THIRD SPACE LEARNING

Sentence Stems

Addition and Subtraction

Years 1-6

Sentence Stems in a Nutshell

A sentence stem provides pupils with a way to communicate their ideas with mathematical precision and clarity. A sentence stem is a very structured sentence that often expresses a key conceptual idea or generalisation. The structure of a sentence stem provides a framework to embed conceptual knowledge and build understanding.

To use sentence stems in lessons, first introduce the sentence stem and explain how and when to use it. It is very important that the pupils understand the sentence stem otherwise it will not embed their learning. After this, the teacher should model the sentence stem and the pupils chant it back. Encourage repetition of the sentence stem throughout the lesson or lessons to come.

Sentence stems can be a whole sentence, for example:

A half is one of two equal parts.

Or with missing parts to be filled, for example:

A (fraction) is (numerator) out of (denominator) parts.

Where there is a missing part, we have given an example of a completed sentence as shown below.

There are (number/ items). Half of (whole) is (half).

- *There are 8 counters. Half of 8 is 4.*

By providing the pupils with a structure to follow, they will have an accurate way to discuss the given topic. By using repetition, the concepts expressed in the sentence stems will become embedded.

THIRD SPACE LEARNING

Sentence Stems

Adding/ Subtracting General

Adding one gives one more.

Subtracting one gives one less.

When zero is added to a number, the number does not change

When zero is subtracted from a number, the number does not change.

When adding numbers, the total will be the same whichever pair we add first. (commutative law)

Adding

The whole is (number). One part is (number), so the other part must be (number). **OR** (number) is the whole, (number) is a part, (number) is a part.

- *The whole is 10. One part is 4, so the other part must be 6.* **OR** *10 is the whole, 4 is a part, 6 is a part.*

First there were (number/ item). Then there were (number/ item) added. Now there are (number/ item).

- *First there were 6 apples. Then there were 3 apples added. Now there are 9 apples.*

There are (number/ item) and (number/ item). We can write this a (number) plus (number).

- *There are 5 cars and 5 trains. We can write this as 5 plus 5.*

(number) is equal to (number) plus (number). **OR** (number) plus (number) is equal to (number).

- *6 is equal to 2 plus 4.* **OR** *2 plus 4 is equal to 6.*

There are (number/ item). There are (number/ item). There are (number/ item/ description) altogether.

- *There are 5 red cards. There are 3 black cards. There are 8 cards altogether.*

Vocabulary

. . . .

Add	Left (left over)
Addition	Fewer
Sum	Difference
Total	Minus
Altogether	Equals
How many more…	The same as
How much more…	Addend
Subtract	
Take away	

THIRD SPACE LEARNING

Sentence Stems continued

Ten plus (number) is equal to (number).

- *Ten plus 5 is equal to 15.*

(number) and (number) are the addends. (number) is the sum.

- *4 and 2 are the addends. 6 is the sum.*

If the order of the addends is changed, the sum remains the same.

NOTE: Not all schools will introduce technical mathematical language of addend in Year 1.

Subtracting

(number) is equal to (number) subtract (number). **OR** (number) subtract (number) is equal to (number).

- *6 is equal to 8 subtract 2.*
  OR *8 subtract 2 is equal to 6.*

The difference between (number) and (number) is (number).

- *The difference between 10 and 7 is 3.*

There are (number/ item) and (number/ item) are taken away. We can write this as (number) subtract (number).

- *There are 7 cars and 5 cars are taken away. We can write this as 7 subtract 5.*

Number Bonds

(number) plus (number) is equal to ten.

- *7 plus 3 is equal to ten.*

Year 2 | Addition and Subtraction

Sentence Stems

Adding/ Subtracting General

When adding numbers, we can add them in any order. (Commutative law – this can be applied to 2 or more addends.)

(number) plus (number) is equal to (number) so (number) plus (number) is equal to (number).

- *There are two ways to use this: 7 plus 3 is equal to 10 so 7 plus 4 is equal to 11.* **OR** *7 plus 3 is equal to 10 so 17 plus 3 is equal to 20.*

(number) minus (number) is equal to (number) so (number) minus (number) is equal to (number).

- *There are two ways to use this: 10 minus 7 is equal to 3 so 11 minus 7 is equal to 4.* **OR** *10 minus 7 is equal to 3 so 20 minus 7 is equal to 13.*

The value on both sides of the equals symbol must be the same.

The more we subtract, the less we are left with.

The less we subtract, the more we are left with.

Adding/ Subtracting 10

When adding 10, the tens digit changes, the ones digit stays the same.

When subtracting 10, the tens digit changes, the ones digit stays the same.

If (number) plus (number) is equal to (number), then (number) tens plus (number) tens is equal to (number) tens.

- *If 3 plus 2 is equal to 5, then 3 tens plus 2 tens is equal to 5 ten.*

This is (number). Ten more than (number) is (number). (number) is ten more than (number).

- *This is 5. Ten more than 5 is 15. 15 is ten more than 5.*

If (number) minus (number) is equal to (number), then (number) tens minus (number) tens is equal to (number) tens.

- *If 3 minus 2 is equal to 1, then 3 tens minus 2 tens is equal to 1 ten.*

This is (number). Ten less than (number) is (number). (number) is ten less than (number).

- *This is 15. Ten less than 15 is 5. 5 is ten less than 15.*

Vocabulary

Commutative
Crossing the (tens) boundary or bridging

Exchange
Regrouping

THIRD SPACE LEARNING

Sentence Stems continued

Partitioning

(First number) can be partitioned
into (number) tens and (number) ones.
(Second number) can be partitioned
into (number) tens and (number) ones.
(number) tens + (number) tens = (number)
tens.
(number) ones + (number) ones = (number)
ones
(number) tens + (number) ones = (number)

- *For 23 + 21.*
  *23 can be partitioned into 2 ten
  and 3 one.*
  *21 can be partitioned into 2 tens
  and 1 one.*
  2 tens + 2 tens = 4 tens
  3 ones + 1 one = 4 ones
  4 tens + 4 ones = 44

To subtract (number), first subtract (number)
then subtract (number).

- *To subtract 6, first subtract 5 then subtract
  1.* **OR** *To subtract 13, first subtract 3 then
  subtract 10.*

Sentence Stems

Adding/ Subtracting General

Addend plus addend equals the sum.

Minuend minus subtrahend is equal to the difference.

When using column addition/ subtraction, start with the right most column.

Adding

(number) one(s) add (number) one(s) is equal to (number) one(s). (number) ten(s) add (number) ten(s) is equal to (number) ten(s).

- *For 35 + 23. 5 ones add 3 ones is equal to 8 ones. 3 tens add 2 tens is equal to 5 tens.*

When adding, if the (ones/ tens/ hundreds) is equal to (10/ 100/ 1,000 etc), we must regroup to the column on the left.

Subtracting

(number) one(s) subtract (number) one(s) is equal to (number) one(s). (number) ten(s) subtract (number) ten(s) is equal to (number) ten(s).

- *For 35 - 23. 5 ones subtract 3 ones is equal to 2 ones. 3 tens subtract 2 tens is equal to 1 ten.*

If we cannot subtract, we must exchange from the column to the left.

Vocabulary

. . . .

Addend	Difference
Sum	Exchange
Minuend	
Subtrahend	

THIRD SPACE
LEARNING

Year 4 | Addition and Subtraction

Sentence Stems

Order of Addition/ Subtraction

For calculations involving both addition and subtraction, we can add then subtract or subtract then add. The final answer will be the same.

Vocabulary

. . . .

Inverse

Year 5 | Addition and Subtraction

Sentence Stems

Addition/ Subtraction General

If one addend is increased by an amount and the other addend is decreased by the same amount, the sum remains the same.

If one addend is changed by an amount and the other addend is kept the same, the sum changes by that amount.

If you have increased or decreased the minuend and subtrahend by the same amount, the difference stays the same.

Addition and Multiplication

When a whole is split into equal parts, it can be both an additive and a multiplicative number sentence.

Missing Number Calculations

For a question where the whole is split into three parts and two of the values are known. The sum of the two known parts plus the missing part is equal to the whole.

For a question where the whole is split into three parts and two of the values are known. The whole minus the two known parts is equal to the missing parts.

Estimation to Check Answers

(First number) rounds to (number). (Second number) rounds to (number). When (adding/ subtracting) (first number) to/from (second number) the answer will be approximately (number).

- *3,981, rounds to 4,000. 8,231 rounds to 8,000. When adding 3,981 to 8,231, the answer will be approximately 12,000.*

Vocabulary

• •

Additive
Estimation
Approximate

THIRD SPACE LEARNING

Year 6 | Addition and Subtraction

6

Estimation

When estimating you find an approximate answer.

Vocabulary

See previous vocabulary