# **Brackenwood**Junior School





#### Aims for the session

- Familiarisation of maths intent and how we teach maths
- >Calculation policy
- > Importance of reasoning
- >Practice some arithmetic skills
- >Meet staff and have fun with your child!





There's lots of detail on maths on our website...

https://www.brackenwood-junior.wirral.sch.uk/web/maths/600706



#### Maths Intent

At Brackenwood Juniors, we follow the Powermaths Scheme. We adapt it to the needs of our children through questioning, support and challenge tasks. Individual year group's long term plans can be found on our website.

#### Maths implementation

At Brackenwood Juniors, our curriculum is designed to ensure that all children have the opportunity to reach the expected standard (and beyond) at the end of Year 6. We use the Powermaths scheme and supplement it with support materials and NCETM challenge activities to ensure our curriculum is challenging but accessible for all. Daily practice of arithmetic and planned lesson starters ensure fluency is addressed. Times tables are taught once a week along with a expectation of using TT Rock Stars at home. Knowledge retrieval is key to long term understanding. Therefore, maths lessons start with a 'power up', which reinforces previous lessons. During our mathematics lessons, all children are taught how to use various representations to show their thinking. Talking and explaining, using technical mathematical language, is key to success. This can be seen through the use of sentence stems and working walls

# Calculation policy

Year 6			
	Concrete	Pictorial	Abstract
Year 6 Addition			
Comparing and selecting efficient methods	Represent 7-digit numbers on a place value grid, and use this to support thinking and mental methods.	Discuss similarities and differences between methods, and choose efficient methods based on the specific calculation. Compare written and mental methods alongside place value representations.	Use column addition where mental methods are not efficient. Recognise common errors with column addition. $32,145+4,302=?$ $\frac{TTh\ Th\ H\ T\ O}{3\ 2\ I\ 4\ 5} \qquad \frac{TTh\ Th\ H\ T\ O}{3\ 2\ I\ 4\ 5} + \frac{4\ 3\ 0\ 2}{7\ 5\ I\ 6\ 5}$ $\frac{H\ T\ O\ Tth\ Hth}{1\ 4\ 0\ 0\ 0\ q}$ $\frac{H\ T\ O\ Tth\ Hth}{1\ 4\ 0\ 0\ q}$ $\frac{H\ T\ O\ Tth\ Hth}{1\ 4\ 0\ 0\ q}$

This is a large document. Here is an example. You can find the full policy on our website.



## The importance of reasoning

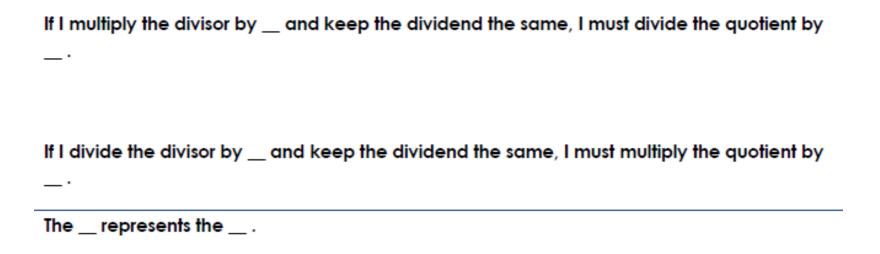
The ability to reason has a fundamental impact on one's ability to learn from new information and experiences because reasoning skills determine how people comprehend, evaluate, and accept claims and arguments.

Reasoning and sense making are critical in mathematics learning because students who genuinely make sense of mathematical ideas can apply them in problem solving and unfamiliar situations and can use them as a foundation for future learning.





# Examples of mathematical language in sentence stems to support reasoning and mathematical knowledge



The dividend is \_\_.

The divisor is \_\_ because \_\_\_\_\_.

The mean is \_\_ ÷ \_\_ = \_\_.





```
26,981 + 17,982 =
```

```
1.53,148 + 16,855 =
```

$$2.48,922 + 36,558 =$$

$$3.78,556 + 35,825 =$$



```
26,981 + 17,982 = 44,963
```

```
1.53,148 + 16,855 = 70,003
```

```
2.48,922 + 36,558 = 85,480
```

$$3.78,556 + 35,825 = 114,381$$



```
35,725 - 17,829 =
```

```
1.72,522 - 16,825 =
```

$$2.58,486 - 35,294 =$$

$$3.90,205 - 48,655 =$$



```
35,725 - 17,829 = 17,896
```

```
1.72,522 - 16,825 = 55,697
```

$$2.58,486 - 35,294 = 23,192$$

$$3.90,205 - 48,655 = 41,550$$



```
236 \times 15 =
```

- $1.354 \times 15 =$
- $2.522 \times 16 =$
- $3.688 \times 24 =$



```
236 \times 15 = 3,540
```

```
1.354 x 15 = 5,310
```

$$2.522 \times 16 = 8,352$$

$$3.688 \times 24 = 16,512$$



```
308 \div 11 =
```

```
1.352 \div 11 =
```

$$2.517 \div 11 =$$

$$3.636 \div 12 =$$



```
308 \div 11 = 28
```

```
1.352 \div 11 = 32
```

$$2.517 \div 11 = 47$$

$$3.636 \div 12 = 53$$

