

# Standards-Based Assessment + Instruction

# Preliminary Planning Sheet Grade 1 - Birds in Trees

#### Standard(s)

1.OA.A.1

Mathematical Practices MP.1 MP.3 MP.4 MP.6 MP.7

#### Domain(s)

Operations and Algebraic Thinking

#### **Major Underlying Mathematical Concepts**

- Counting/Adding on
- Two to one
- Ordinal numbers
- Number sense to 18

#### **Problem Solving Strategies**

- Diagram/Key
- Model (manipulatives)
- Table

### Formal Mathematical Language and Symbolic Notation

- Diagram/Key
- Model
- Table
- Sets
- Ordinal numbers: 1st, 2nd, 3rd ...
- Dozen, half dozen (for mothers)
- More than (>)/Greater than (>)/Less than (<)

- Equivalent/Equal to
- Halves, half of
- Pair
- Even/Odd
- Patterns
- Total/Sum
- Per



## Possible Solution(s)

Hailey counts 18 birds in all.

	Кеу	Tree 1	Tree 2	Tree 3	Tree	Mother	Babies
m b	mother bird	m I	m m / \ bb bb	mmm /   \ bb bb bb	1	3	6
	baby bird	b			2	2	4
					3	1	2

6 + 4 + 2 = 123 + 2 + 1 = 612 + 6 = 18

#### **Possible Connections**

Below are some examples of mathematical connections. Your students may discover some that are not on this list.

- Patterns: Mother birds +1, Baby birds +2
- Each mother has a pair of baby birds.
- More babies are added to continue the pattern.
- There are more baby birds than mothers.
- There are a dozen baby birds.
- The total number of mother birds is half the number of baby birds.
- There is an equal number of baby birds per mother.
- The baby birds in each tree is an even number.
- Relate to a similar task and state a math link.
- Solve more than one way to verify the answer.

