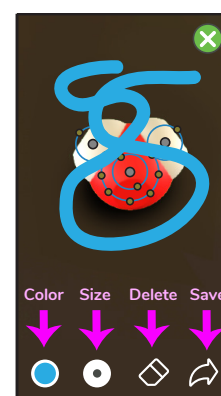
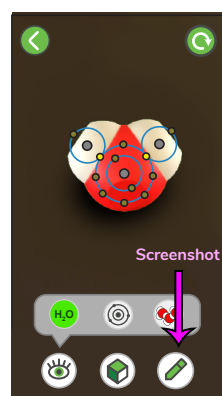
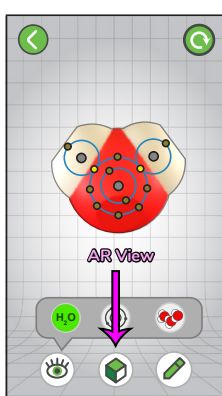
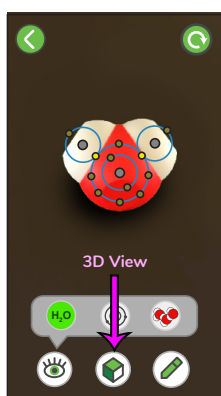


- 3 Click to switch between each of the different AR overlays

What atoms make up water? _____

How many electrons are associated with each atom? _____

How do multiple water molecules interact? _____



- 4 Click the central button to toggle between AR view and 3D view. It may be easier to see the details of an overlay using 3D view.

Click and drag to rotate in 3D view. Pinch and pull to zoom in 3D view.

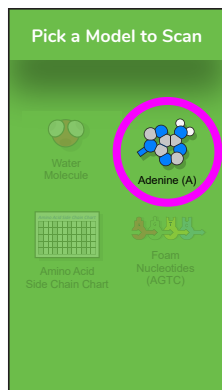
- 5 Click the pencil button to take a screenshot, then click and drag to draw. Buttons at the bottom will change the drawing color and size, erase all work to start again and save the screenshot.

Take a screenshot and draw where you think partial charges (either positive or negative) may exist on a water molecule.

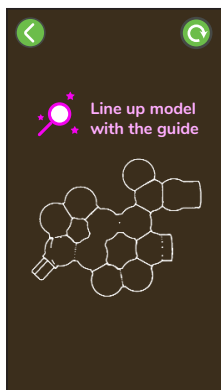
Complete the survey at: [url coming soon. . .](#)

Training Activity: Adenine (A)

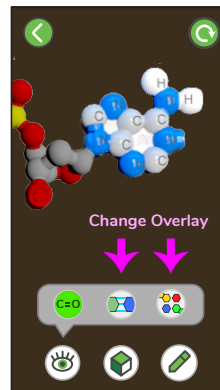
QR Code
coming
soon



- 1 Open the app and select the adenine (A)



- 2 Line up your model with the white guide. Open the targeting help menu if having trouble.

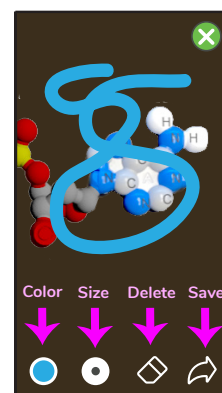
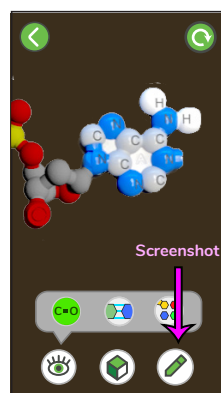
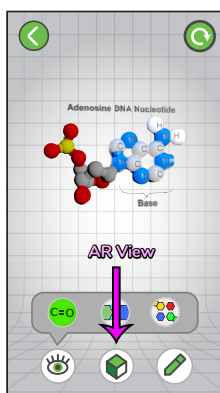
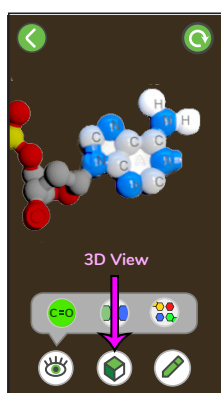


- 3 Click to switch between each of the different AR overlays

What are the components of the backbone? _____

How many bonds form between the adenine and thymine? _____

How do the bonds between adenine and thymine & guanine and cytosine differ? _____



- 4 Click the central button to toggle between AR view and 3D view. It may be easier to see the details of an overlay using 3D view.

Click and drag to rotate in 3D view. Pinch and pull to zoom in 3D view.

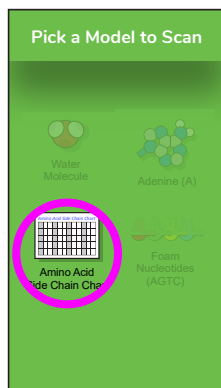
- 5 Click the pencil button to take a screenshot, then click and drag to draw. Buttons at the bottom will change the drawing color and size, erase all work to start again and save the screenshot.

Take a screenshot and draw the differences in base pairing between the four DNA nucleotides.

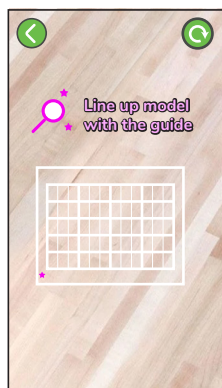
Complete the survey at: [url coming soon...](#)

Training Activity: Amino Acid Sidechain Chart

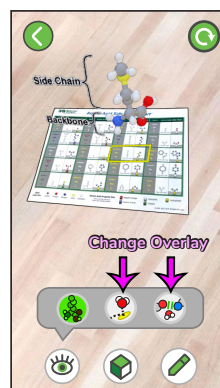
QR Code
coming
soon



- 1 Open the app and select the Amino Acid Sidechain Chart



- 2 Line up your model with the white guide. Open the targeting help menu if having trouble.

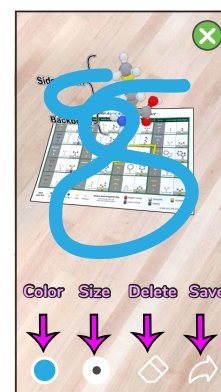
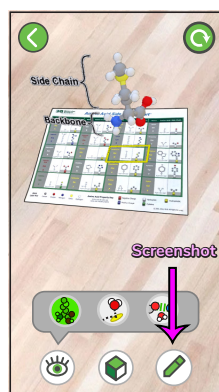
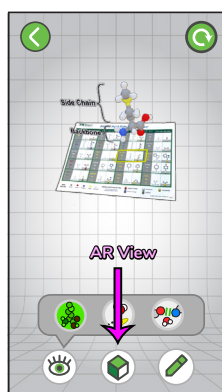
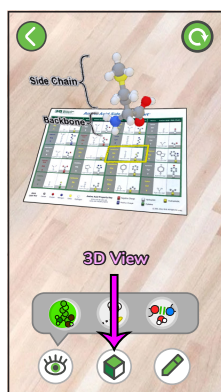


- 3 Click to switch between each of the different AR overlays

What do you notice about the structure of methionine? How does it differ from the plastic cysteine side chain model?

How does this amino acid interact with water?

What was removed when the peptide bond was formed?



- 4 Click the central button to toggle between AR view and 3D view. It may be easier to see the details of an overlay using 3D view.

Click and drag to rotate in 3D view. Pinch and pull to zoom in 3D view.

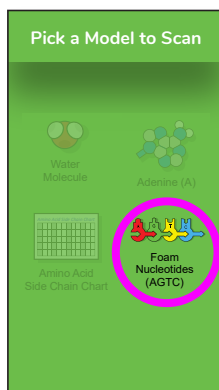
- 5 Click the pencil button to take a screenshot, then click and drag to draw. Buttons at the bottom will change the drawing color and size, erase all work to start again and save the screenshot.

Take a screenshot and draw how the methionine amino acid interacts with water, summarizing its properties

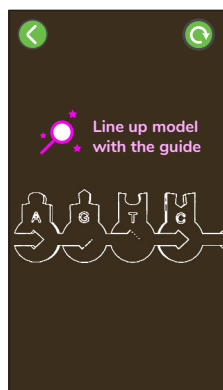
Complete the survey at: [url coming soon. . . .](#)

Training Activity: *Foam Nucleotides (AGTC)*

QR Code
coming
soon



- 1 Open the app and select Foam Nucleotides (AGTC)



- 2 Line up your model with the white guide. Open the targeting help menu if having trouble.

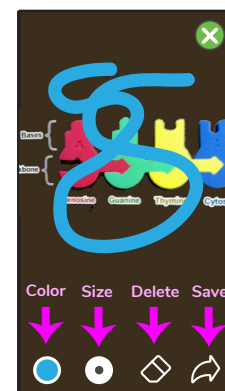
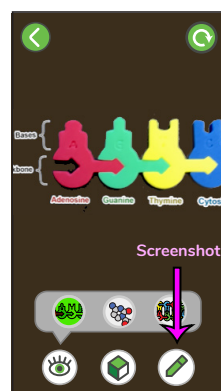
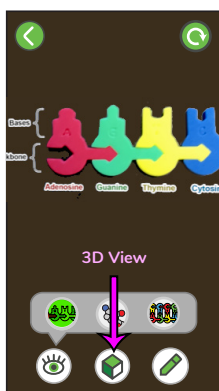


- 3 Click to switch between each of the different AR overlays

How are the 3' and 5' carbons oriented in the single strand of DNA molecule? _____

How do the bases on the same strand bind to the sugar-phosphate backbone? _____

Which complementary bases bind together? _____



- 4 Click the central button to toggle between AR view and 3D view. It may be easier to see the details of an overlay using 3D view.

Click and drag to rotate in 3D view. Pinch and pull to zoom in 3D view.

- 5 Click the pencil button to take a screenshot, then click and drag to draw. Buttons at the bottom will change the drawing color and size, erase all work to start again and save the screenshot.

Take a screenshot and draw one way the four nucleotides are each different and one way they are all the same.

Complete the survey at: [url coming soon. . .](#)