



CORRECTIONS INSERT

There are a few corrections to the printed facilitator guide activity instructions. Please see below for the correct language/instructions.

PAGE 11: SCENARIO 3

- The four livestock card records will need to be paper clipped to the Scenario 3 animal card. The transparency grid, the thermal satellite map and the Scenario 3 plant card will need to be paperclipped together. Place all items into the black bag.
- To set the four-digit lock, follow the instructions included with the lock. You will want to use the code 7445. Once the lock is set, place the shackle through the zipper, close the lock and scramble the letters.

PAGE 17: SELECTIVE BREEDING – PLANTS

Selective breeding has been practiced for hundreds of years. Before Gregor Mendel experimented with peas, farmers noticed that offspring received or inherited traits (characteristics) from their parents. Scientists have learned that chromosomes containing genes transfer specific traits from parents to offspring. Offspring will get a copy of a gene for a specific trait from each parent. If a trait is dominant, the offspring must get at least one copy of a specific gene from one parent. If it is recessive, the offspring must get a copy of the same gene from both parents.

Scenario

Farmers want to grow the healthiest food, so they select orange carrots to pollinate or breed so that they get a crop of all orange carrots.

Look at the models of chromosomes made with green pipe cleaners. The beads represent genes that pass traits from parents to their offspring. Since the orange color in carrots is recessive, there need to be two genes that are the same orange color. A non-orange carrot is represented by an unmarked center, while an orange carrot is represented by a black marker in the center of the model. Looking at the upper gene structure, which color bead represents the gene for orange carrots?

