## Step 1: Fact Families

## National Curriculum Objectives:

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

## Differentiation:

Questions 1, 4 and 7 (Varied Fluency)
Developing Write number sentences to represent the part whole model using the =, + and - signs. Use of one-to-one pictorial representations within 10 to support.
Expected Write number sentences that represent the part whole model using the $=,+$ and - signs. Use of pictorial support within 20.
Greater Depth Write number sentences to represent the part whole model using the =, + and - signs. Use of numbers, words and a variety of representations within 20.

Questions 2, 5 and 8 (Varied Fluency)
Developing Complete statements using a completed bar model to show the relationship between addition and subtraction and the purpose of the =, + and - signs. Use of one-toone pictorial representations within 10 to support.
Expected Complete statements using a completed bar model to show the relationship between addition and subtraction and the purpose of the $=,+$ and - signs within 20. Greater Depth Complete number lines using a completed bar model to show the relationship between addition and subtraction and the purpose of the $=,+$ and - signs within 20.

Questions 3, 6 and 9 (Reasoning and Problem Solving)
Developing Use number cards to complete number sentences and corresponding representations to show the relationship between addition and subtraction. Use of ten frames and part-whole models within 10.
Expected Use number cards to complete number sentences and corresponding representations to show the relationship between addition and subtraction. Use ten frames and part-whole models within 20.
Greater Depth Use number cards to complete number sentences and corresponding representations to show the relationship between addition and subtraction. Use of ten frames and part-whole models within 20 , numbers represented as words.

## More Year 2 Addition and Subtraction resources.

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

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## Fact Families

1. Gabi has 8 pens and pencils. Using +, - and $=$ write the 4 number sentences that

2. Use the bar model to complete the number sentences below. Use the number track to help you.

| 9 |  |
| :---: | :---: |
| 5 | 4 |


| 1 |  | 2 |  | 3 | 4 |  | 5 | 6 |  | 7 |  | 8 | 9 |  | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 4 |  | + | 5 | $=$ | 9 |  |  |  |  | + | 4 | = | 9 |  |
|  | 9 |  | - |  |  | 4 |  |  | 9 |  |  | 4 | = |  |  |

3. Use the cards to complete the fact family number sentences. Complete the partwhole model and ten frame to match your sentences.

$$
4 \sqrt[2]{3} \sqrt[4]{5} \sqrt[6]{7} \sqrt[9]{9}
$$

A.

$=$

B.

 $\square$ $=$ $\square$
C.

D. $6-\square=2$
E.

F.

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |

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4. Frankie has 14 pets. Using +, - and = write the 4 number sentences that show Frankie's pets.

5. Use the bar model to complete the number sentences below.

| 17 |  |
| :---: | :---: |
| 5 | 12 |


6. Use the cards to complete the fact family number sentences. Complete the partwhole model and ten frames to match your sentences.
$\square$ 67
$8 \longdiv { 9 }$
B.
$=16$

D. $16-\square=\square$
E.

F.

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |


|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |


| VF |
| :---: |
| HW/EX |

A. $\square+\square=16$
c. $16-\square$
$=\square$
$1 \longdiv { 2 }$
$=16$

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7. Sacha has 17 tools. Using +, - and = write the 4 number sentences that could show Sacha's tools.

8. Use the bar model to complete the number lines below.

| eighteen |  |
| :--- | :---: |
| three | fifteen |

A.

B.

C.

D.

9. Use the cards to make four fact family number sentences within twenty. Complete the part-whole model and ten frames to match your sentences.
one two three four five six seven eight nine ten
A. $\square+\square=\square$
B.

$=\square$
C.

D.

$\square$
E.

F.

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
|  |  |  |  |  |

$\square$

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## Homework/Extension

## Fact Families

## Developing

1. $5+3=8 ; 3+5=8 ; 8-3=5 ; 8-5=3$
2. $\underline{5}+4=9 ; 9-\underline{5}=4 ; 9-4=\underline{5}$
3. A. $\underline{2}+\underline{4}=6$; B. $\underline{4}+\underline{2}=6$; C. $6-\underline{2}=4$; D. $6-\underline{4}=2$; E. 2 and 4; F. Accept any accurate representation of the number sentences within the ten frame.

## Expected

4. $4+10=14 ; 10+4=14 ; 14-10=4 ; 14-4=10$
5. $12+\underline{5}=17 ; 5+\underline{12}=17 ; \underline{17}-5=\underline{12} ; \underline{17}-12=\underline{5}$
6. Various answers, for example: A. $9+7=16 ;$ B. $7+9=16$; C. $16-7=9$; D. $16-9=7$; E. 9 and 7; F. F. Accept any accurate representation of the number sentences within the ten frames.

## Greater Depth

7. Various answers, for example: $8+9=17 ; 9+8=17 ; 17-8=9 ; 17-9=8$
8. A. jump of 15 labelled; B. jump of 15 labelled, jump of 3 drawn and labelled; C. jump of 3 labelled, jump of 15 drawn and labelled; D. jump of 15 labelled, jump of 3 drawn and labelled.
9. Various answers, for example: A. $6+13=19$; B. $13+6=19$; C. $19-13=6$; D. $19-6=$ 13; E. 6, 13 and 19; F. Accept any accurate representation of the number sentences within the ten frames.

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