

|                                  |                         |
|----------------------------------|-------------------------|
| <b>1. Are all mutations bad?</b> | <b>4. Gene: ABCDEF</b>  |
| Yes                              | <b>Mutation: ACEFCD</b> |
| No                               | <b>What mutation?</b>   |
|                                  | deletion                |
| <b>2. Original: ATC CAT</b>      | substitution            |
| <b>Mutation: ATC GCAT</b>        | inversion               |
| <b>What mutation occurred?</b>   | insertion               |
| deletion                         |                         |
| insertion                        |                         |
| silent                           | <b>5. Gene: ABC</b>     |
| transverse                       | <b>New Gene: BBC</b>    |
|                                  | <b>What mutation</b>    |
| <b>3. Original DNA: CAT GAT</b>  | deletion                |
| <b>New DNA: CAT AT</b>           | insertion               |
| <b>What mutation occurred?</b>   | substitution            |
| deletion                         | transversion            |
| substitution                     |                         |
| tranverse                        |                         |
| insertion                        |                         |