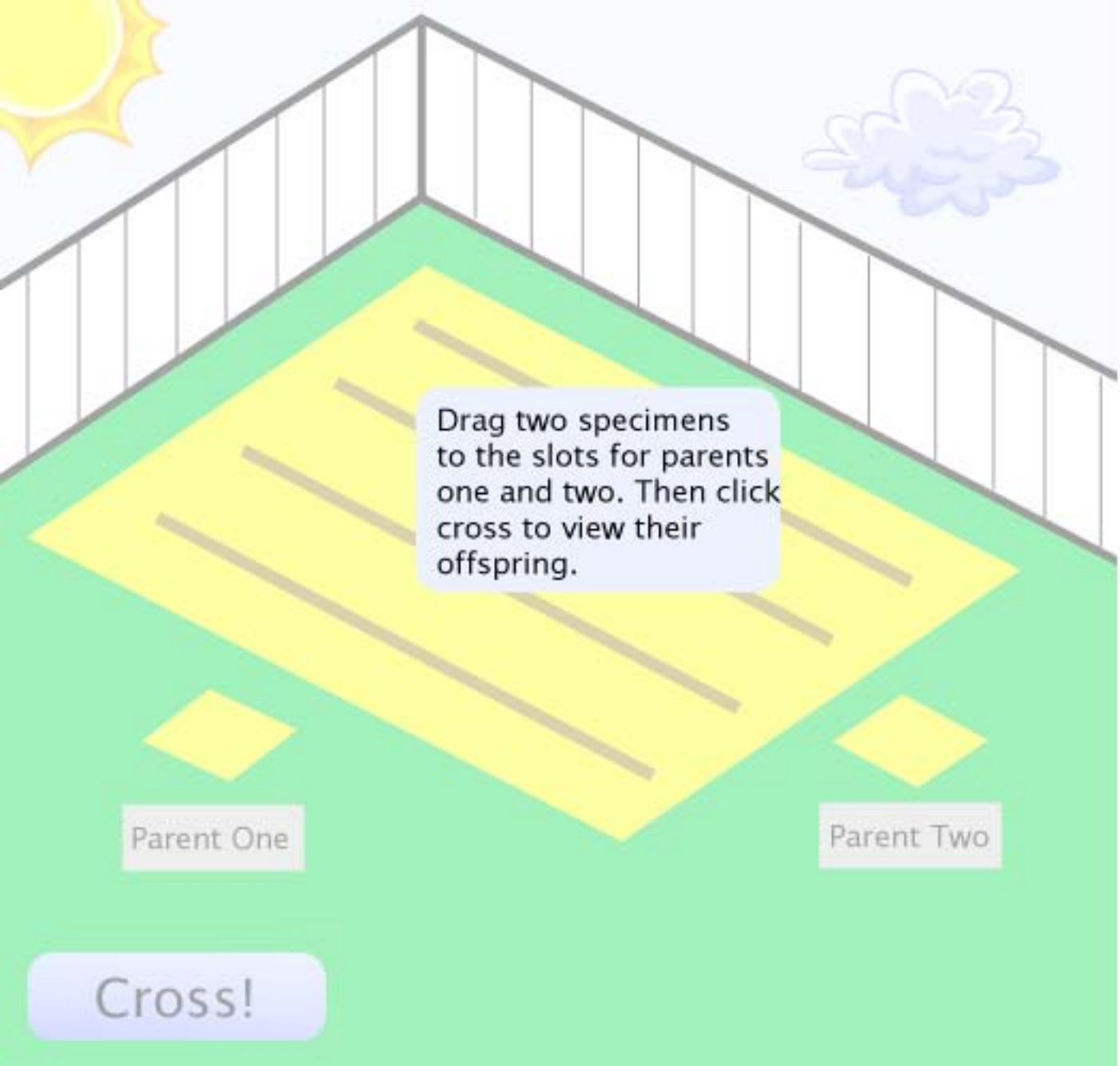


Hello! I am very excited to have a new assistant! Would you be willing to help me with a research problem? I am trying to understand how traits are passed from one generation to the next. Please help me by cross breeding some of my plants. Let's see if we can find any strange results that can help us understand this phenomena.



Start



Drag two specimens to the slots for parents one and two. Then click cross to view their offspring.

Parent One

Parent Two

Cross!

Selected Plant



color: red  
stem: short

Specimens





Selected Plant



color: red  
stem: short

Specimens





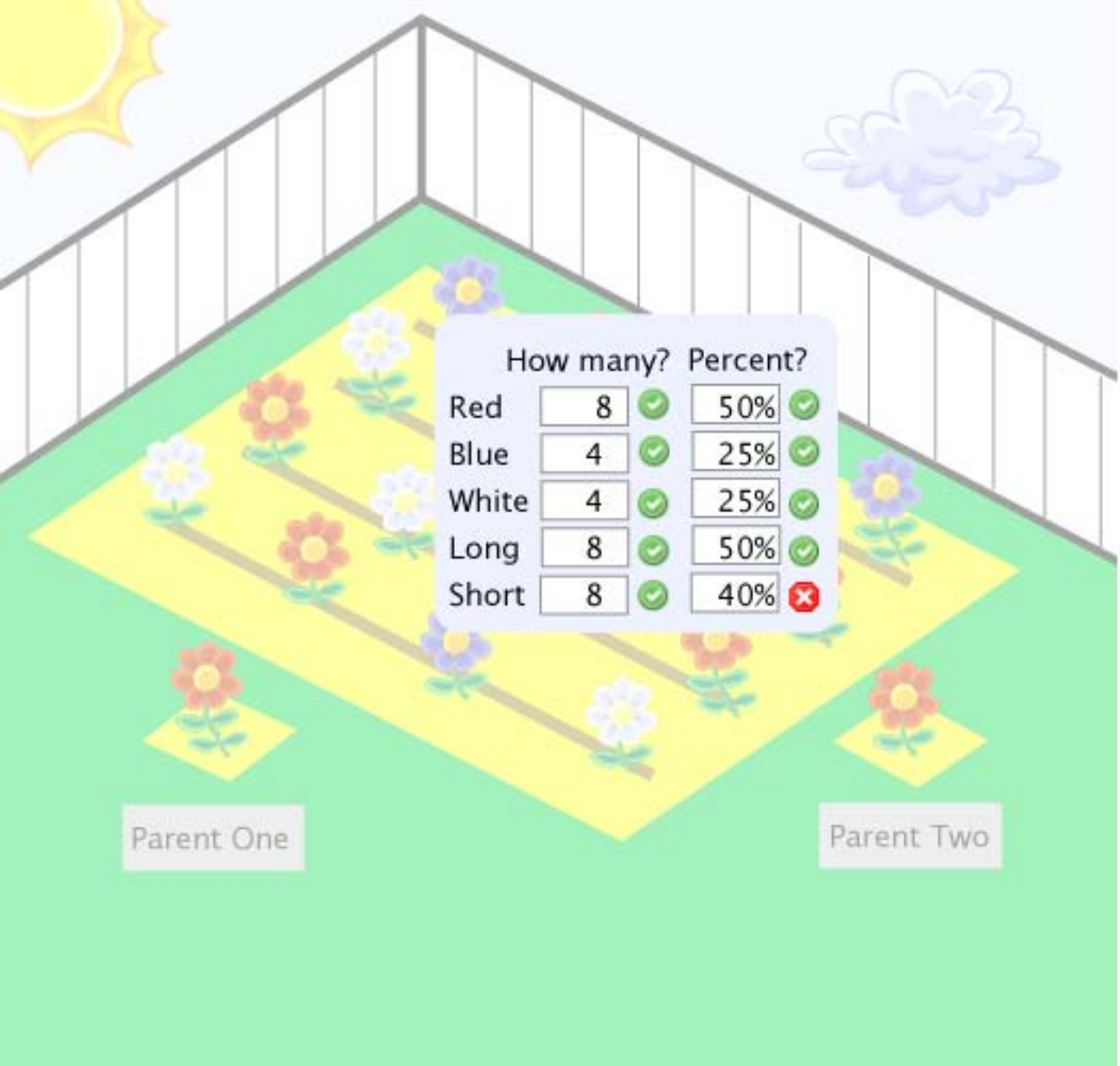
Selected Plant



color: red  
stem: short

Specimens





How many? Percent?

Red	<input type="text" value="8"/>	✓	<input type="text" value="50%"/>	✓
Blue	<input type="text" value="4"/>	✓	<input type="text" value="25%"/>	✓
White	<input type="text" value="4"/>	✓	<input type="text" value="25%"/>	✓
Long	<input type="text" value="8"/>	✓	<input type="text" value="50%"/>	✓
Short	<input type="text" value="8"/>	✓	<input type="text" value="40%"/>	✗

Selected Plant



color: red  
stem: short

Specimens



Parent One

Parent Two



Selected Plant



color: red  
stem: short

	How many?		Percent?	
Red	<input type="text" value="8"/>	✓	<input type="text" value="50%"/>	✓
Blue	<input type="text" value="4"/>	✓	<input type="text" value="25%"/>	✓
White	<input type="text" value="4"/>	✓	<input type="text" value="25%"/>	✓
Long	<input type="text" value="8"/>	✓	<input type="text" value="50%"/>	✓
Short	<input type="text" value="8"/>	✓	<input type="text" value="40%"/>	✗

I have a Theory!

I need more data!

Parent One

Parent Two

Specimens



Which of your data would  
you like to discuss?

Color

Length



Ok, lets talk about color. Tell me about what you found? What are some of the most interesting results from your study? Which of these results were unexpected?

Red	8	✓	50%	✓
Blue	4	✓	25%	✓
White	4	✓	25%	✓
Long	8	✓	50%	✓
Short	8	✓	50%	✓



Your right! It is strange blue and white flowers appeared when there were no blue or white flowers in the mix. How could that be?

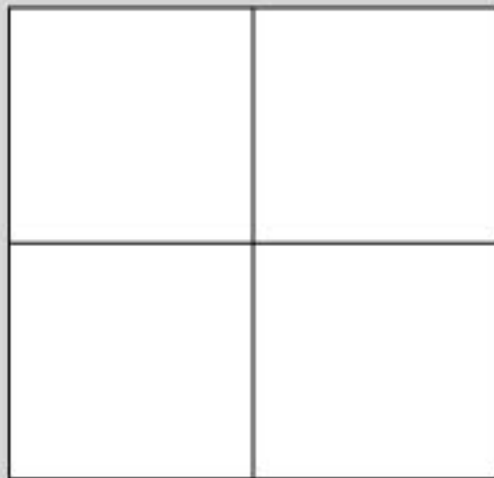
The trait had to be hidden somehow in the parents!

Something must have gone wrong I will try again

Could it have something to do with different conditions?



Interesting idea! How could such a thing be hidden? What if the color was decided by two traits. Lets simplify this to what we think would happen if there were only 4 offspring. Which colors would you place in our new model.



Fascinating! It looks like the model of two traits could very well explain the strange results of our experiment. Now lets gather results from more crosses to see if they correspond with this model.

