

Ducks in a Row

FOCUS

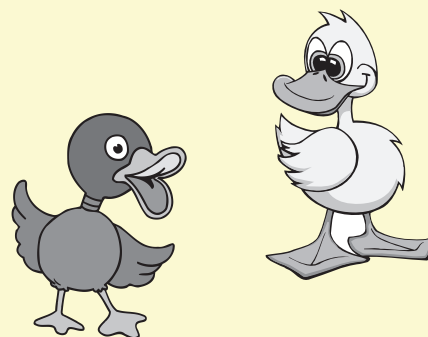
Multiplying decimals by 10 and 100

LEVEL

Intermediate

SOFTWARE CONNECTION

Fractions-Percentages-Decimals (Level 4: multiply decimals)



GROUPING

Student pairs

SUPPLIES

Copies of Ducks in a Row Activity Sheets A and B (1 of each per student pair), copies of Ducks in a Row Activity Sheet C (1 per student), scissors

ACTIVITY

1. As a class, review how to multiply a decimal by 10 and by 100. Ask volunteers to solve multiplication problems on the board. For example: $.35 \times 10 = 3.5$ $.35 \times 100 = 35$
2. Arrange for students to work in pairs, and distribute Activity Sheets A and B (1 of each per student pair). Have students cut apart the decimal cards on Activity Sheet A, shuffle them, and stack them facedown. Have students cut apart the game markers (ducks) on Activity Sheet B and place them in a pile.
3. Distribute Activity Sheet C (1 per student), and explain the rules for Ducks in a Row:
 - Players use game markers to cover FREE on their game boards.
 - Player A draws a decimal card and places it where both players can see it.
 - Player A multiplies the decimal on the card by 10 and places a duck marker on the answer on his or her game board. Player B multiplies the decimal on the card by 100 and places a duck marker on the answer on his or her game board. The players should check each other's answers.
 - The game continues in this manner with players taking turns drawing decimal cards. On each turn, both players multiply (Player A multiplies by 10, Player B multiplies by 100).
 - The winner is the first player to get five ducks in a row—horizontally, vertically, or diagonally.
4. Allow time for each student pair to play at least one complete game. Then have the players shuffle the decimal cards and play again. This time, Player A should multiply by 100 and Player B should multiply by 10.

Note: There are many winning combinations, so the game boards can be used multiple times with little or no duplication.

Ducks in a Row

Activity Sheet A

.76

.039

.39

.827

.82

.01

.1

.694

.007

.07

.045

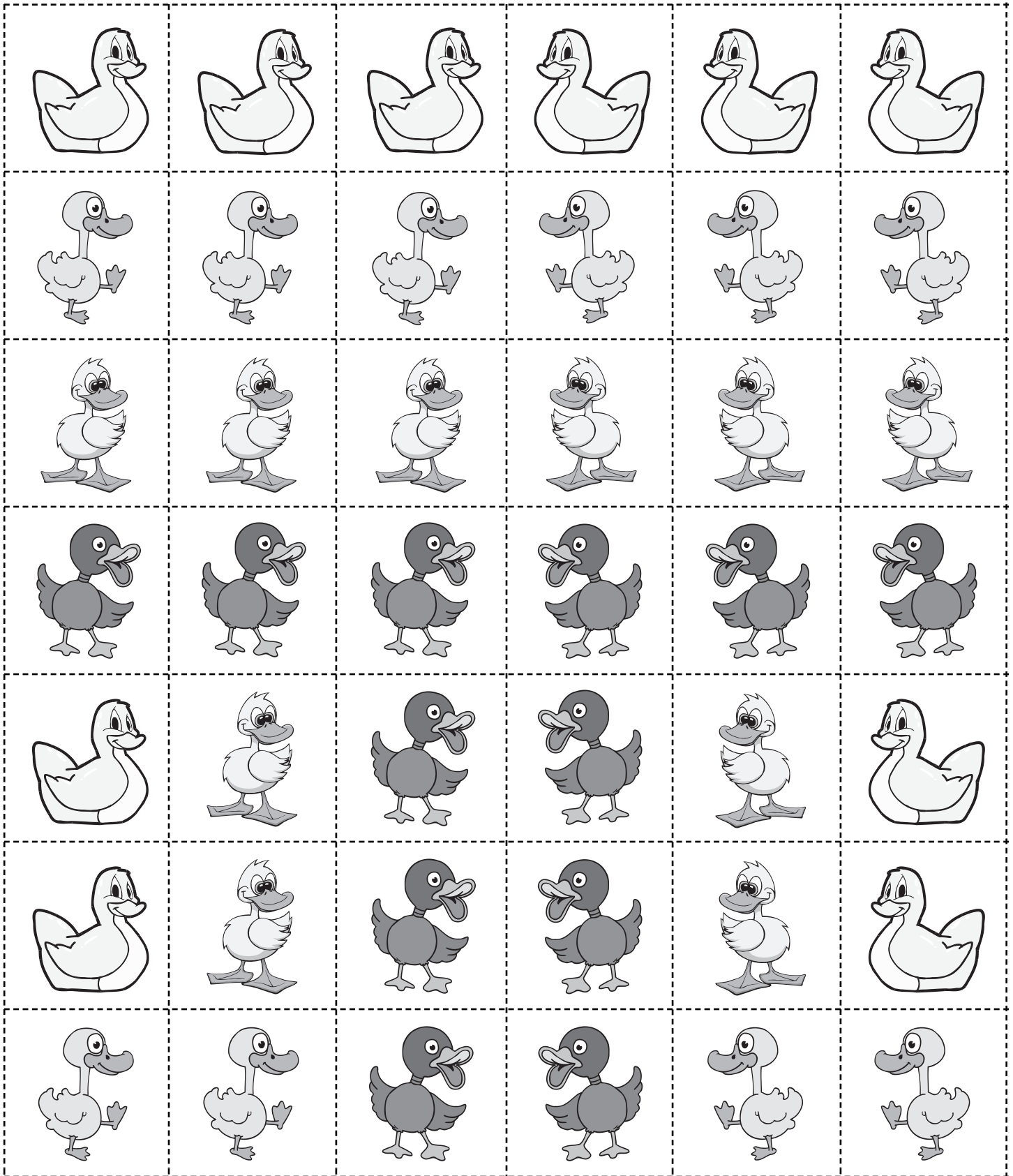
.45

.124

.2

Ducks in a Row

Activity Sheet B



Ducks in a Row

Activity Sheet C

.45	12.4	.07	20	82
.39	3.9	8.2	1	8.27
10	82.7	FREE	69.4	45
2	4.5	.1	.7	7.6
7	39	6.94	76	1.24