

Modeling Evolution: The Charlie Shuffle

This is a fun game to use in your classroom that will help simplify the theory of natural selection, in an engaging and effective way.

Your students will need a piece of white lined paper and a piece of blank printer paper.

On the lined paper, students should make a table with 4 columns as follows: Student Name; Round 1; Round 2; Round 3. Then have the class write down the list of student names as a group with teacher guidance.

Students should then fold the white solid paper in half twice to create 4 equal sections, then use scissors to cut out the 4 sections (or gently tear). On each card they should write one of the following words: live, die, reproduce, mutate. To keep the cards discreet have the students fold the cards in half to keep the words hidden. Have students mix them up before the game starts.

Over the course of three timed rounds, students will exchange as many cards with as many different classmates as possible during a 30 second time period. They must do equal exchanges so that they start each round with 4 cards and end each round with 4 cards. You will need a timer to help facilitate. Tell your students not look at their cards during the rounds- wait until *after* the round is up to examine the cards.

Two “die” cards means natural selection did not favor the individual. They are out of the game.

Two “mutate” cards means the individual mutated. You may have become another super ultra mega awesome species, or maybe they didn’t make it. Either way, they are no longer part of the population because they have become too different.

Any other combination means they are a survivor! **Only survivors can move on to the next round.**

Next to each student’s name, indicate “survivor”, “mutant”, or “goner” for each round.

Be sure to have the students refold the cards and mix them up before the start of the next round.

After the three rounds are up, only desirable traits will remain.

Suggestions for discussion: What did the cards represent; what did the students represent; what did the rounds represent? What determined whether or not someone stayed in for the round and why? What happened to the population over time and why? How does this activity model natural selection?

