

Specialist 1-to-1 maths interventions and curriculum resources

# Sentence Stems

## Measure

**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.



## Measure

1



## **Sentence Stems**

#### **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 Next Height Finally

Taller Days of the week
Shorter Months of the year

O'clock

Longer Non-standard unit

Non-standard unit Half past cm Seconds Centimetre(s) Minutes Heavier Faster

Heavier Faster
Lighter Slower
Full Earlier
Empty Later
Almost full Money
Almost empty Coin
More Note

Less Penny/ pence

Before Pound
After Price/ cost
Morning Spend/ spent
Afternoon Buy/ cost

Evening Pay First Total



## Measure

1



## **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.

## Measure

2



## **Sentence Stems**

#### **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

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

To



## Measure

## 2



## **Sentence Stems continued**

#### **Temperature**

The temperate is (number)<sup>o</sup>C.

• 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 £2 coins in 2s.

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

## Measure

3



## **Sentence Stems**

## 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) School/ work week

Perimeter a.m.
Estimate p.m.
Leap year 24-hour



## Measure

3



## **Sentence Stems continued**

#### **Capacity**

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

## Measure

4



## **Sentence Stems**

## 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



## Measure

## 5



## **Sentence Stems**

#### **Area**

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

Area is measured in units squared or unit<sup>2</sup>.

#### **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 unit<sup>3</sup>.

## **Vocabulary**

Kilograms Milligrams Millilitres

Metric

Imperial Timetable

## Measure

6



## **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

