



### Activity B.11: Homing Pigeons II- Sorting by Color and Sequencing Multiples

Special Note: This is similar to Homing Pigeons I but instead of sorting consecutive numbers, students will be sorting multiples. During setup they will be practicing skip-counting skills and then during play they will practice sequencing 2 digit numbers correctly. The next more advanced version (Homing Pigeons III) still provides color clues regarding on which staircase a pigeon should roost, but it requires good multiplication skills.

#### Learning Objectives:

- 1) Sort, classify and order objects by color & number.
- 2) Practice skip counting.
- 3) Continue to develop familiarity with multiples.
- 4) Understand  $<$ ,  $>$ ,  $=$  when comparing 2 digit numbers.

#### Examples of Skills Accomplished:

- 1) Put the following numbers in sequence from smallest value to highest value:
  - a. 40, 30, 10, 50, 60, 20
  - b. 22, 55, 44, 11, 33
  - c. 24, 12, 60, 36, 48

#### Setup:

- 1) Match the color of each foam cards to the corresponding staircase. Use forest green foam card with bright green staircase.
- 2) Select the tokens representing the multiples for the staircase and put them in the treasure trove. These are now pigeons.
- 3) Mix up the pigeons in the treasure trove.

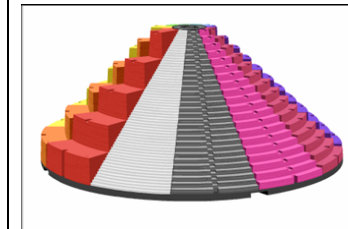
#### Setup options:

- 1) You may assign this task to students who are ready to practice skip counting; or
- 2) You may keep a set of foam cards with the multiples in place but turned blank side up to speed up this process.

Maximum Number of Players for Small Group Activities: 4

Players Positions: Standing

Grey foam logs: In



<p>Game Objectives: Help all pigeons fly home to roost at the correct elevation. All players work together as a team to get all pigeons in the correct roost points before nightfall (the end of play). Remind players they may not rotate Zillio. They have to fly around to the correct side of Zillio.</p> <ol style="list-style-type: none"> <li>1) Have each learner select a token and then place it number side up in any notch on the staircase that matches the color of the token. See partial view of Mountain below.</li> <li>2) Continue until the treasure trove is empty and all tokens are on the correct staircase.</li> <li>3) Allow each player to select a staircase.</li> <li>4) Each player should put the tokens in sequence in the notches on the steps on their staircase, by putting the lowest number (closest to zero) in the notch on the bottom step and the largest number (closest to 60) in the notch on the highest (notched) step.</li> <li>5) When any player has completed sequencing the tokens on a staircase allow him/her to select another staircase that has not yet been sorted and sequence the steps on that staircase.</li> </ol>	<p>Hint: If some students have good skip counting skills, challenge them to put the tokens at the correct elevation (on the correct step) so the pigeons go straight to their own nests.</p>
<p>Observe and Assess:</p> <ol style="list-style-type: none"> <li>1) Students' interpersonal skills in collaborating in the sequencing portion of the task.</li> <li>2) Students' ability to sort two digit numbers correctly.</li> </ol>	
<p>Group Discussion: N/A</p>	
<p>Transition to Paper:</p> <ol style="list-style-type: none"> <li>1) Assign the one of the reproducible as either class work or homework. The first reproducible only covers sequencing two digit numbers. Use the second one if you want to move into skip counting and/or multiplication.</li> </ol>	



Reproducible

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

Put the following numbers in sequence from least to most:

**a)** 20, 30, 10  
10, 20, 30

**b)** 24, 36, 12,  
12, 24, 36

**c)** 27, 18, 9, 36  
9, 18, 27, 36

**d)** 32, 40, 8, 16, 24  
8, 16, 24, 32, 40

**e)** 33, 22, 11  
11, 22, 33

**f)** 14, 21, 35, 28, 42  
14, 21, 28, 35, 42



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

**a)**  $2 \times 1 = 2$

**b)**  $3 \times 1 = 3$

**c)**  $4 \times 2 = 8$

**d)**  $12 \times 2 = 24$

**e)**  $7 \times 5 = 35$

**f)**  $10 \times 5 = 50$

**g)**  $9 \times 3 = 27$

**h)**  $8 \times 3 = 24$