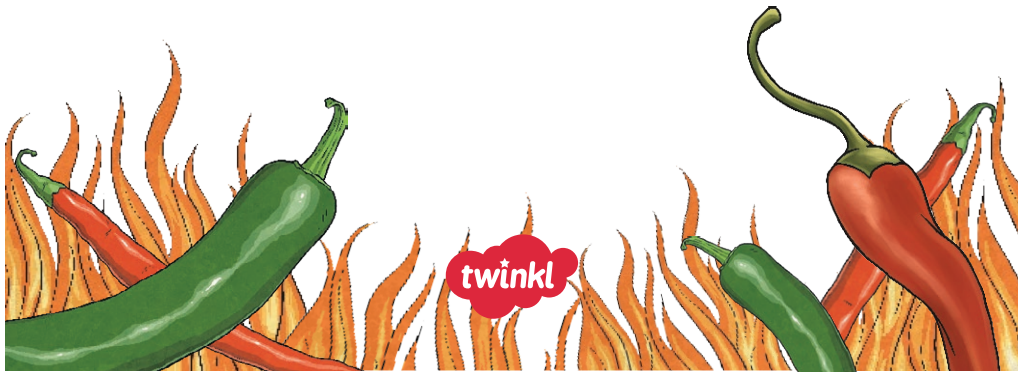


Chilli Challenge

Addition, Subtraction, Multiplication and Division



Addition, Subtraction,
Multiplication and Division

Nice and Spicy! 

Calculating

Use rounding to check answers to calculations

Round these numbers to the nearest 100 to check:
 $7683 - 5847 = 2336$

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Addition, Subtraction,
Multiplication and Division

Nice and Spicy! 

Calculating

Identify multiples and factors, including finding all factor pairs of a numbers less than 20, and common factors of two numbers less than 20

Factor pairs of 14 are $1 \times \square$, $2 \times \square$

Common factors of 6 and 12: $\square$, $\square$, $\square$ and $\square$

twinkl.com

Addition, Subtraction,
Multiplication and Division

Nice and Spicy! 

Calculating

Know and use the vocabulary of prime numbers

Prime numbers have only 1 and itself as factors.

Recall prime numbers up to 19

Prime numbers: 2, $\square$, 5, 7, $\square$, 13, $\square$, 19.

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Calculating

Multiply and divide whole numbers and those involving decimals by 10 and 100

$$234 \times 10 = \boxed{} \quad 341 \div 10 = \boxed{}$$

$$185 \times 100 = \boxed{} \quad 1609 \div 100 = \boxed{}$$

Solve Problems

Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why

One Y5 class has 14 boys and 15 girls. On Tuesday, 25 children are in class. How many children are absent?

Methods

Add and subtract numbers up to 3 digits mentally

$$562 + 240 = \boxed{} \quad 720 - 457 = \boxed{}$$

Methods

Add and subtract whole numbers with more than 3 digits, including using formal written methods (columnar addition and subtraction)

$$\begin{array}{r} 681 \\ + 907 \\ \hline \end{array} \quad \begin{array}{r} 827 \\ - 643 \\ \hline \end{array}$$

Methods

Multiply numbers up to 3 digits by a one-digit number using a formal written method

$$\begin{array}{r} 465 \\ \times 8 \\ \hline \end{array}$$

Methods

Multiply and divide numbers mentally drawing upon known facts

$$485 \times 8 =$$

$$500 \times 8 = 4000, 15 \times 8 = \boxed{}$$

$$485 \times 8 = 4000 - 120 = 3880$$

Methods

Divide numbers up to 3 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context

$$6 \overline{) 282}$$

Calculating

Use rounding to check answers to calculations

Round these numbers to the nearest 100 to check:
 $7683 - 5847 = 2336$

7700 - 5800 = 1900 so 2336 is incorrect

Calculating

Identify multiples and factors, including finding all factor pairs of a numbers less than 20, and common factors of two numbers less than 20

Factor pairs of 14 are 1×14 , 2×7

Common factors of 6 and 12: **1, 2, 3** and **6**

Calculating

Know and use the vocabulary of prime numbers

Prime numbers have only 1 and itself as factors.

Recall prime numbers up to 19

Prime numbers: 2, **3**, 5, 7, **11**, 13, **17**, 19.

Calculating

Multiply and divide whole numbers and those involving decimals by 10 and 100

$$234 \times 10 = 2340$$

$$341 \div 10 = 34.1$$

$$185 \times 100 = 18\,500$$

$$1609 \div 100 = 16.09$$

Solve Problems

Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why

One Y5 class has 14 boys and 15 girls. On Tuesday, 25 children are in class. How many children are absent?

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Methods

Add and subtract numbers up to 3 digits mentally

$$562 + 240 = 802 \quad 720 - 457 = 263$$

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Methods

Add and subtract whole numbers with more than 3 digits, including using formal written methods (columnar addition and subtraction)

$$\begin{array}{r} 681 \\ + 907 \\ \hline 1588 \end{array} \quad \begin{array}{r} 78127 \\ - 643 \\ \hline 184 \end{array}$$

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Methods

Multiply numbers up to 3 digits by a one-digit number using a formal written method

$$\begin{array}{r} 5465 \\ \times 8 \\ \hline 3720 \end{array}$$

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Methods

Multiply and divide numbers mentally drawing upon known facts

$$485 \times 8 =$$

$$500 \times 8 = 4000, 15 \times 8 = 120$$

$$485 \times 8 = 4000 - 120 = 3880$$

Methods

Divide numbers up to 3 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context

$$\begin{array}{r} 47 \\ 6 \overline{) 282} \end{array}$$



Calculating

Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy

Round these numbers to the nearest 100 to check:

$$67\,683 - 28\,347 = 41\,336$$



Calculating

Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers

Factor pairs of 28 are 1×28 , , 4×7

Common factors of 15 and 36:



Calculating

Know and use the vocabulary of prime numbers, prime factors and composite (nonprime) numbers

Prime numbers have only 1 and itself as factors.

Prime factors of $24 = 2 \times 2 \times 2 \times 3$, so 2 and 3.

Composite numbers are numbers that are not prime.

Establish whether a number up to 100 is prime and recall prime numbers up to 19

Is 13 prime?

Prime numbers: 2, , 5, , , 13, , 19.



Calculating

Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

$$234 \times 1000 = \text{ } \quad 341 \div \text{ } = 3.41$$



Solve Problems

Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why

Class A has 13 boys and 15 girls, and Class B has 16 boys and 17 girls. How many more children are in class B than class A?



Methods

Add and subtract numbers mentally with increasingly large numbers

$$3562 + 240 = \boxed{} \quad 4720 - 457 = \boxed{}$$



Methods

Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)

$$\begin{array}{r} 4681 \\ + 2907 \\ \hline \end{array} \quad \begin{array}{r} 3127 \\ - 643 \\ \hline \end{array}$$



Methods

Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers

$$\begin{array}{r} 3614 \\ \times 7 \\ \hline \end{array} \quad \begin{array}{r} 465 \\ \times 28 \\ \hline \\ \hline \end{array}$$



Methods

Multiply and divide numbers mentally drawing upon known facts

$$2485 \times 8 =$$

$$2500 \times 8 = 20\,000, 15 \times 8 = \boxed{}$$

$$2485 \times 8 = 20\,000 - 120 = \boxed{}$$



Methods

Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context

$$6 \overline{) 5382}$$

17 children need to travel by car to a school event. Four children can travel in each car. How many cars are needed?



Calculating

Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy

Round these numbers to the nearest 100 to check:

$$67\,683 - 28\,347 = 41\,336$$

67 700 – 28 300 = 39 400 so 41 336 is incorrect.



Calculating

Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers

Factor pairs of 28 are 1×28 , 2×14 , 4×7

Common factors of 15 and 36: **1 and 3**



Calculating

Know and use the vocabulary of prime numbers, prime factors and composite (nonprime) numbers

Prime numbers have only 1 and itself as factors.

Prime factors of $24 = 2 \times 2 \times 2 \times 3$, so 2 and 3.

Composite numbers are numbers that are not prime.

Establish whether a number up to 100 is prime and recall prime numbers up to 19

Is 13 prime?

Prime numbers: 2, **3**, 5, **7**, **11**, 13, **17**, 19.



Calculating

Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

$$234 \times 1000 = 234\,000 \quad 341 \div 100 = 3.41$$



Solve Problems

Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why

Class A has 13 boys and 15 girls, and Class B has 16 boys and 17 girls. How many more children are in class B than class A?

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Methods

Add and subtract numbers mentally with increasingly large numbers

$$3562 + 240 = 3802 \quad 4720 - 457 = 4263$$



Methods

Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)

$$\begin{array}{r} 4681 \\ + 2907 \\ \hline 7588 \\ 1 \end{array} \quad \begin{array}{r} 23127 \\ - 643 \\ \hline 2484 \end{array}$$



Methods

Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers

$$\begin{array}{r} 3614 \\ \times 7 \\ \hline 25298 \\ 41 \end{array} \quad \begin{array}{r} 465 \\ \times 28 \\ \hline 3720 \\ 9300 \\ \hline 13020 \\ 1 \end{array}$$



Methods

Multiply and divide numbers mentally drawing upon known facts

$$2485 \times 8 =$$

$$2500 \times 8 = 20\,000, 15 \times 8 = 120$$

$$2485 \times 8 = 20\,000 - 120 = 19\,880$$



Methods

Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context

$$\begin{array}{r} 8\,9\,7 \\ 6 \overline{) 5\,3\,8\,2} \end{array}$$

17 children need to travel by car to a school event. Four children can travel in each car. How many cars are needed?

$$17 \div 4 = 4 \text{ r}1, \text{ so } 5 \text{ cars are needed}$$



Calculating

Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy

Round these numbers to check:

$$67\,683 - 28\,347 = 41\,336$$



Calculating

Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers

The factor pairs of 56 are:

Common factors of 24 and 76:



Calculating

Know and use the vocabulary of prime numbers, prime factors and composite (nonprime) numbers

A prime number is a number...

The prime factors of 24 are:

Composite numbers are...



Calculating

Establish whether a number up to 100 is prime and recall prime numbers up to 19

Explain why 13 is a prime number and 14 is not:

Prime numbers to 19 are:



Calculating

Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

Explain the effect of multiplying or dividing by 10, 100 or 1000.



Solve Problems

Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why

Write an addition and subtraction word problem that uses more than two steps.



Methods

Add and subtract numbers mentally with increasingly large numbers

$$3562 + 380 =$$

$$5060 - 438 =$$



Methods

Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)

Explain how to use a formal columnar method to solve these equations:

$$6196 + 3677 =$$

$$7082 - 3439 =$$



Methods

Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers.

Explain how the formal long multiplication method provides the answer.



Methods

Multiply and divide numbers mentally drawing upon known facts

Explain two different mental methods for calculating:

$$2485 \times 8 =$$



Methods

Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context

Explain how the formal written method of division provides the answer. Write two different word problems to explain the two different ways that the remainder can be used.

1. The remainder is not used because it is not a complete set or group.
2. The remainder needs to be used, although the final group or set is incomplete.



Calculating

Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy

Round these numbers to check:

$$67\,683 - 28\,347 = 41\,336$$

$$68\,000 - 28\,000 = 40\,000$$



Calculating

Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers

The factor pairs of 56 are: 1 and 56, 2 and 28, 4 and 14, 7 and 8

Common factors of 24 and 76: 1, 2, 4



Calculating

Know and use the vocabulary of prime numbers, prime factors and composite (nonprime) numbers

A prime number is a number which has only itself and 1 as factors.

The prime factors of 24 are: $2 \times 2 \times 2 \times 3$ so 2 and 3

Composite numbers are numbers that are not prime.



Calculating

Establish whether a number up to 100 is prime and recall prime numbers up to 19

Explain why 13 is a prime number and 14 is not: 3 is a prime number because it only has two factors, 1 and 13. 14 is not a prime number because it has more than two factors, 1, 2, 7 and 14.

Prime numbers to 19 are: 2, 3, 5, 7, 11, 13 and 17



Calculating

Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

Explain the effect of multiplying or dividing by 10, 100 or 1000.

Numbers move 1, 2 or 3 places left (multiplying) or right (dividing) and become 10, 100 or 1000 x larger/smaller.



Solve Problems

Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why

Write an addition and subtraction word problem that uses more than two steps.

For example: Class A has 13 boys and 15 girls and class B has 16 boys and 17 girls. How many more children are in class B than class A?



Methods

Add and subtract numbers mentally with increasingly large numbers

$$3562 + 380 = 3942$$

$$5060 - 438 = 4622$$



Methods

Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)

Explain how to use a formal columnar method to solve these equations:

$$6196 + 3677 =$$

$$7082 - 3439 =$$

Children explain to one another/teacher according to method taught in class.



Methods

Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers.

Explain how the formal long multiplication method provides the answer.

Children explain to one another/teacher according to method taught in class.



Methods

Multiply and divide numbers mentally drawing upon known facts

Explain two different mental methods for calculating:

$$2500 \times 8 = 20\,000, 15 \times 8 = 120$$

$$2485 \times 8 = 20\,000 - 120 = 19\,880$$

$$2000 \times 8 = 16\,000, 400 \times 8 = 3200, 80 \times 8 = 640, 5 \times 8 = 40$$

$$2485 \times 8 = 16\,000 + 3200 + 640 + 40 = 19\,880$$



Methods

Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context

Explain how the formal written method of division provides the answer. Write two different word problems to explain the two different ways that the remainder can be used.

1. The remainder is not used because it is not a complete set or group.
2. The remainder needs to be used, although the final group or set is incomplete.

Children explain to one another/teacher according to method taught in class.