

# **Genetic Mutations: a STARS Scientific Suitcase For 9th Grade High School Science Educators**

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The purpose of this project was to design and produce a lightweight scientific suitcase teaching tool that ninth grade high school science educators may implement into their curriculum when teaching students the concepts about genetic mutations. Contained within the suitcase are an animation, card game, hands-on models, and display posters, along with a teacher's instruction manual. This scientific suitcase was created in an attempt to fill in the apparent lack of information over genetic mutations that is present in current Texas high school textbooks and resources. It may assist students in better preparing for standardized testing by giving their educators an all-in-one module that can give the classroom extensive information on genetic mutations, all in one easy to carry suitcase. The suitcase components have been evaluated for their effectiveness and appeal by current educators, from 8th grade to college level, who specialize in multiple fields of science. The scientific suitcase's impact on students' performance and comprehension will be tested by STARS and DISD once it has been fully integrated into the science classroom curriculum

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