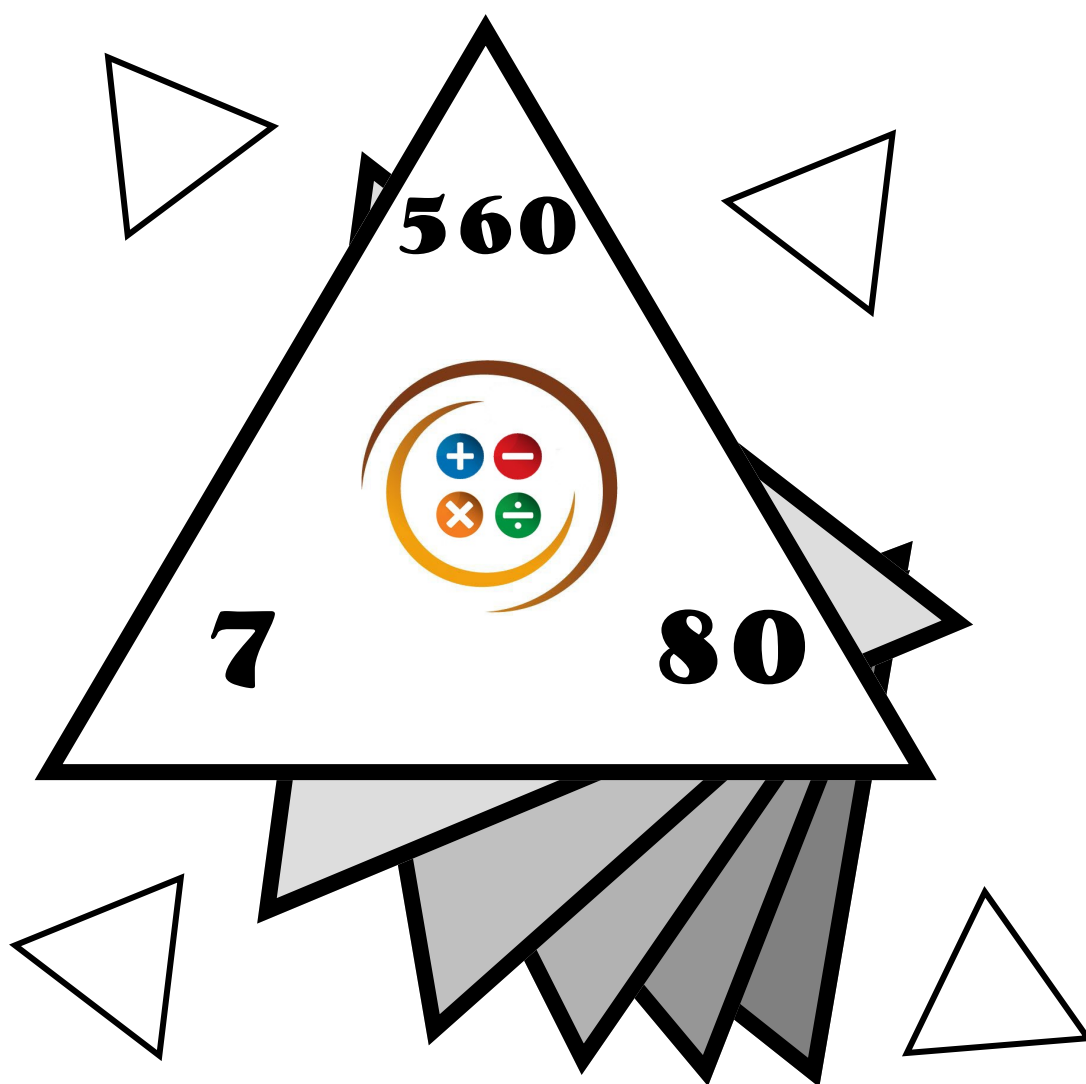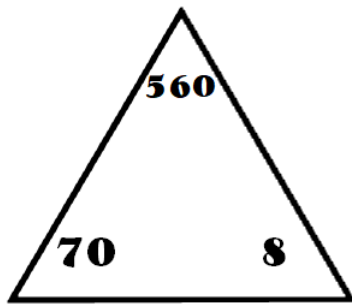# Oakwood Maths
Basic Skills Logs

Silver Award

560

7

80

Name _____ Class _____
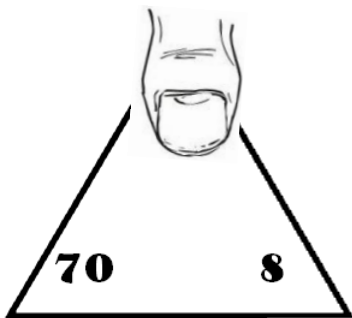
We use triangles to teach multiplication facts.

In the example on the left, the tables fact is 70 x 8 = 560.

We can represent multiplying by a multiple of ten in this way right up to 12 x 120.

Writing the fact on a triangle and then covering numbers up means we can practise and test <u>all</u> the ways of knowing that fact. For example:

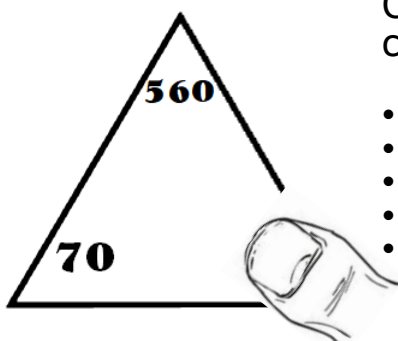Covering up the **product** (560) means we can ask:

- What is 70 times 8?
- What is 8 times 70?
- What is the **product** of 8 and 70?
- What are 70 lots of 8 or 8 lots of 70?
- What is 70 multiplied by 8? (and the other way round)
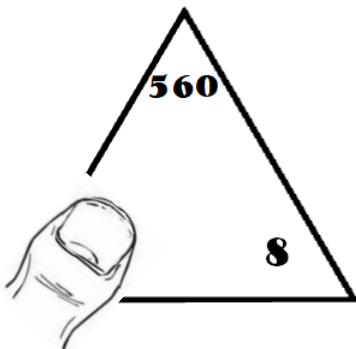
Covering up one of the **factors** (70) means we can ask:

- What is 560 **divided by** 8?
- How many 8s in 560?
- What is an **eighth** of 560?
- What is 560 **shared between** 8 people?
- How many **groups of** 8 in 560?

...and so on.

Covering up the other of the **factors** (8) means we can ask:

- What is 560 **divided by** 70?
- How many 70s in 560?
- What is a **seventieth** of 56?
- What is 560 **shared between** 70 people?
- How many **groups of** 70 in 560?

...and so on.

The Silver Log builds on the children's understanding of multiplication facts. It also covers a range of mental maths skills.

Children, teachers, teaching assistants and parents will work together to complete each section. We'll work on one section at a time.

...date the **H Box** when your child can recite the table in order, eg: **"1 times 100 is 100, 2 times 100 is 200..."** **up to "12 x 100 is 1,200"**

...date the **H Box** when your child can recite the answers to the table in order …. **100, 200, 300.**

...date the **H Box** when your child can answer questions from the table in any order **within five seconds**. This **includes** the questions about division and fractions next to the triangles on the previous page.

We'll date the **S Boxes** in school when your child is tested.

Listen to your child and encourage them to talk about their learning.

Try to work when neither you nor your child is tired.

Remember it is perfectly normal to forget things. More practice will help.

Praise your child for their successes. Always finish on a positive note.

Know when to stop. Even when things are going well, little and often is the golden
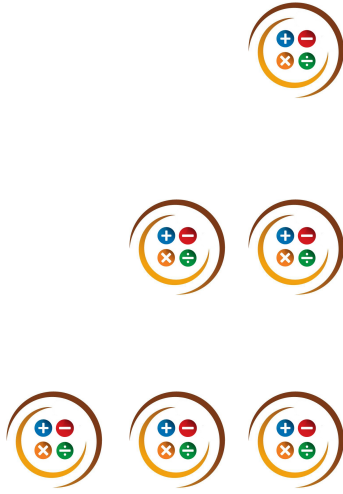
x 100

H   S

x 20

H   S

x 50

H   S

H   S

x 40

H   S

x 80

H   S

x 30
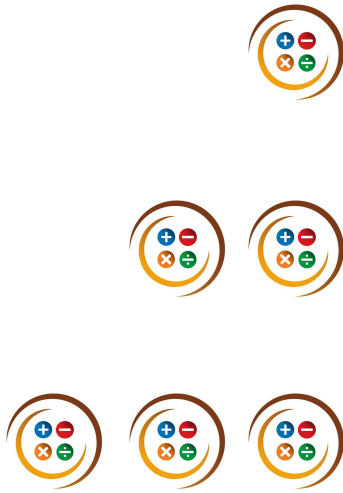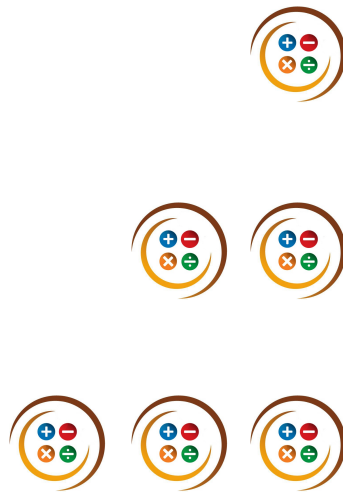
x 60

H	S

x 90

H	S

x 70

H	S

x 110

H	S

x 120

H	S
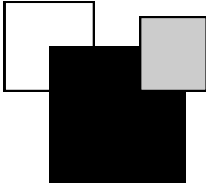
I know my square numbers up to 12^2

A square number is the product of a number multiplied by itself.

$3 \times 3 = 3^2$
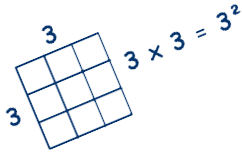
$0^2 = 0$ $1^2 = 1$ $2^2 = 4$ $3^2 = 9$

$4^2 = 16$ $5^2 = 25$ $6^2 = 36$ $7^2 = 49$

$8^2 = 64$ $9^2 = 81$ $10^2 = 100$

$11^2 = 121$ $12^2 = 144$

Date achieved:
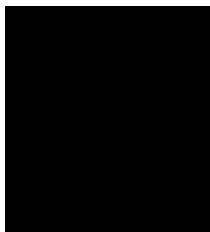
I know my square roots up to $\sqrt{144}$

Square root is the inverse to squaring a number and it is the number that is multiplied by itself.

$\sqrt{0} = 0$ $\sqrt{1} = 1$ $\sqrt{4} = 2$ $\sqrt{9} = 3$

$\sqrt{16} = 4$ $\sqrt{25} = 5$ $\sqrt{36} = 6$ $\sqrt{49} = 7$

$\sqrt{64} = 8$ $\sqrt{81} = 9$ $\sqrt{100} = 10$

$\sqrt{121} = 11$ $\sqrt{144} = 12$

Date achieved:

I can multiply 2 and 3-digit numbers by 10 and 100

eg.   27 x   10 =   270
and   27 x 100 = 2,700

           356 x   10 = 3,560
and...   356 x 100 = 35,600

TU x 10
HTU x 10
TU x 100
HTU x 100

Date achieved:

I can divide multiples of 10 by 10

eg.   210 ÷ 10 =   21
        4,500 ÷ 10 = 450

÷ 10

Date achieved:

I can divide multiples of 100 by 100

eg.   4,500 ÷ 100 =   45
    36,300 ÷ 100 = 363

÷ 100

Date achieved:

I can multiply 2-digit numbers by 4 and 8 using doubling

I know that...   **16 x 2 =   32**

so, doubling...   **16 x 4 =   64**

and...

16 x 8 =   128

Date achieved:

_____

I can use my number bond facts to add 3 numbers together

40 + 30 + 60

60 + 40 = 100
$\qquad$ 100 + 30 = 130

33 + 29 + 47

47 + 33 = 80
$\qquad$ 80 + 20 = 100
$\qquad\qquad$ 100 + 9 = 109

Date achieved:

I know the following common fraction, decimal and percentage equivalents and use them in calculations:

Fraction	Decimal	Percentage	Operation
½	0.5	50%	÷2
¼	0.25	25%	÷4
¾	0.75	75%	÷4 x3
$^1/_{10}$	0.1	10%	÷10
$^1/_5$	0.2	20%	÷5
$^1/_{100}$	0.01	1%	÷100
1	1	100%	x1

Congratulations, you have achieved your Silver Award.

School Signature   **Date**

_____   _____

Oakwood Maths
Basic Skills Logs

At Oakwood Primary School, we have a Basic Skills Log system, which leads to awards.

Rockets, Stars and Planets
These three logs are worked through in Years R, 1 and 2. They help embed basic knowledge of the number system and number bonds.

Children should aim for all three awards by the end of Year 2.

The Bronze Award
This is knowing all your tables up to 12 x 12 and all the division facts which go with them.

Children should aim for this by the end of Year 4.

The Silver Award
This is using your multiplication and division facts to multiply and divide by multiples of 10, knowing square numbers, doubling and halving and knowing common fraction equivalents.

Children should aim for this by the end of Year 5.

The Gold Award
This is using your multiplication and division facts to work with money, decimals and having a range of mental maths strategies for all occasions!

Children should aim for this by the end of Year 6.

When children have achieved the **Gold Award**, they can move on to the **Platinum** and **Platinum Plus Awards**.