

Adding & Subtracting to 20

AC9M1N04 add and subtract numbers within 20, using physical and virtual materials, part-part-whole knowledge to 10 and a variety of calculation strategies

Learning Intention: use part-part-whole thinking and flexible strategies to add and subtract numbers within 20.

✓ Count on ✓ Count back ✓ Make ten ✓ Use part-part-whole

1. Count On & Back

Start big, count on: $9 + 3$

Whisper 10, 11, 12

Count back to subtract

2. Make Ten

$8 + 5 = 8 + 2 + 3$

Fill the ten first

Then add what's left

3. Part-Part-Whole

Whole = 14

Parts = 6 and 8

Split to help subtract

Watch For

Counting all instead of counting on

Forgetting to start from the larger number

Losing track when crossing ten

Remember

Addition joins parts together.

Subtraction finds a missing part.

Order does not change a sum.

Let's Talk

- Which strategy did you choose and why?
- How can 10 help you add?
- Is $7 + 6$ the same as $6 + 7$?

Materials & Models

- ✓ Ten-frames
- ✓ Counters & cubes
- ✓ Number line to 20
- ✓ Part-part-whole mats

Let's Try Together Add and subtract to 20 together.

$$7 + 6 = 13$$

$$15 - 9 = 6$$

$$8 + \underline{\quad} = 14$$

$$12 - \underline{\quad} = 5$$

$$9 + 8 = \underline{\quad}$$