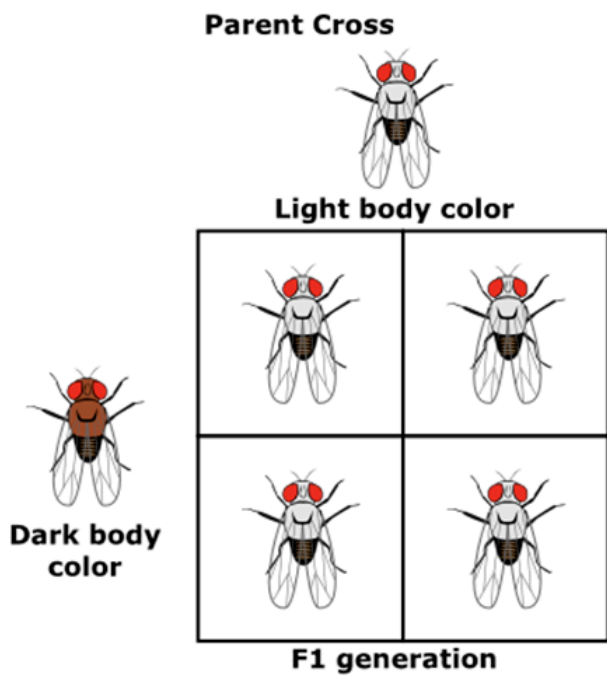


Sample High School Performance Task

Constructed Response Question

To allow the students to observe an additional trait, the teacher gives them a fly with a darker body color than the other flies, which have a lighter body color. The students crossed the dark-body-colored fly with the light-body-colored fly. The cross is represented in the Punnett square below.



The students then crossed two flies from the F1 generation and recorded the following results:

162 light-body-colored fruit flies
52 dark-body-colored fruit flies

Explain how the dark body color of the fruit flies remained in the gene pool.
