

Title: Cookie Factory Grade: K-2

Overview: Students enjoy counting jelly beans as they decorate cookies for Harley, the horse, and his friend Froggy. They also discover that using the Factory's devices in different sequences produces different results.

My Learning Objectives:

Use concrete materials to show numbers to 20 Create sets containing 1 to 20 objects Use one-to-one correspondence between objects and numerals

DISCOVER MODE

Let your students click different devices in the Cookie Factory to discover the function of each one. At first, students may see each device in isolation. At some point, they will discover that clicking devices in different sequences will produce different results. The sequence below decorates and sorts cookies, but let students use trial and error to discover this independently!

- 1. Click the cookie jar to enter the Cookie Factory from the Main Room.
- 2. Click the cookie pipe to make a cookie appear.
- 3. Click the conveyor belt lever to move the cookie under the jelly bean dispenser.
- 4. Decorate the cookie by clicking the jelly bean dispenser as many times as you want. The number of jelly beans will be counted aloud and shown on the jelly bean meter as they drop onto the cookie.
- 5. Click the hand to move the cookie into a bin, or click the lever to move the cookie along the conveyor belt. Make and decorate as many cookies as you want.
- 6. Click the cookie with the most jelly beans for bins with numbers 10 to 20.
- 7. Click the character in the picture frame for the Question and Answer Mode, or click Millie to return to the Main Room.

QUESTION AND ANSWER MODE

- 1. Click the character in the picture frame to enter the Question and Answer Mode.
- 2. A cookie drops and moves under the jelly bean dispenser. Then Harley asks you to put jelly beans on it.
- Click the jelly bean dispenser once for each jelly bean Harley requested. Then click the hand to feed the cookie to Harley. (Click Harley if you want to hear the request again.)
 If you count out the number of jelly beans requested, Harley thanks you and gobbles the cookie!

- If you count out too many or two few jelly beans, Froggy gets to eat the cookie and you get to try again.

You can continue decorating cookies for Harley as long as you like.

4. Click the empty picture frame for the Discover Mode, or click Millie to return to the Main Room.