$\qquad$
$\qquad$

## Number Star Target

## Star 3

I will need to:

- Know facts from the $2 x$ table by completing number patterns and using formal recording. For Example:
2,4,6,8, $\qquad$
10,12,14,16,
4, 8 , 8 $\qquad$ 12, $\qquad$
$2 \times 6=$ $\qquad$
$8 \times 2=$ $\qquad$ $10 \times 2=$
- Understand how to use the + and $=$ signs and know that addition can be done in any order so that I can add 2 numbers where the total is less than 20.
For example:
3 + $\qquad$ $=10$
$10-\ldots=4$
$6+$ $\qquad$ $=20$
20 - $\qquad$ $=5$
$\qquad$

$$
+7=10
$$

$$
10-\ldots=0
$$

$\qquad$ $+1=10$

$$
20-2=
$$

$\qquad$ $+2=20$
$10-3=$ $\qquad$

You will have 15 questions to answer in 5 minutes
$\qquad$
$\qquad$

## Number Star Target

## Star 4

I will need to:

- Know by heart all pairs of numbers that total 10 (addition and subtraction facts).
For example:

$$
3+\ldots=10 \quad 10=4+\ldots \quad 10-3=\ldots \quad 10-\ldots=2
$$

- Be able to say which number is 1 or 10 more/less than a 2 digit number.
For example:

1 more than $29 \rightarrow$
1 less than $14 \rightarrow$

10 more than $15 \rightarrow$ $\qquad$ 10 more than $4 \rightarrow$
10 less than $28 \rightarrow$ $\qquad$

- Know multiplication facts for the $10 x$ table. For example:
10x $=80$ $70=$ $\qquad$ $\times 7$
$10 \times 4=$ $\qquad$

You will have 20 questions to answer in 8 minutes
$\qquad$

Number Star Target

## Star 5

I will need to:

- Know addition and subtraction bonds to 20.
- Know by heart, or work out very quickly, all pairs of numbers that total 20. For example -

$$
18+\ldots=20
$$

$$
\ldots+6=20
$$

$$
12+\ldots=20
$$

$$
\ldots+13=20
$$

$$
20-\ldots=14
$$

$$
20-\ldots=18
$$

- Be able to partition numbers within 10.

For example-

$$
3+\ldots=9 \quad 4+\ldots=8 \quad 3+\ldots=7 \quad \ldots+2=9
$$

- Be able to use partionned numbers to add within 20.

For example:
$8+7$ is the same as $8+2+5$
$6+8$ is the same as $6+4+4$
$12+7$ is the same as $12+3+2$

- Know multiplication facts for the $5 x$ table.

You will have 25 questions to answer in 15 minutes
$\qquad$

## Number Star Target

Star 6

I will need to:

- Give a double or half of any number up to 10.

For example -

Double 1, 5, 3, 4, 2

Halve 10, 4, 6, 2, 8

- Know division facts for $2 x$ table
- To add or subtract a single digit to a two digit number.

You will have 30 questions to answer in 8 minutes
$\qquad$

## Number Star Target

## Star 7

I will need to:

- Know by heart, or work out very quickly, all addition and subtraction facts for each number to 10.
For example -
$6+\ldots=9$
$2+5=$ $\qquad$

9-2 = $\qquad$ _

$$
3+\ldots=8
$$

$$
\ldots+4=10
$$

$$
8-\ldots=1
$$

$$
-3=7
$$

- Know by heart, or work out very quickly, all pairs of multiples of 10 that total 100. For example -
$40+\ldots=100$
$\ldots+20=100$
- Know division facts for 10xtable.

You will have 35 questions to answer in 15 minutes
$\qquad$

## Number Star Target

## Star 8

I will need to:

- Know by heart, or work out very quickly, all pairs of multiples of 10 that total 100. For example -
$40+$ $\qquad$ $=100$
$\ldots+20=100$
- Know doubles and halves of numbers to double 50 without having to convert units to tens.
- Know division facts for $5 x$ table

You will have 40 questions to answer in 15 minutes
$\qquad$

## Number Star Target

## Star 9

I will need to:

- Know addition and subtraction bonds to 100.

For example $64+36=100 \quad 100-32=68 \quad 12+88=100 \quad 100-$ 54=46

- Understand what ' $=$ ' means and use facts from $2 x, 5 x$ and $10 x$ table to sovle problems.
For example.
$2 \times 5=1 \times 10$
$10 \times 5=5 \times 10$
$8 \times 5=10 \times 4$
$2 \times 10=5 \times 4$

You will have 45 questions to answer in 15 minutes.
$\qquad$

## Number Star Target

## Star 10

I will need to:

- Know, or work out very quickly, all addition and subtraction facts for all numbers to 20. For example -

$$
6+5=
$$

$$
\ldots=9+8
$$

$$
13=7+\ldots
$$

$$
11+\ldots=18
$$

18-5 = $\qquad$
$\qquad$

$$
-7=12
$$

16 - _ = 11
15-8 = $\qquad$

- Know by heart, or work out very quickly, all pairs of multiples of 5 with a total of 100 . For example -
$60+\ldots=100$
$45+\ldots=100$
$75+\ldots=100$
$\ldots+30=100$
- Know by heart, or work out very quickly, all pairs of multiples of 100 with a total of 1000 . For example -
$400+\ldots=1000$
$\ldots+200=1000$
$1000-500=$ $\qquad$ 1000 $\qquad$ $=700$

You will have 50 questions to answer in 15 minutes.
$\qquad$
$\qquad$

## Number Star Target

## Star 11

I will need to:

- Know by heart the multiplication and division facts for the $2 x, 3 x, 4 x, 5 x$ and $10 x$ tables. For example -

$$
7 \times 4=
$$ $8 \times \ldots=40$

$$
\ldots \times 3=24
$$

$$
\ldots \times 7=28
$$

$18 \div 3=$ $\qquad$
$\ldots \div 5=6$
$30 \div \ldots=3$

$$
16 \div \_=4
$$

- Know facts about length, mass, capacity and time. You will need to know these facts:

1 metre = 100 centimetres (cms.)
1 kilometre $=1000$ metres (m.)
1 kilogram = 1000 grams (g.)
1 litre $=1000$ millilitres (ml.)
1 minute $=60$ seconds
1 hour $=60$ minutes
1 day $=24$ hours
1 year = 52 weeks
1 year = 12 months
$£ 1=100$ pence
You will have 60 questions to answer in 15 minutes.
$\qquad$
$\qquad$

## Number Star Target

Star 12
I will need to:

- Know by heart the multiplication facts for the $2 x, 3 x, 4 x$, $5 x, 6 x, 8 x, 10 x$ tables. For example -
$6 \times 8=$ $\qquad$ $4 \times \ldots=24$
$\ldots \times 8=64$
$18=\ldots \times 3$
$56=\ldots \times 8$
$\ldots=7 \times 6$
- Know by heart the division facts for the $2 x, 3 x, 4 x, 5 x, 10 x$ tables. For example -
$35 \div 5=$ $\qquad$ $21 \div 3=$ $\qquad$ $-\div 4=7$
$\ldots \div 10=10$
$18 \div \ldots=6$
$32 \div \ldots=8$
- Know facts about money, length, mass, capacity and time and use them to calculate for example:
2 kilograms = $\qquad$ g.

5000 g. $=$ $\qquad$ kg.
4 cms . $=$ $\qquad$ millimetres
2 metres = $\qquad$ chs.
3 metres = $\qquad$ millimetres
2 ms = $\qquad$ metres
3 litres = $\qquad$ ml .

30 millimetres = $\square$ cos.

3 weeks = ___ days 400 cms . $=$ $\qquad$ m. 4000 millimetres $=$ $\qquad$ m.
$£ 5.16=$ __ pence
$\qquad$
$£ 5.16$ = ___ pence $3200 \mathrm{~m} .=$ $\qquad$ ms $\qquad$ m. 2500 mls . $=$ $\qquad$
$\qquad$ ml . 24 months = $\qquad$ years 426 pence $=£$ $\qquad$

- Know how many days in each month of the year. Remember:

30 days has September
April, June and November
All the rest have 31
Except February alone
Which has 28 days clear
But 29 each leap year.
You will have $\mathbf{7 0}$ questions to answer in 20 minutes.
$\qquad$
$\qquad$

## Number Star Target

## Bronze Star

I will need to:

- Know multiplication and division facts for $2 x, 3 x, 4 x, 5 x, 6 x$, $8 x, 10 x$ tables. For example -

| $3 \times-=27$ | $8 \times 6=-$ | $32=\frac{1}{4} \times 4$ |
| :--- | :--- | :--- |
| $56 \div 8=-\quad$ | $40 \div \ldots=5$ |  |

- Understand remainders in division. For example -

Ring the numbers that have a remainder of 1 when you

- divide by $3 \rightarrow 23,24,25$
- divide by $4 \rightarrow 18,31,37$
- divide by $5 \rightarrow 35,21,24$
- divide by $6 \rightarrow$ 41,51,61
- divide by $8 \rightarrow$ 31, 41,51
- divide by $10 \rightarrow 19,91,25$
- Know facts about money, length, mass, capacity and time and use them to calculate for example:

300 years = $\qquad$ centuries

1 millennium = $\qquad$ years

20 minutes = $\qquad$ seconds

5 weeks $=$ $\qquad$ days

1 year = $\qquad$ days

1 leap year = __ days
2 years = $\qquad$ months
$500 \mathrm{mls} .=$ $\qquad$ litre $2500 \mathrm{~g}=$ $\qquad$ kgs
$1750 \mathrm{~m} .=$ $\qquad$ kms
$1 / 2 \mathrm{~m}$. $=$ $\qquad$ cms.

5m. $30 \mathrm{cms}=$ $\qquad$ cms $1 / 4 \mathrm{~km}=$ $\qquad$ m.

You will have 80 questions to answer in 20 minutes
$\qquad$
$\qquad$

## Number Star Target

## Silver Star

I will need to:

- Know by heart all multiplication and division facts for all tables up to $10 \times 10$. For example -
$7 \times 9=$
$81 \div \ldots=9$
$\qquad$ $8=72 \div$
$\qquad$
$\ldots \times 8=56$
$49 \div \ldots=7$
- Multiply and divide any number by 10 or 100 . For example -
$23 \times 10=$
$14 \times 100=$
$\ldots \times 10=3700$
$\ldots \div 10=67$
$\ldots \div 100=50$
$\ldots \div 10=84$
- Know facts about money, length, mass, capacity and time and use them to calculate for example:
2.45 m. = $\qquad$ cms. 2.9 kgs = $\qquad$ $g$.

3695
m. = $\qquad$ kms
$4 \frac{1}{2}$ litres $=$ $\qquad$ ml
$240 \mathrm{mins}=$ $\qquad$ hours 100 years = $\qquad$ months

- Understand remainders in division. For example -

Ring the numbers that have a remainder of 2 when you

- divide by $3 \rightarrow \quad 28,29,30$
- divide by $4 \rightarrow$ 19,31,34
- divide by $5 \rightarrow$ 37,21, 28
- divide by $6 \rightarrow$ 42,50,56
- divide by $7 \rightarrow \quad 27,36,51$
- divide by $8 \rightarrow \quad 21,28,34$
- divide by $9 \rightarrow \quad 45,55,65$
- divide by $10 \rightarrow$ 102, 103, 104

You will have 90 questions to answer in 20 minutes
$\qquad$

## Number Star Target

## Gold Star

I will need to:

- Know by heart all multiplication and division facts for all tables up to $10 \times 10$.
- Multiply any number by $10,100,1000$
- Know facts about length, mass, capacity and time and use them to calculate for example -

14 kms . $=$ $\qquad$ m.

423 cms . $=$ $\qquad$ m.
$15 \mathrm{cms}=$ $\qquad$ millimetres 4750 ml . $=$ $\qquad$ I.
$4 \frac{3}{4} \mathrm{~kg}=$ $\qquad$ g.

42 days $=$ $\qquad$ weeks

- Understand remainders in division. For example -

Ring the numbers that have a remainder of 3 when you

- divide by $4 \rightarrow$ 19, 29, 34
- divide by $5 \rightarrow 35,47,59$
- divide by $6 \rightarrow 23,33,45$
- divide by $7 \rightarrow 29,39,52$
- divide by $8 \rightarrow 28,33,43$
- divide by $9 \rightarrow 48,58,69$
- divide by $10 \rightarrow$ 93, 39, 50
- Recognise the equivalence between decimals, fractions and percentages. For example -

$$
1 / 2=\ldots \% \quad 1 / 4=\ldots \% \quad 3 / 4=\ldots
$$

- Write as a decimal: - 1/10 (one tenth); 1/5 (one fifth); half; a quarter.
- Find fractions and percentages of whole numbers. For example -

| $\frac{1}{8}$ of 800 | $\frac{5}{8}$ of 40 | $\frac{7}{8}$ of 80 |
| :--- | :--- | :--- |
| $\frac{3}{4}$ of 200 | $1 / 3$ of 90 | $2 / 3$ of 600 |
| $10 \%$ of 300 | $20 \%$ of 500 | $5 \%$ of 400 |

You will have 100 questions to answer in 20 minutes.

Name: $\qquad$
$\qquad$
Number Star Target

## Platinum Star

I will need to:

- Know by heart all multiplication and division facts for all tables up to $10 \times 10$.
- Multiply any number by $10,100,1000$
- Know facts about length, mass, capacity and time and use them to calculate for example -

14 kms . $=$ $\qquad$ m.

423 cms . $=$ $\qquad$ m.
$15 \mathrm{cms}=$ $\qquad$ millimetres 4750 ml . $=$ $\qquad$ I.
$4 \frac{3}{4} \mathrm{~kg}=$ $\qquad$ g.

42 days $=$ $\qquad$ weeks

- Recognise the equivalence between decimals, fractions and percentages. For example -

$$
1 / 2=\ldots \% \quad 1 / 4=\ldots \% \quad 3 / 4=\ldots \%
$$

- Write as a decimal: - $1 / 10$ (one tenth); $1 / 5$ (one fifth); half; a quarter.
- Find fractions and percentages of whole numbers. For example -

| $\frac{1}{8}$ of 800 | $\frac{5}{8}$ of 40 | $\frac{7}{8}$ of 80 |
| :--- | :--- | :--- |
| $\frac{3}{4}$ of 200 | $1 / 3$ of 90 | $2 / 3$ of 600 |
| $10 \%$ of 300 | $20 \%$ of 500 | $5 \%$ of 400 |

- To understand the use of brackets. For example $247+\left(8 x \_\right)=535$
- To be able to solve worded problems mentally.

You will have 100 questions to answer in 20 minutes.
$\qquad$
$\qquad$

## Number Star Target

Steel Star
I will need to:

- Know by heart all multiplication and division facts for all tables up to $10 \times 10$ and use them to calculate larger numbers.
- Know how to add and subtract two fractions.

$$
\frac{3}{8}+\frac{2}{5}=\quad \frac{5}{6}-\frac{3}{4}=
$$

- Know how to multiply and divide decimal numbers
$5.3 \times 14=$
$6.3 \times 16=$
- Know how to order decimal numbers and convert them to a fraction and vice versa

$$
\frac{1}{10}
$$

- Know how to find the highest common factor of a given set of numbers

Find the highest common factor between 12 and 18

- Know how to find a number to the power of...
$6^{2}$
$2^{3}$
$4^{3}$
- To understand the use of brackets. For example -

$$
247+\left(8 x \_\right)=535
$$

You will have 60 questions to answer in 20 minutes.
$\qquad$ Class: $\qquad$

## Number Star Target

Titanium Star
I will need to:

- Know how to add, subtract and multiply two fractions.
$2 / 3+1 / 6=$
$3 / 5-2 / 7=$
$4 / 7 \times \frac{3}{4}=$
- Know how to order fractions and decimal numbers, be able to relate fractions and find differences between fractions and decimals.

What is exactly half way between $2 / 7$ and $3 / 8$ ?
Choose the two decimals which are closest in value:
$0.22,0.022,0.2,0.05,0.5$

- Know how to find the square root and cube root of a number:

$$
\sqrt{ } 100
$$

$\sqrt{3}^{7} 29$

- To add, subtract, multiply and divide positive and negative numbers:

$$
-5 \times-9=\quad 12+-9=\quad-24 \div 6=
$$

- Know how to find percentages of percentages.

$$
\text { What is } 50 \% \text { of } 75 \% \text { ? }
$$

- To be able to solve algebraic equations:

$$
4 t+15=7 t-3
$$

You will have 50 questions to answer in 15 minutes.

