# **Mendelian Pigs**

### Part 1: Breed Your Bacon

Experiment with crosses, using Punnett squares to explore the rules of inheritance.

- A Tragic Fate for Blondes?
- · Pure-breeding Herds
- Mendel's Model
- First Back Cross
- Second Back Cross
- Think About Genes and Populations
- Summary of Part 1

### **Part 2: Pigmented Pigs**

Learn how melanocytes produce coat color, and examine the molecular basis for dominance among different versions of MC1R.

- Pigs with Patterns: How?
- Overview of Melanin Production
- The S Allele
- Melanocyte Simulator
- Exploring Crosses
- Test Your Understanding
- Summary of Part 2

# Part 3: Going Hog Wild

Apply what you've learned to make and test both family-level and population-level predictions about patterns in coat color.

- Whole Populations of Pigs
- Genes in Populations
- Punnett Squares for Populations
- Hungry Wolves
- Will Blondeness Really Disappear?
- Conclusion: Blondes Are Not Doomed
- Summary of Part 3

### Part 4: Quiz Questions

**Quiz Questions** 

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