**Mutation Telephone Worksheet Answer Key**

1. **Draw lines** to match the action or item from the mutation telephone activity on the left with the biological process that it models or represents on the right.

**Circle** the process on the right during which a mutation is most likely to happen.

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| *Instructions*  *Passing the instructions*  *Performing the instructions*  *Students* | *DNA replication*  *Cells*  *Protein synthesis*  *DNA/gene* |

1. List the three types of mutations that could occur, and give a brief description of each.

1. Substitution, a nucleotide base pair is replaced by another base pair

2. Insertion, an extra nucleotide base pair is added to the DNA

3. Deletion, a nucleotide base pair is removed from the DNA

1. The mutation telephone activity was used as a model used to simplify how mutations occur. List one way in which the model simplified the biological processes that occur in real cells.

* The instructions for the activity were much shorter than the DNA that a cell must copy.
* Mutations occurred more rapidly than real cells.
* Cells with mutations were able to survive and pass on the mutation.
* Many other possible solutions…