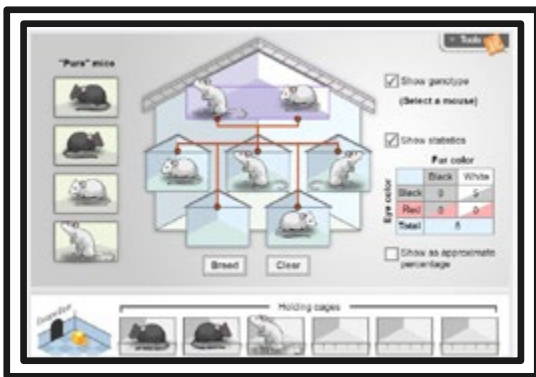


# What are Science Gizmos?

**ExploreLearning Science Gizmos** are award-winning, interactive simulations that bring research-proven instructional strategies to life and make learning fun. Students use Gizmos to interact with and explore hundreds of science topics, ranging from ecosystems to electrical circuitry. And with alignments to the latest standards, it's easy to get students ready for success.

In the **Mouse Genetics (Two Traits) Gizmo** you'll 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. 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. Learn about genotypes, probability, and statistics.

## Play, explore, and experience the "ah-ha!" moment with Gizmos:

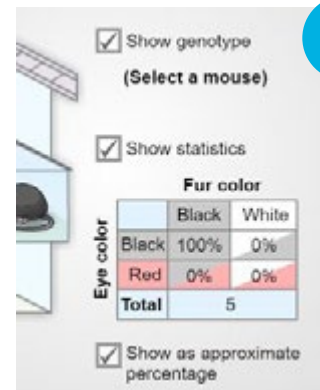


### Discover concepts

Interactive controls allow you to set up and run your simulation. Hit **Breed** to see the results or **Clear** to try something different. You're in control.

### Analyze data

Visualizations, screenshots, and graphing tools help you easily capture and compare results from experiments.



3. The table below describes 100 offspring of the same two parents. What are the most likely genotypes of the parents?

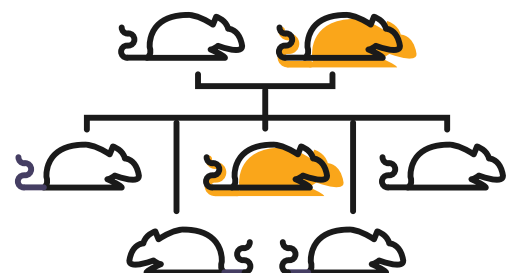
		Fur color	
		Black	White
Eye color	Black	22	27
	Red	25	26
Total		100	

A.  $FfEe$  and  $ffee$   
B.  $ffEe$  and  $ffee$

C.  $FfEe$  and  $FfEe$   
D.  $FFEE$  and  $ffee$

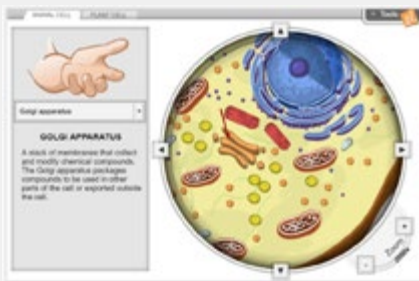
### Go deeper

Inquiry-based lesson plans, customizable activities, and assessment questions create more moments to explore, discover, and apply new concepts.



# What are Science Gizmos?

## Support the latest standards and assessments with hundreds of science topics for grades 3-12



3D Eclipse  
Air Track  
Ants on a Slant (Inclined Plane)  
Average Atomic Mass  
Balancing Chemical Equations  
Boyle's Law and Charles' Law  
Building DNA  
Building Pangaea  
Carbon Cycle  
Cell Division  
Cell Structure  
Chemical Changes  
Chemical Equations  
Chicken Genetics  
Circuit Builder  
Circulatory System  
Cladograms  
Coastal Winds and Clouds  
Collision Theory  
Color Absorption  
Comparing Climates  
Conduction and Convection  
Coral Reefs  
Covalent Bonds  
Density  
Density Laboratory  
Dichotomous Keys  
Diffusion  
Digestive System  
Disease Spread  
Doppler Shift  
Earthquakes  
Eclipse  
Effect of Environment on New Life Form  
Electron Configuration  
Element Builder  
Energy Conversions  
Evolution  
Fan Cart Physics

Feel the Heat  
Flower Pollination  
Food Chain  
Force and Fan Carts  
Forest Ecosystem  
Free Fall Tower  
Genetic Engineering  
Germination  
Graphing Skills  
Gravity Pitch  
Greenhouse Effect  
Growing Plants  
Half-life  
Heat Absorption  
Heat Transfer by Conduction  
Household Energy Usage  
H-R Diagram  
Human Homeostasis  
Human Karyotyping



Hurricane Motion  
Identifying Nutrients  
Inheritance  
Isotopes  
Levers  
Magnetism  
Measuring Motion  
Measuring Volume  
Meiosis  
Mineral Identification  
Natural Selection  
Observing Weather  
Ocean Tides  
Osmosis  
Pattern Finder  
Periodic Trends  
pH Analysis  
Phase Changes  
Phases of the Moon  
Phases of Water

Photosynthesis Lab  
Plants and Snails  
Plate Tectonics  
Pollination: Flower to Fruit  
Pond Ecosystem  
Prairie Ecosystem  
Rabbit Population by Season  
Rainfall and Bird Beaks  
River Erosion  
RNA and Protein Synthesis  
Rock Classification  
Rock Cycle  
Roller Coaster Physics  
Seasons in 3D  
Seasons: Earth, Moon, and Sun  
Senses  
Sled Wars  
Solar System  
Solubility and Temperature  
Star Spectra  
Tides  
Trebuchet  
Triple Beam Balance  
Unit Conversions  
Water Cycle  
Water Pollution  
Waves  
Weather Maps  
Weathering  
Weight and Mass

... And hundreds more!

### STEM Cases include:

Animal Group Behavior  
Water Crisis: Stoichiometry  
Heredity and Traits  
Nitrogen Cycle  
Evolution

