

# Big Ideas in Number Resource Information

Big Ideas in Number Focus Area: **Partitioning**

Name of Game or Activity:

Partitioning 3 digit numbers, matching cards

Instructions:

## Teacher Instruction

1. Print, cut and laminate each number, addition and equal sign card.
2. Place students into small groups and provide each group with a set of cards.
3. Students work together to match the cards to represent the partitioning of each number, e.g.  $235 = 200 + 30 + 5$ .

Resources:

Print out the matching resource to create a set

## BLIN Micro Content

<b>Objects, quantities and collections can be shared to create equal parts</b>	
<b>There is a relationship between the number of parts and the size and name of the parts and the number of parts increases as the size or share decreases</b>	
<b>Objects, quantities and collections can be repeatedly halved and doubled e.g. use successive splits to show that one half is equivalent to 2 parts in 4, 4 parts in 8 etc.</b>	
<b>An object, quantity or collection can be partitioned into a number of equal portions to show unit fractions so that say one third is more than one fourth etc.</b>	
<b>The relative magnitude of a fraction is dependent on the relationship between the numerator (how many parts) and the denominator (total parts)</b>	
<b>Fractions are renamed as equivalents where the total number of parts (denominator) and required number of parts (numerator) are increased by the same factor</b>	
<b>Fractions with unlike denominators can be compared and ordered</b>	
<b>Common fractions and decimal fractions can be compared, ordered and renamed in conceptual ways</b>	
<b>Construct of fraction as division can be used to produce equal parts (equipartitioning)</b>	

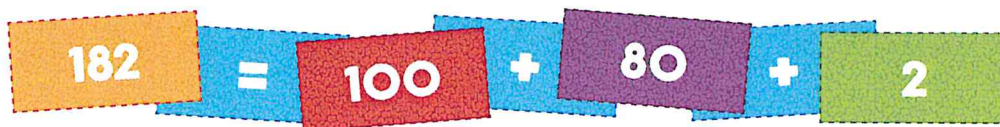
## Big Ideas in Number Resource Information

Fractions are used to describe quotients and operators	
Fractions are used to describe part-whole relations	
Fractions are used to describe simple ratios	
Percentages, fractions and decimals express the relationship between to quantities	
Percentages are special part : whole ratios based on 100	
Any given percentage can be used as a ratio to generate an infinite number of equivalent fractions (e.g. 50% = $\frac{1}{2}$ $\frac{2}{4}$ $\frac{3}{6}$ etc.)	
Multiplicative arrays can be used to represent fractions, decimals and percentages	
Benchmark fractions, decimals and percentages which are the equivalents of one another, can be used to estimate and to solve problems	

# PARTITIONING

## 3 DIGIT NUMBERS

*- Match Up Cards -*



A row of five cards with dashed edges. From left to right: an orange card with '182', a light blue card with '=', a red card with '100', a purple card with '80', and a green card with '2'. Plus signs are on the light blue cards between the orange and red, and between the purple and green cards.

$$182 = 100 + 80 + 2$$

Students match-up the correct partitioning cards for a given number, e.g.  $235 = 200 + 30 + 5$ .

### Teacher Instruction

1. Print, cut and laminate each number, addition and equal sign card.
2. Place students into small groups and provide each group with a set of cards.
3. Students work together to match the cards to represent the partitioning of each number, e.g.  $235 = 200 + 30 + 5$ .



### 3 Digit Cards

182

265

309

417

540

621

734

853

976

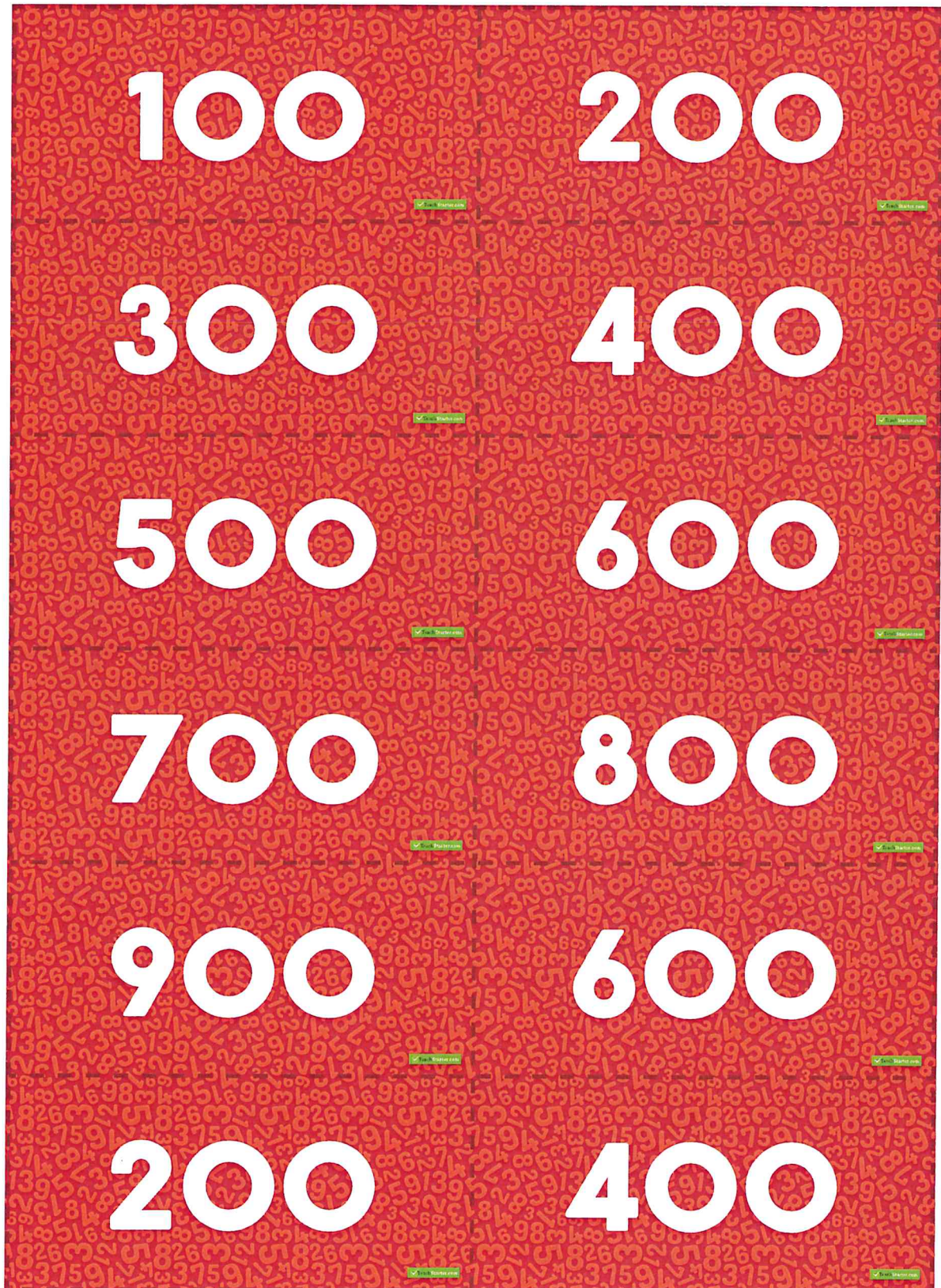
608

290

487

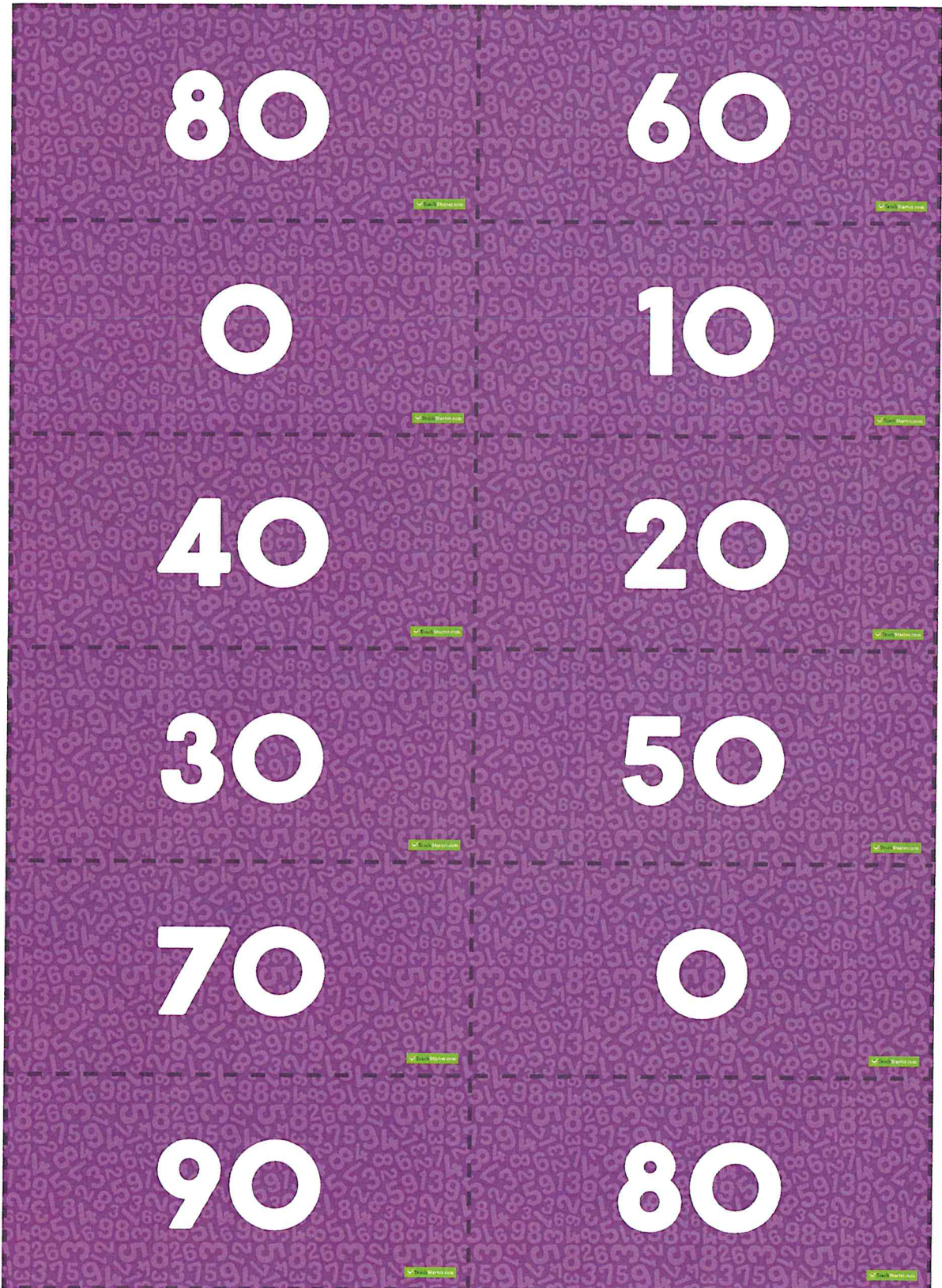


## Hundreds Cards



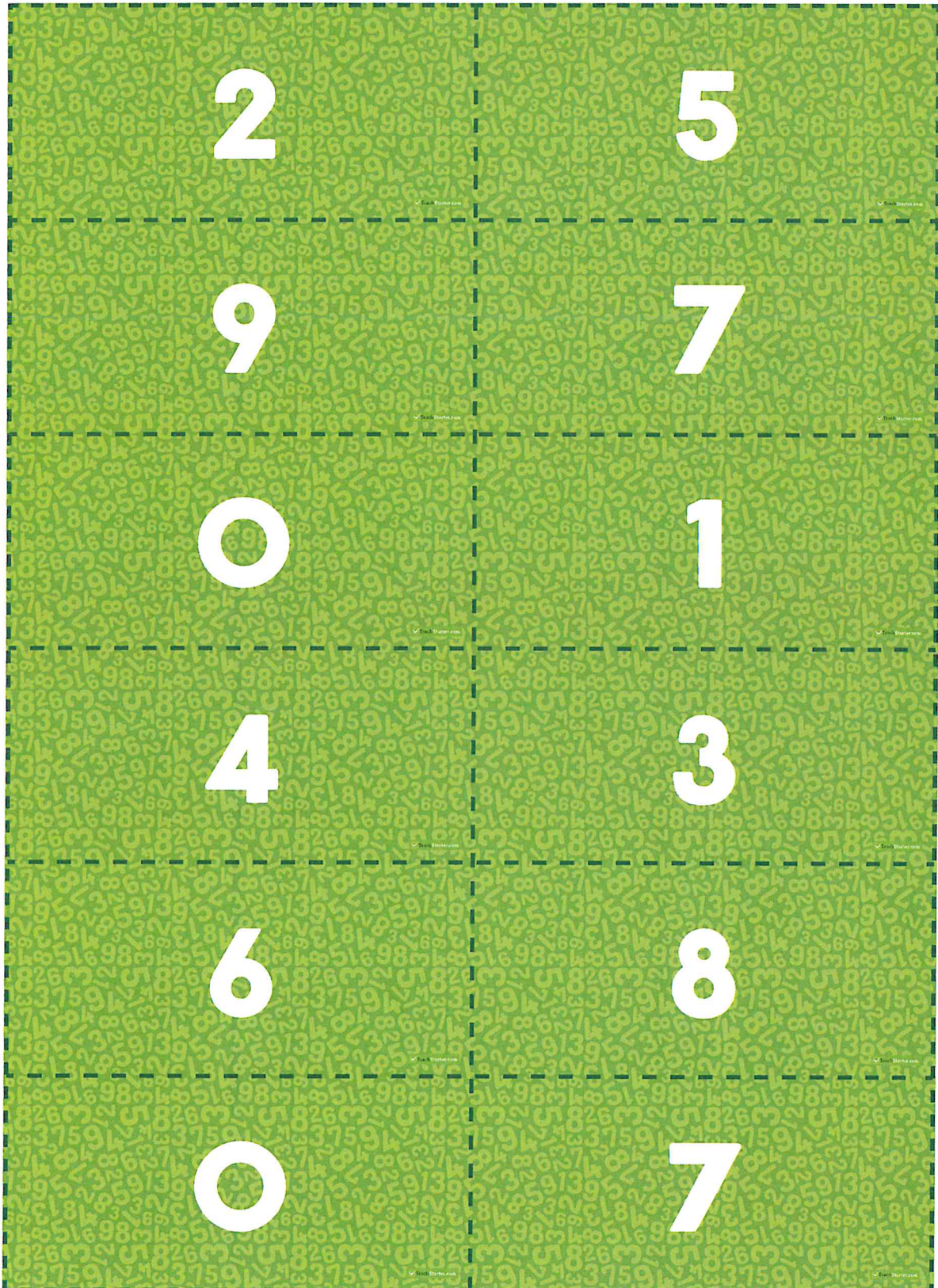


## Tens Cards



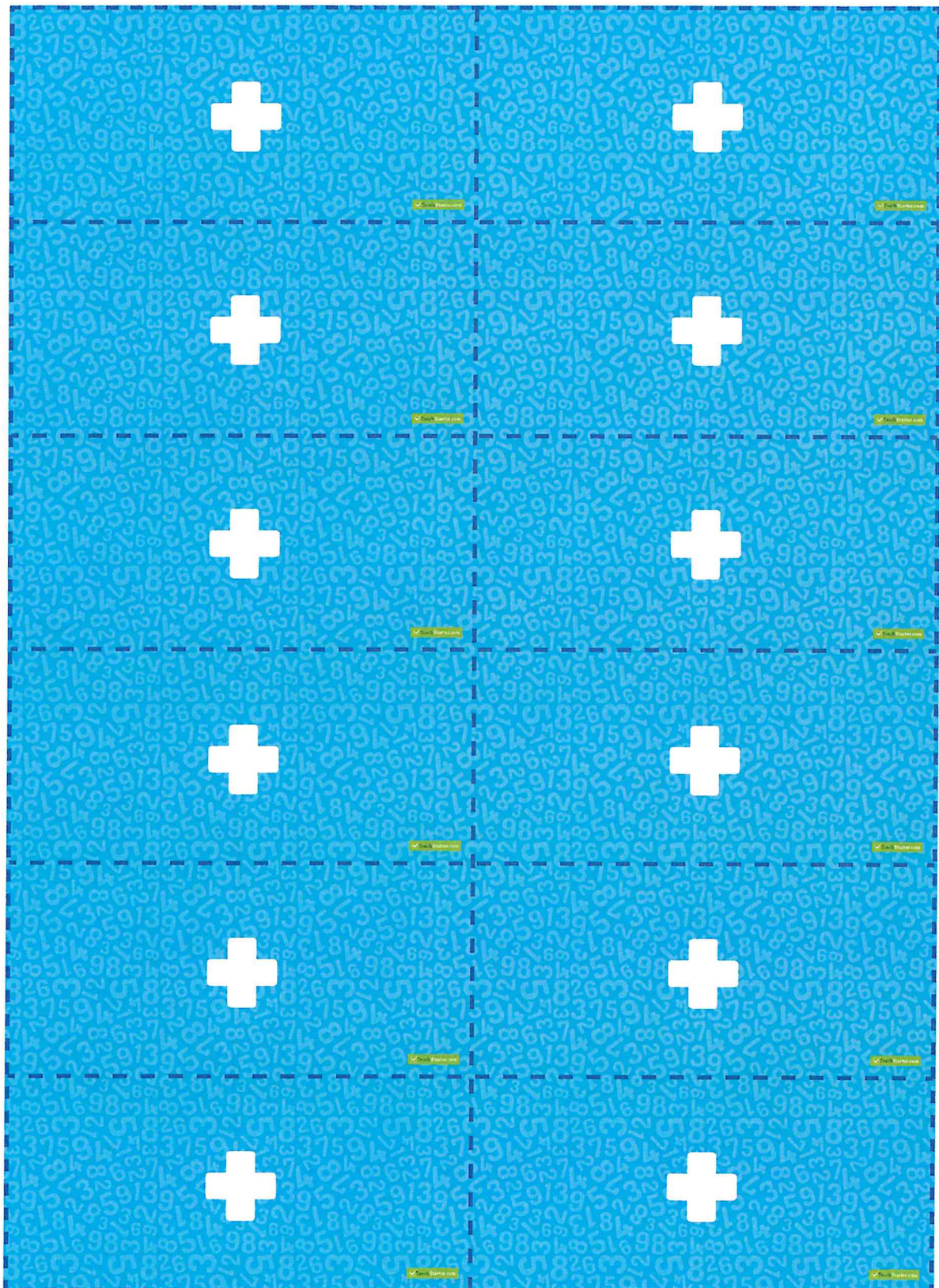


## Ones Cards



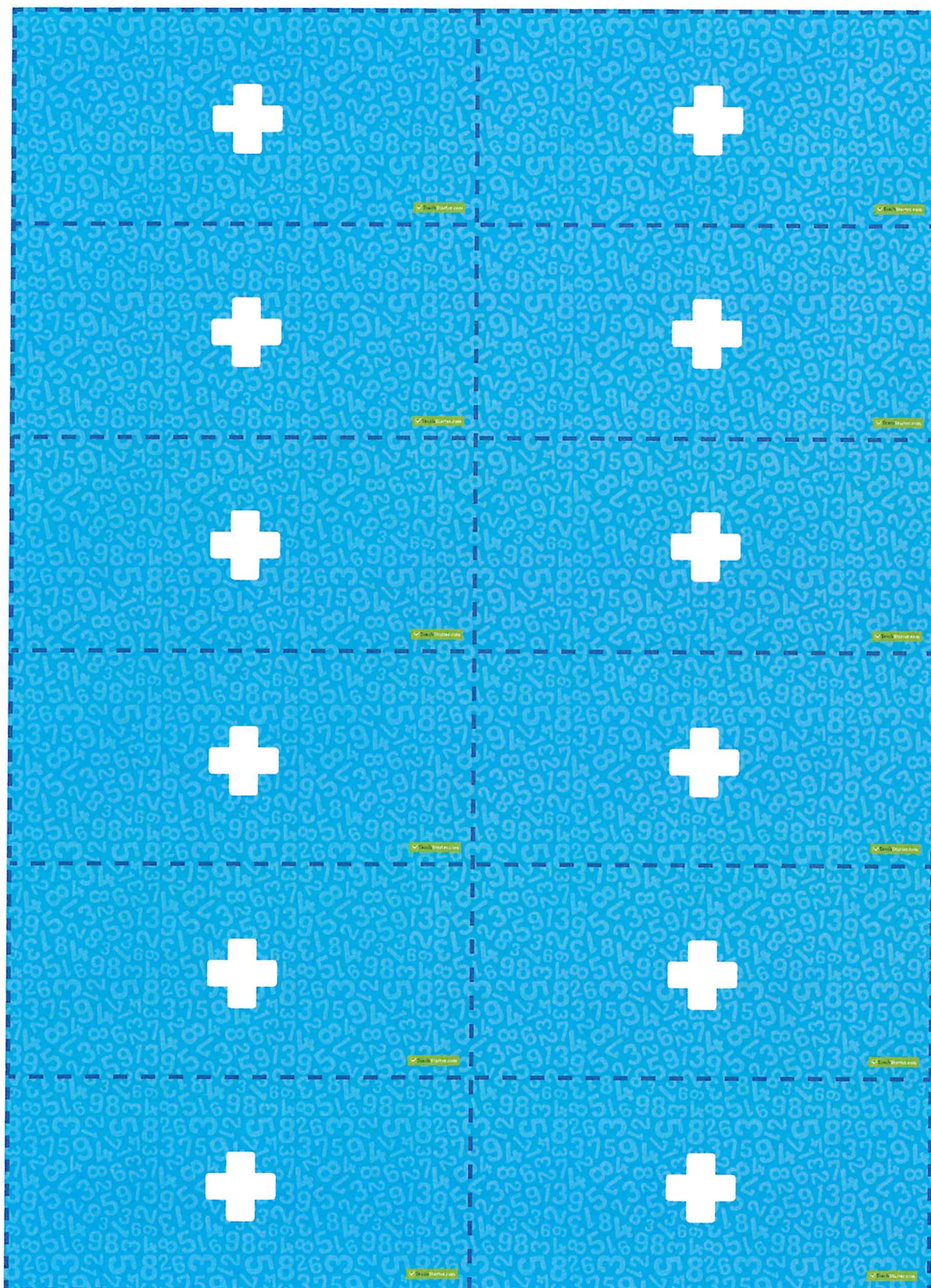


# Addition Cards





# Addition Cards





# Equals Cards

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