

Click Breed several times, and This document provides instructions for using a Gizmo simulation to model mouse genetics inheritance of two traits: fur color and eye color. Time Exam (elaborations) GIZMO Mouse Genetics 2SE (Two Traits) Answers Mouse Genetics (Two Traits) Vocabulary: allele, genotype, phenotype, probability, Punnett Student Exploration: Mouse Genetics (Two Traits) Vocabulary: allele, genotype, phenotype, probability, Punnett square [Note to teachers and students: This Gizmo was designed as a follow-up to the Mouse Genetics (One Trait) GizmoTM. Mice can be stored in cages for future breeding, and the statistics of fur and eye color are reported every time a pair of mice breed. On the Mouse Genetics (Two Traits) Gizmo, drag mice into the Parentand Parentspaces, and then click Breed to see their offspring. Go to Lesson Info. Breed "pure" mice with known genotypes that exhibit specific fur and eye colors, Lab: Mouse Genetics (two traits) Student Guide Prelab Information. They then test their predictions by running simulations in the Gizmo and comparing the observed The odds of getting four tails in a row are for both parents to have dominate genotype Gizmo Warm-up On the Mouse Genetics (Two Traits) Gizmo, drag mice into the ParentParentand spaces, and then click Breed to see their offspring. Experiment with different combinations of parent mice Question: What patterns appear when two traits are inherited? Observe: Breed a black-fur, black-eye mouse with a white-fur, red-eye mouse. Turn on Show genotype. [Note to teachers and students: This Gizmo was Teach mouse genetics with two traits with ExploreLearning Gizmos. Students are asked to use Student Exploration: Mouse Genetics (Two Traits) Vocabulary: allele, genotype, phenotype, probability, Punnett square. Respond to the questions and prompts in the orange boxes. Experiment with Without an account, Gizmos can be viewed for justminutes each per day. Vocabulary: allele, genotype, phenotype, probability, Punnett square [Note to teachers and students: This Gizmo was designed as a follow-up to the Mouse Genetics (One Trait Question: How can a 4x4 square model the inheritance of two traits? Model: Each parent mouse will contribute one allele for fur color and another for eye color. Experiment with different combinations of parent mice. 1 Student Exploration: Mouse Genetics (Two Traits) Directions: Follow the instructions to go through the simulation. Students are asked to use Punnett squares and probability calculations to predict offspring genotypes and phenotypes for different parental combinations. Purpose Explore the law of independent assortment by examining a dihybrid cross in mice. Students explore fur and eye color inheritance and discover dominant and recessive genes Gizmo Warm-up On the Mouse Genetics (Two Traits) Gizmo, drag mice into the Parentand Parentspaces, and then click Breed to see their offspring. Experiment with different combinations of parent mice On the Mouse Genetics (Two Traits) Gizmo, drag mice into the Parentand Parentspaces, and then click Breed to see their offspring. If a parent mouse is Ff Ee, there are four possible allele combinations the parent could pass to its offspring; FE, Fe, fE, and fe Breed "pure" mice with known genotypes that exhibit specific fur and eye colors, and learn how traits are passed on via dominant and recessive genes. Question: What patterns appear when two traits are inherited? Activity A: Exploring inheritance Get the Gizmo ready: Click Clear. We recommend doing that activity before trying this one.] Prior Knowledge Questions (Do these BEFORE using the Explain your answer. Punnett squares can be used to predict results This document provides instructions for using a Gizmo simulation to model mouse genetics inheritance of two traits: fur color and eye color.