

# **Lesson 9: The Birds**

### **Standards Alignments**

Addressing 5.MD.C.3, 5.MD.C.5, 5.NBT.B.5

### **Teacher-facing Learning Goals**

 Solve problems that involve the multiplication of multi-digit numbers.

## **Student-facing Learning Goals**

Let's solve multiplication problems.

### **Lesson Purpose**

The purpose of this lesson is for students to use whole-number multiplication to solve problems.

In previous lessons, students learned to use the standard algorithm to multiply multi-digit numbers. In this lesson, they solve problems that involve multiplication. Students are not asked to use a particular algorithm when they solve these problems. Some of the numbers in the problems are large and cumbersome and lend themselves well to using the standard algorithm for multiplication. Other products have factors of 10 and other smaller factors and these lend themselves well to mental calculations or use of the associative and commutative properties of multiplication. Use this lesson as an opportunity to observe the strategies your students are applying. This lesson has a Student Section Summary.

#### Access for:

Students with Disabilities

Action and Expression (Activity 2)

## English Learners

MLR1 (Activity 2)

#### **Instructional Routines**

Notice and Wonder (Warm-up)

#### **Lesson Timeline**

Warm-up	10 min
Activity 1	15 min
Activity 2	20 min
Lesson Synthesis	10 min

### **Teacher Reflection Question**

If you were to teach this lesson over again, what activity would you redo? How would your proposed changes support student learning?



Cool-down 5 min

 $\textbf{Cool-down} \hspace{0.2cm} \text{(to be completed at the end of the lesson)}$ 

O 5 min

On Screech

## **Standards Alignments**

Addressing 5.MD.C.5, 5.NBT.B.5

## **Student-facing Task Statement**

To make a birdhouse for a screech owl, the recommended area of the floor is 8 inches by 8 inches and the recommended height is 12 inches to 15 inches. What is the recommended range of volumes for a screech owl birdhouse? Explain or show your thinking.

## **Student Responses**

768 to 960 cubic inches.  $8 \times 8 = 64$ ,  $64 \times 12 = 768$  and  $64 \times 15 = 960$ .