## Key Instant Recall Facts Autumn Term 2 year 6

I know square numbers up to $12 \times 12$, and square roots.

| $\times$ | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 2 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 |
| 3 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 | 33 | 36 |
| 4 | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 | 44 | 48 |
| 5 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 |
| 6 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 | 66 | 72 |
| 7 | 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 | 77 | 84 |
| 8 | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 88 | 96 |
| 9 | 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90 | 99 | 108 |
| 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 |  |
| 11 | 11 | 22 | 33 | 44 | 55 | 66 | 77 | 88 | 99 | 110 | 121 | 132 |
| 12 | 24 | 36 | 48 | 60 | 72 | 84 | 96 | 108 | 120 | 132 | 144 |  |

Key Mathematical Talk
Any number multiplied by itself creates a square number. To square a number, you multiply it by itself.
Are the squares of even numbers, even or odd? Are the squares of odd numbers, odd or even?
How could you represent a square number using practical materials such as lego, counters or food?

## I know how to double and halve 2-digit decimal numbers.

## Examples of questions to ask at home

How can we represent a decimal number to show its place value? When we double a number, does it affect the place value of all its digits?
Why is it easier to halve even numbers than odd numbers? Using a place value chart, what happens when you have to exchange a digit?

Can you find the doubles and halves of these decimal numbers?

| Decimal | Dcuble | Half |
| :---: | :---: | :---: |
| 2.3 |  |  |
| 4.2 |  |  |
| 6.5 |  |  |
| 1.4 |  |  |
| 8.6 |  |  |
| 12.1 |  |  |
| 6.03 |  |  |
| 6.12 |  |  |
| 24.22 |  |  |
| 42.42 |  |  |

## Useful Websites

https://www.topmarks.co.uk/Search.aspx?q=square+numbers
https://www.youtube.com/watch?v=P-NDICmVOGg

