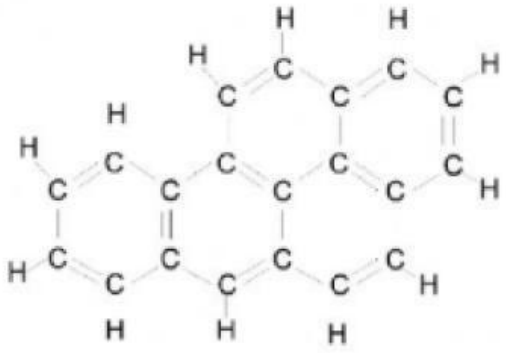
Project 60

DP EDUCATION

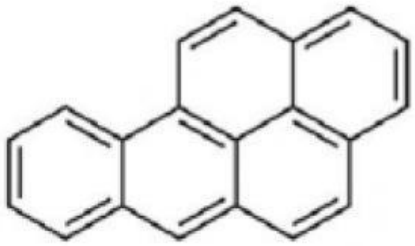
Coding School

❖ Draw the structure of benzo[a]pyrene from artist lab.

Benzo[a]pyrene is an organic molecule consisting of five benzene molecules. Its Lewis structure is as follows.



❖ When drawing the structure of benzene, by drawing a hexagon without carbon and hydrogen molecules, the above structure can be drawn in the artist lab as follows.



❖ For this, first of all, the artist should be placed on the left side of the screen.

❖ Let's first draw the hexagon shapes and then create the lines inside them.

❖ Use these blocks to create the first hexagon. The artist turns 330 degrees to the south and begins the design. The initial X position is 70 and the y position is 200. This will create a six-sided hexagon with a side length of 55px.

❖ The other 4 hexagon designs can also use the same blocks as above. But the artist's direction and x, y positions should be changed accordingly.

- After creating all 5 hexagons, let's see how to create the lines inside.
- The double bond formation inside the first benzene molecule on the left is possible as follows.

- This will draw three 43 px long lines in the first left hex similar to the structure above.

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- In this way, create the lines in the remaining hexagons by giving proper x,y position and rotation and create the final structure.