



### Activity C.8: Homing Pigeons III- Sorting by Color and Sequencing Multiples

Special Note: This is the third version of the game in a series of four. Students use color clues to determine which tree (staircase) the pigeon (token) belongs in and then uses multiplication skills to put the pigeon in their own nest (notch) at the correct elevation. Homing Pigeons IV (Activity C.14) is the most advanced version of this game – there are no color clues and instead players must use multiplication, division, factoring and other problem solving skills to help pigeons roost.

#### Learning Objectives:

- 1) Continue to develop fluency with multiples.
- 2) Begin to understand division.

#### Examples of Skills Accomplished:

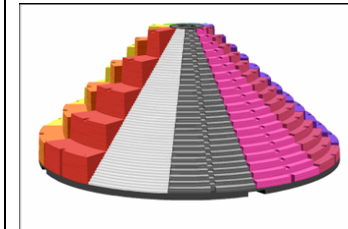
- 1)  $6 \times 7 = 42$ .
- 2) There are eight groups of 6 in 48.

#### Setup:

- 1) Put staircases in counterclockwise sequence  $1x \rightarrow 12x$ . You can use all of the staircases or only a few.
- 2) You will need the foam card matching the color of each staircase in use. Use forest green tokens with the bright green staircases.
- 3) Tokens will become pigeons, staircases will become trees, and notches on the steps will become nests.
- 4) The game is written so that players select multiples for each staircase and then put them in the treasure trove and mix them up. If you want to speed up the setup or you want to just focus on the sorting and sequencing rather than calculating the multiples, put the multiples directly in the treasure trove, yourself, taking care to select the multiples from the foam card that matches the staircase.

Maximum Number of Players for Small Group Activities: 6

Players Positions: Standing  
Grey foam logs: In



<p>Game Objective: Help all pigeons fly home to roost in their own nests. All players work together as a team and get points for all pigeons in the correct roost at nightfall (the end of play). Players do not need to take turns; they all work at once. Remind players they may not rotate Zillio. They have to fly around to the side of Zillio where the pigeons will roost.</p> <ol style="list-style-type: none"> <li>1) Using the foam card that matches the color of the staircase, students place the multiples on Zillio.</li> <li>2) Check to make sure the multiples are correct. The tokens are now pigeons.</li> <li>3) Have all pigeons flock to the treasure trove. Mix up all the colors of pigeons in the treasure trove.</li> <li>4) Each player should select a pigeon and, help it find first its own tree (using color) and then its own nest (using skip counting &amp; multiplication skills).</li> <li>5) Continue play until the treasure trove is empty and all pigeons are roosting safely in their own nests for the night.</li> </ol>	<p>Hint: At the beginning of the game, allow students who do not yet have good multiplication or skip counting skills to just put the pigeon anywhere in the correct tree. As more pigeons are placed properly, it will be easier for these students to use sequencing (in addition to skip counting) skills to put the pigeons in their own nests. Allow any student to move a pigeon from the wrong nest to the correct one.</p>
<p>Observe and Assess:</p> <ol style="list-style-type: none"> <li>1) Students' fluency with multiples during setup.</li> <li>2) Students' problem solving skills during play.</li> </ol>	
<p>Group Discussion:</p> <ol style="list-style-type: none"> <li>1) N/A</li> </ol>	
<p>Transition to Paper:</p> <ol style="list-style-type: none"> <li>1) Assign the reproducible for either class work or homework.</li> </ol>	



Name: \_\_\_\_\_ Date: \_\_\_\_\_

**a)**  $12 \times 3 = 36$

**b)**  $7 \times 7 = 49$

**c)**  $8 \times 7 = 56$

**d)**  $9 \times 4 = 36$

**e)**  $9 \times 5 = 45$

**f)**  $8 \times 6 = 48$

**g)**  $11 \times 8 = 88$

**h)**  $6 \times 7 = 42$