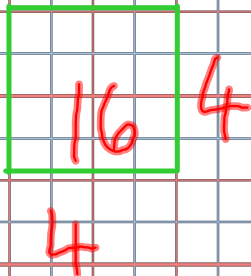


## Square Numbers

In your book draw some squares.

Count how many squares inside them and write it next to the square.



**The square numbers are:**

## The Square Numbers:

$$1^2 = 1 \times 1 = 1$$

$$5^2$$

$$9^2$$

$$2^2 = 2 \times 2 = 4$$

$$6^2$$

$$10^2$$

$$3^2$$

$$7^2$$

$$11^2$$

$$4^2$$

$$8^2$$

$$12^2$$

Find the square numbers up to  $20^2$  using your calculator.

$$13^2 = 169$$

$$16^2 = 256$$

$$19^2 = 361$$

$$14^2 = 196$$

$$17^2 = 289$$

$$20^2 = 400$$

$$15^2 = 225$$

$$18^2 = 324$$

(level 5)

## Square Roots

The opposite of a square is a square root.

For example

$$\sqrt{36} = 6 \quad \sqrt{9} = 3$$

$$\sqrt{121} = 11 \quad \sqrt{81} = 9$$

$$\sqrt{1} = 1 \quad \sqrt{196} = 14$$

Set your neighbour 5 square roots to find.

Your calculator has a square root key.

Use it to find:

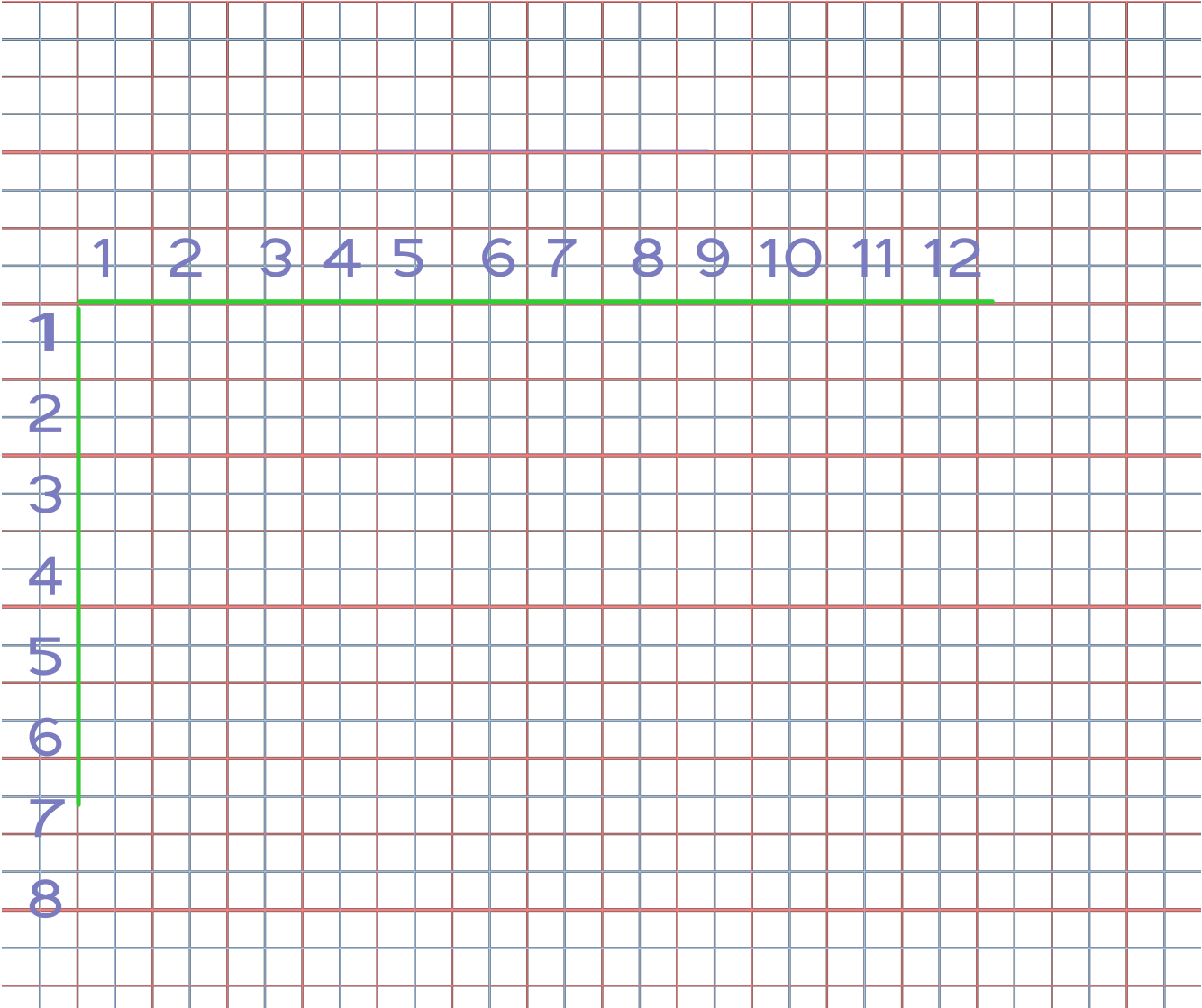
$$\sqrt{400} = 20 \quad \sqrt{1849} = 43$$

$$\sqrt{900} = 30 \quad \sqrt{1089} = 33$$

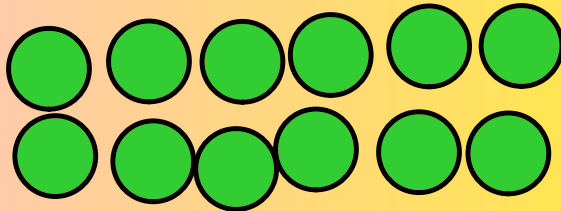
game



$$\sqrt{10201} = 101$$
$$432^2 = 186624$$



## The factors of 12



1, 12

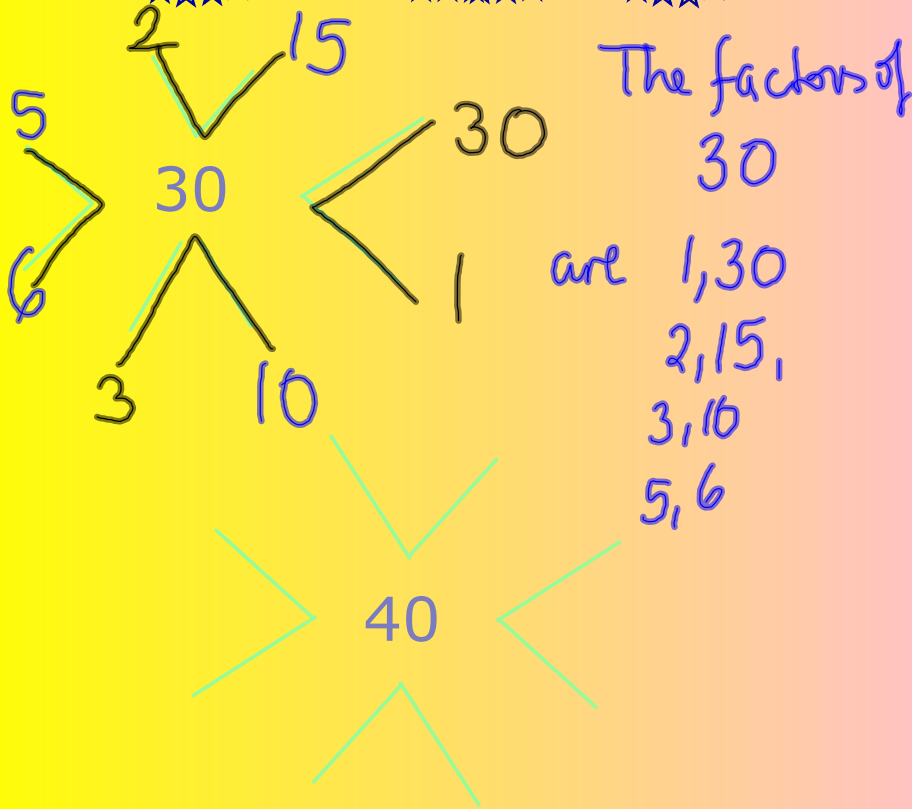
2, 6

3, 4

The factors of 12 are 1, 12, 2, 6, 3, 4

## Factors

Factors are numbers that go into another number.  
They come in pairs!



What are the factors of:

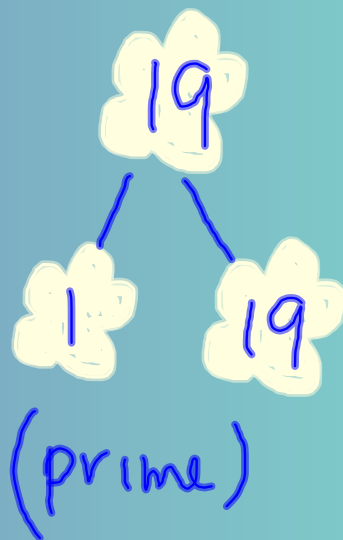
8 1, 8, 2, 4

12

15 1, 15, 3, 5

16 1, 16, 2, 8, 4

## Factor clouds



Mathswise 2 page 78 ex 6

## Multiples

### Multiples of 3.....

Using 1-100 grids:

1. Shade the multiples of 3 blue and the multiples of 5 red.  
Write down the common multiples of 3 and 5.

2. Shade the multiples of 2 blue and the multiples of 6 red.  
Write down the common multiples of 2 and 6.

## Adding Decimals

**KEEP THE DECIMAL POINTS UNDERNEATH EACH OTHER!**

$$2.56+3.6$$

$$28.07+3.5$$

$$14.4309+4.12$$

$$0.7803+213+2.3$$

How many of these sequences can you start...?

even numbers

square numbers

odd numbers

multiples of 5

A sequence going up in 3s Starting with 1

## Continuing Sequences

Write down the next 3 terms of a sequence. Write down the rule.

1. 4, 7, 10, 13....

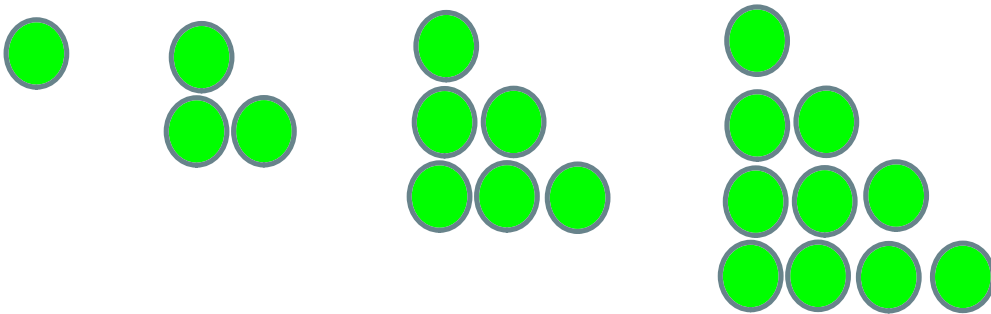
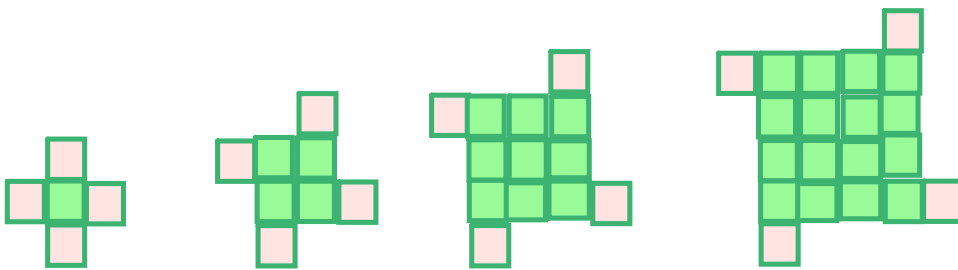
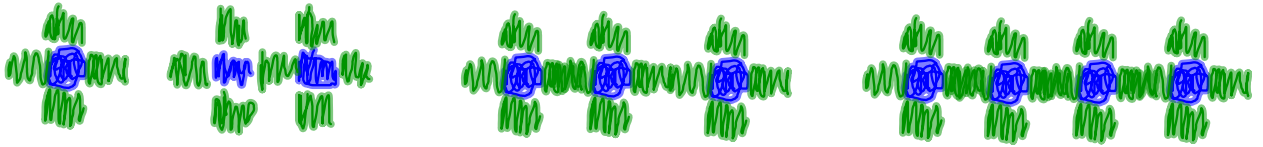
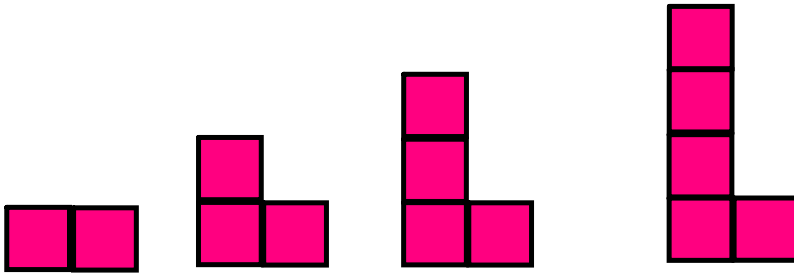
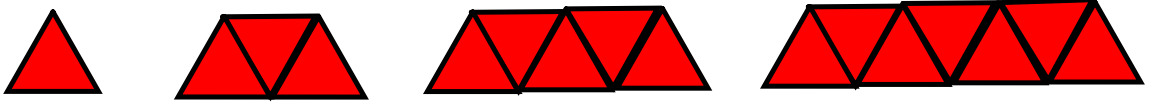
2. 0.5, 1.5, 2.5, 3.5....

3. 7, 5, 3, 1.....

page 23

## Picture Sequences

What will the 5th and 6th diagram look like?



## **Making the Rules**

**A sequence begins:**

**1. 3, 6, 9, 12, 15.....**

**2. 9, 19, 29, 39, 49.....**

**3. 6, 11, 16, 21, 26.....**

**For each sequence:**

**a) Write down the next three terms**

**b) The rule for the sequence**

## Attachments

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14 Spinner 2 (Multiplication 1 to 12).ppt

10 Rings 2 (Addition).ppt

Multiples.xls