

Preliminary Planning Sheet Grade 2 - On the Beach

Domain(s)

Operations and Algebraic Thinking

Standard(s)

2.OA.A.1

Mathematical Practices

MP.1 MP.3 MP.4 MP.6

Major Underlying Mathematical Concepts

- Number sense to 42
- Change unknown
- Result unknown
- Addition
- Subtraction

Problem Solving Strategies

- Model (manipulatives)
- Diagram/Key
- Table
- Tally chart
- Number line

Formal Mathematical Language and Symbolic Notation

- Model
- Diagram/Key
- Table
- Tally chart
- Number line
- Odd/Even
- Amount
- Difference
- Total/Sum
- Per
- More than (>)/Greater than (>)/Less than (<)
- Equivalent/Equal to
- Most/Least
- Equal share
- Dozen

Possible Solution(s)

Kim finds 20 pink shells on the beach.

Key	
b	is brown shell
p	is pink shell

Nick's Shells

b b b b b b b b b b

b b b b b b b b b b

b b b b b b b b b b

p p p p p p p p p p

p p

Kim's Shells

b b b b b b b b b b

b b b b b b b b b b

b b

$$\begin{array}{r} 30 \\ + 12 \\ \hline 42 \end{array}$$

$$\begin{array}{r} 42 \\ - 22 \\ \hline 20 \end{array}$$

Friend	Brown Shells	Pink Shells	Total Shells
Nick	30	12	42
Kim	22	20	42

Possible Connections

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

- Each friend always has an even number of shells.
- Nick has a dozen pink shells.
- Kim has 8 more pink shells than Nick.
- Nick has 8 more brown shells than Kim.
- They have a total of 84 shells, 52 brown and 32 pink.
- They have an equal share of shells, but not equal color amounts.
- Relate to a similar task and state a math link.
- Solve more than one way to verify the answer.
- Even + Even = Even