

Specialist 1-to-1 maths interventions and curriculum resources

Sentence Stems

Measure



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.





Sentence Stems

Year

Length and Height

The (item) is (longer/taller/shorter) than the (item).

• The blue pencil is longer than the red pencil.

The (item) is (number) cubes long.

• The pencil is 5 cubes long.

The (item) is (number) cm.

• The pencil is 7cm.

Weight and Volume

The (item) is (heavier than/ lighter than/ equal to) the (item).

• The cat is heavier than the book.

The (item) weighs the same as (number) (non-standard unit of measure).

• The ball weighs the same as 8 cubes.

This (container) is (empty/ almost empty/ almost full/ full).

• This cup is empty.

This (container) has (more than/ less than) this (container).

• This cup has more than this cup.

If (number/ container) fill one (container), then (number/ container) will fill two (containers). • If 3 cups fill one bucket, then 6 cups will fill two buckets.

Vocabulary

Length Height Taller Shorter Longer Non-standard unit cm Centimetre(s) Ruler Heavier Lighter Full Empty Almost full Almost empty More Less Before After Morning Afternoon Evening First

Next Finally Days of the week Months of the year O'clock Half past Seconds Minutes Hours Faster Slower Earlier Later Money Coin Note Penny/ pence Pound Price/ cost Spend/ spent Buy/cost Pay Total



Year | Measure



Sentence Stems continued

Time

(activity) happens before/after (activity).

- Getting dressed happens before school.
- Today is (day), yesterday was (day).
- Today is Tuesday, yesterday was Monday.

Yesterday was (day), today is (day).

• Yesterday was Friday, today is Saturday.

Today is (day), tomorrow is (day).

• Today is Monday, tomorrow is Tuesday.

Tomorrow is (day), today is (day).

 Tomorrow is Wednesday, today is Tuesday.

My birthday is in (month).

My birthday is in June.

The time is (number) o'clock.

The time is 6 o'clock.

The time is half past (number).

• The time is half past 6.

(activity) is about (number) (seconds/ minutes/ hours) long.

Lunch time is about 1 hour long.

(item/ person/ time) is (faster/ slower/ earlier/ later) than (item/ person/ time).

• Sarah is faster than Peter.

Money

This is a (coin name). It is the same as (number of one pence coins).

• This is a 10p coin. It is the same as 10 one pence coins.

(number of coins/ coins) are equivalent to (total).

- Five 1ps are equivalent to 5p.
- Two £5 notes are equivalent to £10.

I can count 2ps in 2s.

I can count 5ps in 5s.

I can count 10ps in 10s.



Sentence Stems

Year

Length and Height

Line up the item with 0 on the ruler.

One metre is longer than one centimetre.

1 metre is the same as 100 centimetres.

Mass

The (item) weighs (more than/less than/equal to) the (item) but/and (more than/less than/equal to) the (item).

• The book weighs more than the pencil but less than the bag.

The (item) weighs (number) grams (or g).

• The apple weighs 20g.

The (item) weighs (number) kilograms (or kg).

• The bag weighs 2kg.

The (item) weighs (number)kg/g more than (item).

• The box weighs 5g more than the bag.

Volume and Capacity

The capacity is the amount a container can hold.

The (container)'s capacity is (number)ml or l.

• The cup's capacity is 20ml.

The volume is the amount of liquid the container is actually holding.

There are (number)ml/ l of (liquid).

• There are 50ml of water.

Vocabulary

Metre Longer Longest Shorter Shortest Mass Grams Kilograms Millilitres (ml) Litres (l) Temperature Degrees Celsius (°C) Increase Decrease Colder Warmer Past

To Quarter to Quarter past Duration Change Buy/ bought Sell/ sold Compare Comparison More/ less More than Less than Greater than Less than Greatest/ least





Sentence Stems continued

Temperature

Year

The temperate is (number)^oC.

• The temperature is 15°C.

The (room/ item) is (warmer/ colder) than the (room/ item).

• The bedroom is hotter than the kitchen.

The difference between the temperature in the (room/ item) and the (room/ item) is (number) degrees Celsius.

• The difference between the temperature in the classroom and the playground is 5 degrees Celsius.

Time

The time is (quarter past/ to) (hour).

• The time is quarter past 9.

The time is (minutes) (past/to) (hour).

• The time is 5 minutes past 9.

There are 24 hours in a day.

There are 60 minutes in an hour.

Money

I can count £1 coins in 1s.

I can count £5 notes in 5s.

I can count £10 notes in 10s.

I can count £20 notes in 20s.

(number/ coins) = (total)

• Three 10p coins = 30p

(number/ coins or notes) + (number/ coins or notes) = (total pounds) (total pence)

- Three 10p coins + two 2p coins = 34p
- Two £5 notes + 2p = £5 and 2p

I can make (total) using (number/ coins).

• I can make 20p using two 10ps.

(total) is more than/less than (total).

(total) is greater than/less than (total).

• £2 and 50p is more than/greater than 50p

The change is how much is left after spending money.

(total coins/ notes) – (total) = (change)

• 50p – 20p = 30p



Sentence Stems

Year

Length Converting (cm and m)

Note that pupils will not be introduced to decimals at this point.

Centi- as a prefix means hundred.

To convert from metres to centimetres, multiply by 100.

To convert from centimetres to metres, divide by 100.

When multiplying by 100, the digits move two places to the left.

When dividing by 100, the digits move two places to the right.

If my number is not a multiple of 100, I need to partition it.

Converting (mm and cm)

Milli- as a prefix means thousand.

To convert from centimetres to millimetres, multiply by 10.

To convert from millimetres to centimetres, divide by 10.

When multiplying by 10, the digits move one place to the left.

When dividing by 10, the digits move one place to the right.

If my number is not a multiple of 10, I need to partition it.

Perimeter

The perimeter is the distance around a 2-D shape.

(number) (unit of measure) + (number) (unit of measure) + ... (etc) = (number) (unit of measure)

• 5cm + 5cm + 5cm + 5cm = 20cm

Mass

I estimate this (item) has a mass of (number/ unit of measure).

• I estimate this book has a mass of 20g.

The (item) weighs (number)kg and (number)g.

• The box weighs 1kg and 500g.

Vocabulary

Millimetre(s) Perimeter Estimate Leap year

School/ work week a.m. p.m. 24-hour





Sentence Stems continued

Capacity

Year

The scale increases in increments of (number/ unit).

• The scale increases in increments of 10ml.

The capacity of the container is (number/ unit). The volume of the liquid is (number/ unit).

• The capacity of the container is 1l. The volume of the liquid is 300ml.

The volume/ capacity is (number)l and (number)ml.

• The volume is 2l and 720ml

Time

There are 365 in a year.

There are 366 days in a leap year.

There are 12 months in a year.

There are 7 days in a week.

There are 5 days in a school/ work week.

(12-hour time) is the same as (24-hour time).

• 7 o'clock in the morning is the same as 07:00. OR 7 a.m. is the same as 07:00.

There are 60 seconds in a minute.

Money

(list of coins) make a total of (total).

• 50p and 20p and 10p make a total of 80p

(pence) is equal to (pounds and pence).

• 125p is equal to £1 and 25p

(pounds and pence) + (pounds and pence) = (total)

• £5 and 20p + £2 and 30p = £7 and 50p



Sentence Stems

Year

Length Converting (km and m)

Kilo- as a prefix means thousand.

To convert from kilometres to metres, multiply by 1,000.

To convert from metres to kilometres, divide by 1,000.

When multiplying by 1,000, the digits move three places to the left.

When dividing by 1,000, the digits move three places to the right.

Area

The area is the size of the surface of a 2-D shape.

There are (number) squares in each row. There are (number) rows. (number) rows of (number) squares = (number) squares. The area is (number) squares.

 There are 2 squares in each row.
There are 3 rows. 3 rows of 2 squares = 6 squares. The area is 6 squares.

Time

(month) has (number of days) days.

• January has 31 days.

The time is (minutes, to/past, hour). We can also write this as (12 hour or 24 hour digital time). • The time is 25 minutes past 3. We can also write this as 3:25 p.m.

Money

There is (number) pounds. There is (number) pence. This is a total of (pounds) and (pence). This is the same as (pounds and pence total).

 There is 2 pounds. There is 35 pence. This is a total of £2 and 35p. This is the same as £2.35

(pounds and pence) is equivalent to (pounds).

• £2 and 35p is equivalent to £2.35

(total) is (roughly estimated answer).

• £2.35 is roughly £2.00 (or £2.50)

Vocabulary

Kilometre Convert Equivalent Kilo- (prefix) Right angle Rectilinear shape Area

Digital Analogue Estimate Rounded Approximate Approximately





Sentence Stems

Year

Area

For rectangles, the area of a shape is calculated by multiplying the length by the width.

Area is measured in units squared or unit².

Metric Measures

Metric units of measure use the base language of 'metre', 'litre' and 'gram'.

Converting units

There are (number) grams in (number) kilograms.

There are (number) metres in (number) kilometres.

• There are 1,000 grams in 1 kilogram.

To convert from (unit of measure) to (unit of measure), (multiply/ divide) by (number).

• To convert from metres to millimetres, multiply by 1,000.

Converting Imperial and Metric

1 inch is approximately 2.5cm. 1 inch ≈ 2.5cm

1 kilogram is approximately 2 pounds. 1kg ≈ 2lbs There are 568 millilitres in a pint. 568ml = 1 pint.

Converting Units of Time

- 1 year = 12 months
- 1 year = 365(.25) days
- 1 week = 7 days
- 1 day = 24 hours
- 1 hour = 60 minutes
- 1 minute = 60 seconds

Volume

Volume is the amount of solid space a 3-D object takes up.

Volume is measured in units cubed or unit³.

Vocabulary

Kilograms Milligrams Millilitres Metric Imperial Timetable

For more resources and intervention support go to thirdspacelearning.com

Year | Measure



Sentence Stems

Converting Imperial and Metric

5 miles is approximately 8 kilometres. 5 miles ≈ 8km

Imperial

1 foot is 12 inches. 1 foot = 12 inches

- 1 pound is 16 ounces. 1lb = 16oz
- 1 stone is 14 pounds. 1 stone = 14lbs
- 1 gallon is 8 pints. 1 gallon = 8 pints

Area

Area of a triangle = base x height ÷ 2 Area of a parallelogram = base x perpendicular height

Volume

Volume of a cuboid = length x width x height

Vocabulary

| Miles | Stone |
|--------|--------|
| Foot | Gallon |
| Pound | Pint |
| Ounces | |

