# <u>Discussion Problems</u> <u>Step 4: Related Facts</u>

### **National Curriculum Objectives:**

Mathematics Year 2: (2N2a) Read and write numbers to at least 100 in numerals and in words

Mathematics Year 2: (2C1) Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100

Mathematics Year 2: (2C3) Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems

Another matics Year 2: (2N4) Identify represent and estimate numbers using different

Mathematics Year 2: (2N4) <u>Identify, represent and estimate numbers using different</u> representations, including the number line

Mathematics Year 2: (2N6) <u>Use place value and number facts to solve problems</u>

#### About this resource:

This resource has been designed for pupils who understand the concepts within this step. It provides pupils with more opportunities to enhance their reasoning and problem solving skills through more challenging problems. Pupils can work in pairs or small groups to discuss with each other about how best to tackle the problem, as there is often more than one answer or more than one way to work through the problem.

There may be various answers for each problem. Where this is the case, we have provided one example answer to guide discussion.

We recommend self or peer marking using the answer page provided to promote discussion and self-correction.

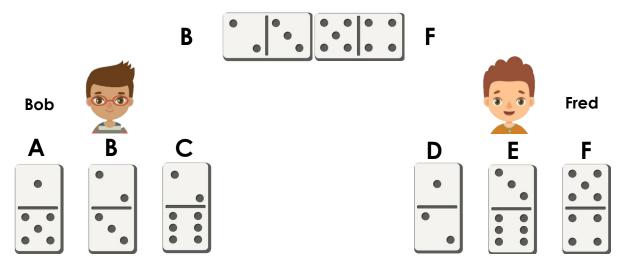
More Year 2 Addition and Subtraction resources.

Did you like this resource? Don't forget to review it on our website.



### **Related Facts**

1. Bob and Fred have 3 dominoes each. They are making number sentences and finding the related number facts by joining their dominoes together. For example, They join 3 to 5 to make the number sentence 3 + 5 = 8, shown below. Their related facts are 30 + 50 = 80 and 33 + 55 = 88.



Investigate which number sentences and related facts they could make using any combinations of the numbers on their dominoes.

2. Faith is creating related facts using some digit cards in the jars to help her.



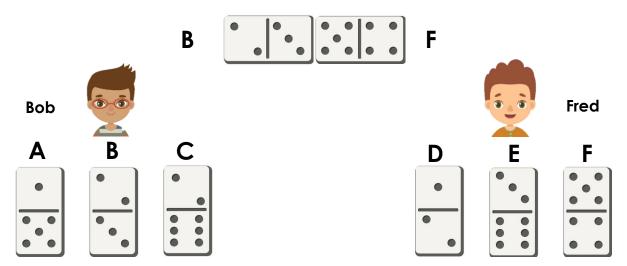
Investigate how many different related facts could be written using any combination of the digit cards from each jar. You can use addition and subtraction.

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## **Related Facts**

1. Bob and Fred have 3 dominoes each. They are making number sentences and finding the related number facts by joining their dominoes together. For example, They join 3 to 5 to make the number sentence 3 + 5 = 8, shown below. Their related facts are 30 + 50 = 80 and 33 + 55 = 88.



Investigate which number sentences and related facts they could make using any combinations of the numbers on their dominoes.

Various answers, for example: 1 + 4 = 5 using dominoes A and F. The related facts would be 10 + 40 = 50 and 11 + 44 = 55.

2. Faith is creating related facts using some digit cards in the jars to help her.



Investigate how many different related facts could be written using any combination of the digit cards from each jar. You can use addition and subtraction.

She could make:

$$8-5=3$$
  $5-3=2$   $3+5=8$   $3+2=5$   
 $8-3=5$   $5-2=3$   $5+3=8$   $2+3=5$   
 $80-30=50$   $50-30=20$   $30+50=80$   $30+20=50$   
 $80-50=30$   $50-20=30$   $50+30=80$   $20+30=50$   
 $88-55=33$   $55-33=22$   $33+55=88$   $33+22=55$   
 $88-33=55$   $55-22=33$   $55+33=88$   $22+33=55$