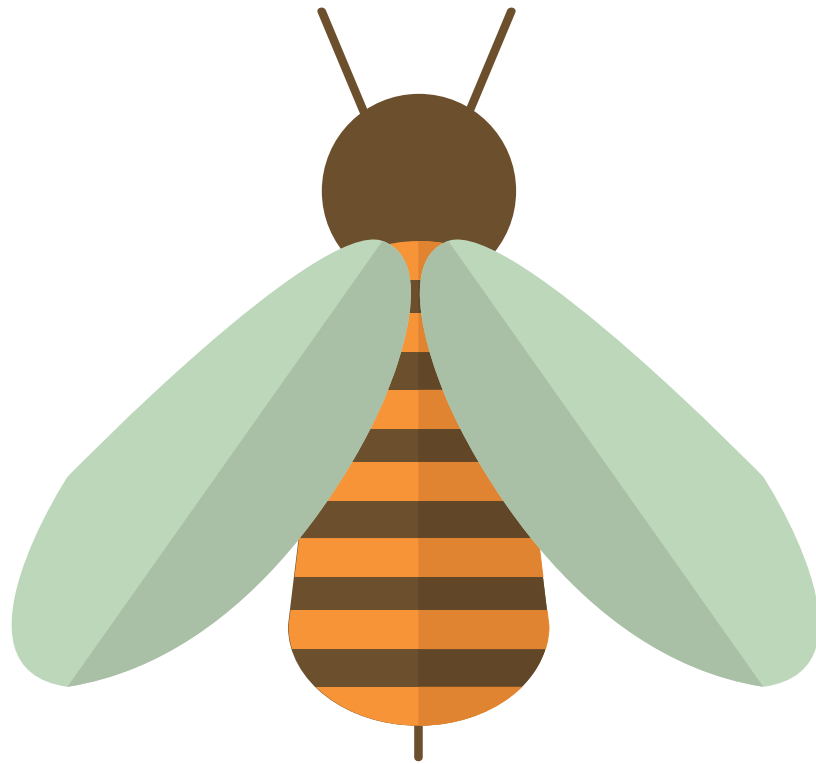
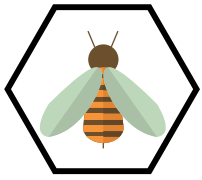


Multiplication

Times Tables



With variation theory



Multiplication times tables and variation theory.

Make links and connections using variation theory to look for patterns and what is the same and what is different.

Each resources starts with a shared example for an adult to expose the link or pattern to the multiplication times tables. In intelligent practice, children should use the calculation(s) they have completed in order to calculate the next one.

For example:

Shared example (Teacher / adult led)

Example

$$10 \times 3 =$$

Your turn

$$5 \times 3 =$$

Here we half one factor, which halves the product

Intelligent practice (independent practice)

$$5 \times 3 =$$

$$3 \times 5 =$$

$$3 \times 6 =$$

$$3 \times 3 =$$

$$3 \times 10 =$$

$$5 \times 6 =$$

$$6 \times 3 =$$

$$= 18 \div 3$$

$$3 \times 12 =$$

$$3 \times 1 =$$

Intelligently and carefully designed questions help children make links and connections

Shared example

Example

$$2 \times 2 =$$

Your turn

$$2 \times 4 =$$

Intelligent practice

If $2 \times 1 =$
Then $2 \times 2 =$
So $= 2 \times 3$
And $2 \times 6 =$
For $2 \times 12 =$

If $2 \times 2 =$
Then $= 2 \times 4$
So $8 \times 2 =$
And $16 \times 2 =$
For $= 32 \div 2 =$

If $2 \times 20 =$
Then $2 \times 200 =$
So $= 20 \times 2$
And $200 \times 2 =$
For $2000 \div 2 =$

If $2 \times 40 =$
Then $= 2 \times 40$
So $60 \times 2 =$
And $120 \div 2 =$
For $= 2 \times 240$

Shared example



Example

$$3 \times 2 =$$

Your turn

$$6 \times 2 =$$

Intelligent practice

If **$3 \times 2 =$**
Then **$3 \times 4 =$**
So **$3 \times 8 =$**
And **$3 \times 12 =$**
For **$3 \times 24 =$**

If **$3^2 =$**
Then **$= 3 \times 9$**
So **$3 \times 10 =$**
And **$3 \times 5 =$**
For **$3 \times 20 =$**

If **$10 \times 3 =$**
Then **$3 \times 11 =$**
So **$= 3 \times 12$**
And **$3 \times 24 =$**
For **$3 \times 6 =$**

If **$3 \times 40 =$**
Then **$3 \times 400 =$**
So **$1200 \div 3 =$**
And **$120 \div 4 =$**
For **$= 12 \div 3$**

Shared example

Example

$$5 \times 2 =$$

Your turn

$$10 \times 2 =$$

Intelligent practice

<i>If</i>	$5 \times 2 =$	<i>If</i>	$2^2 = 25$
<i>Then</i>	$5 \times 10 =$	<i>Then</i>	$50 \times 5 =$
<i>So</i>	$5 \times 100 =$	<i>So</i>	$500 \times 5 =$
<i>And</i>	$= 100 \div 5$	<i>And</i>	$25 \div 5 =$
<i>For</i>	$1000 \div 5 =$	<i>For</i>	$= 5 \times 5 \times 5$

<i>If</i>	$5 \times 20 =$	<i>If</i>	$5 \div 5 =$
<i>Then</i>	$5 \times 40 =$	<i>Then</i>	$50 \div 5 =$
<i>So</i>	$= 80 \times 5$	<i>So</i>	$500 \div 5 =$
<i>And</i>	$5 \times 60 =$	<i>And</i>	$= 505 \div 5$
<i>For</i>	$5 \times 12 =$	<i>For</i>	$510 \div 5 =$

Shared example

Example

$$10 \times 10 =$$

Your turn

$$5 \times 10 =$$

Intelligent practice

If $10 \times 10 =$

Then $= 5 \times 10$

So $50 \times 10 =$

And $500 \div 10 =$

For $5 \div 10 =$

If $10 \times 3 =$

Then $30 \div 10 =$

So $= 30 \div 3$

And $3 \div 10 =$

For $0.3 \div 10 =$

If $10^2 =$

Then $10^3 =$

So $1000 \div 10 =$

And $100 \div 10 =$

For $1 \div 10 =$

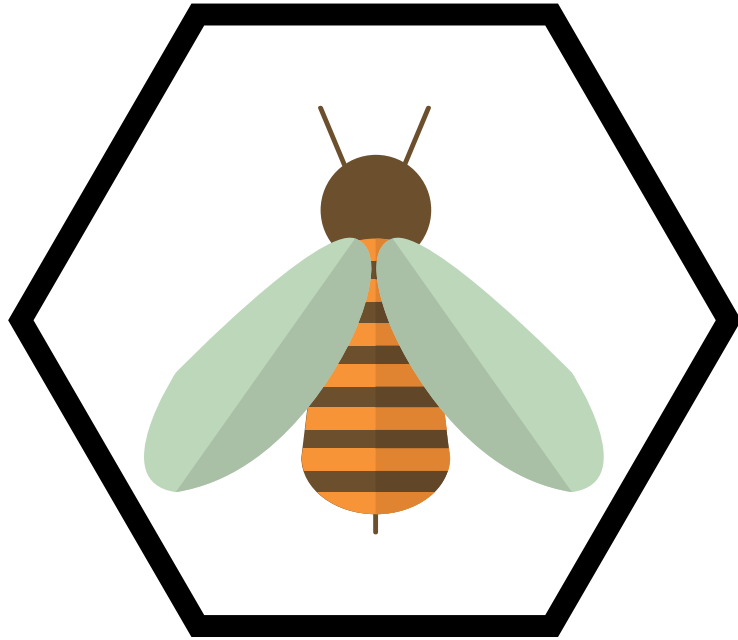
If $10 \times 20 =$

Then $200 \div 10 =$

So $20 \div 10 =$

And $2 \div 10 =$

For $0.2 \div 10 =$



www.mrbeeteach.com