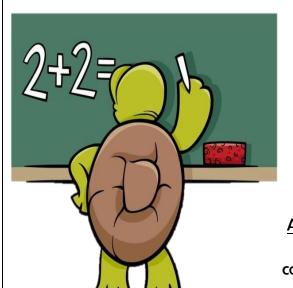
#### Year 3

# ADDITION and SUBTRACTION KNOWLEDGE ORGANISER



#### **Overview**



#### Addition and Subtraction we learn:

- -Add and subtract multiples of 100.
- -Add and subtract 3-digit and 1-digit numbers.
- -Subtract a 1-digit number from a 3-digit number.
- -Add and subtract 3-digit and 2-digit numbers.
- -Add and subtract 100s -Spotting patterns.

Addition and Subtraction is useful learning because it is used in many areas of everyday life - e.g. shopping, cooking, or playing games. It also forms the basis for lots of other maths ideas.

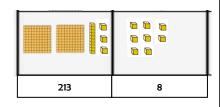
#### 3-digit and 1-digit numbers

Not crossing 10



427 - 4 = 423

Crossing 10

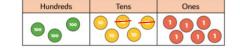


221 - 8 = 213

## 3-digit and 2-digit numbers

**Subtraction Methods** 

#### **Subtracting Tens**



356 - 20 = 336 (5 tens minus 2 tens)

When crossing 10, we can use column addition or count in 10s mentally.

#### **Crossing 10/100**



Use exchanging for answers below zero. Remember to subtract the exchanged value from the next column.

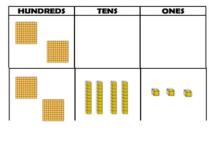
#### 3-digit numbers

#### Not Exchanging



When exchanging/crossing 10/100, we can use column subtraction, as shown below left, but with 3-digit minus 3-digit numbers).

#### Adding 100



443 - 200 = 2

#### **Addition Methods**

3-digit and 1-digit numbers

Not crossing 10

352 + 6 = 358 **Crossing 10** 

232 200 2 200 20 12

224 + 8 = 232

#### 3-digit and 2-digit numbers

#### **Adding Tens**

Hundreds	Tens	Ones
	0 0	

356 + 30 = 386 (5 tens plus 3 tens)

When crossing 10, we can use column addition or count in 10s mentally.

#### **Crossing 10/100**

751

1 1

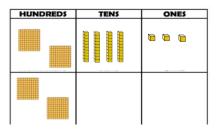
Use exchanging for answers larger than 10. Remember to include this in the next calculation.

# 3-digit numbers



When exchanging/crossing 10/100, we can use column addition, as shown below left, but with 3-digit plus 3-digit numbers).

#### Adding 100 243 + 200 = 443



### Estimate

Being able to estimate using known facts helps us to check that answers are reasonable.

Estimating using near numbers

# Estimate 221 - 78

Near number to 221 = 220

Near number to 78 = 80

220 - 80 = 140

Estimate = 140

## Estimating marked numbers on a number line

Estimate the value of the green line



The student has added the blue lines to break down the hundred further, to give an estimate of 330.

# **Key Vocabulary**

**Estimate** 

Sum

Add

Subtract

Altogether

Difference

Exchange

Column Method

**Number Line** 

**Number Bond** 

Inverse