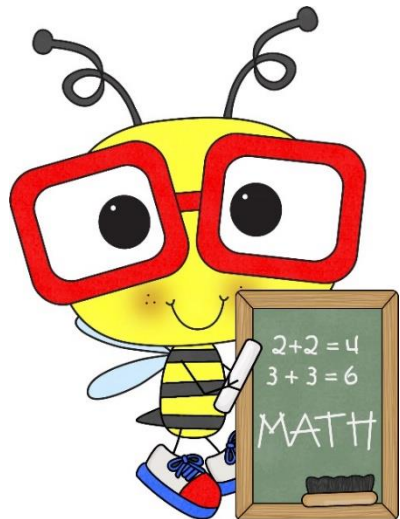


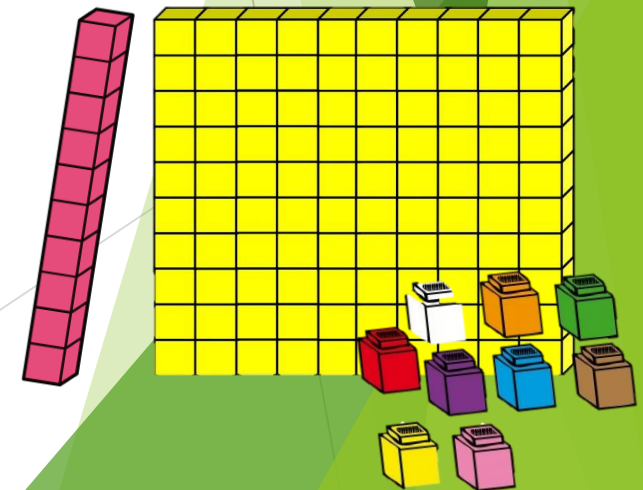
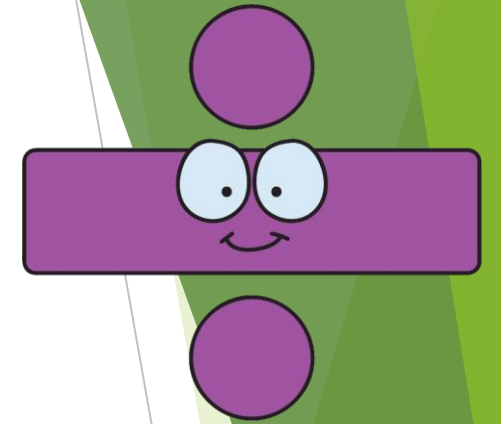


Cranford Park  
Academy

# Year 3 How to Help Maths Division Strategies 29<sup>th</sup> January 2020



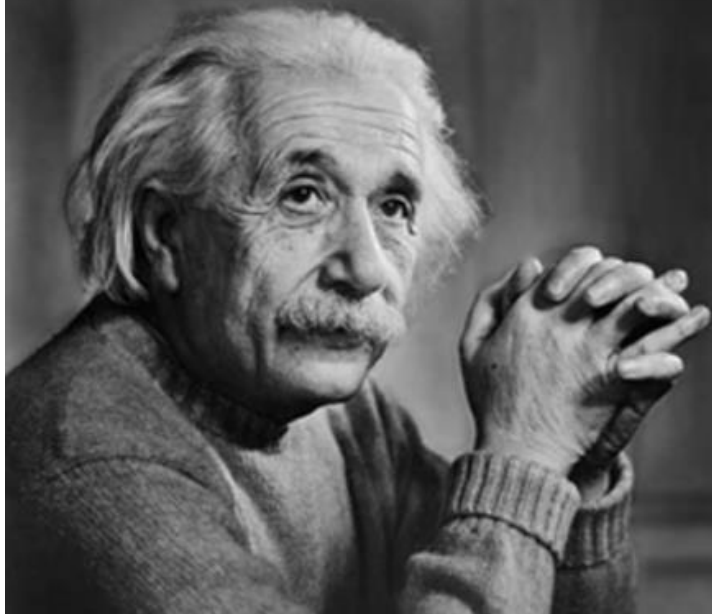
## Ms Kaur and Miss Sekhon



# MATHS MASTERY

If you can't explain it **simply**, you don't understand it well enough.

– Albert Einstein



# Key Terms - Division Year 3

- **Dividend** - the number that is being divided

$$24 \div 6 = 4$$

- **Divisor** - the number that the dividend is being divided by

$$24 \div 6 = 4$$

- **Quotient** - the answer

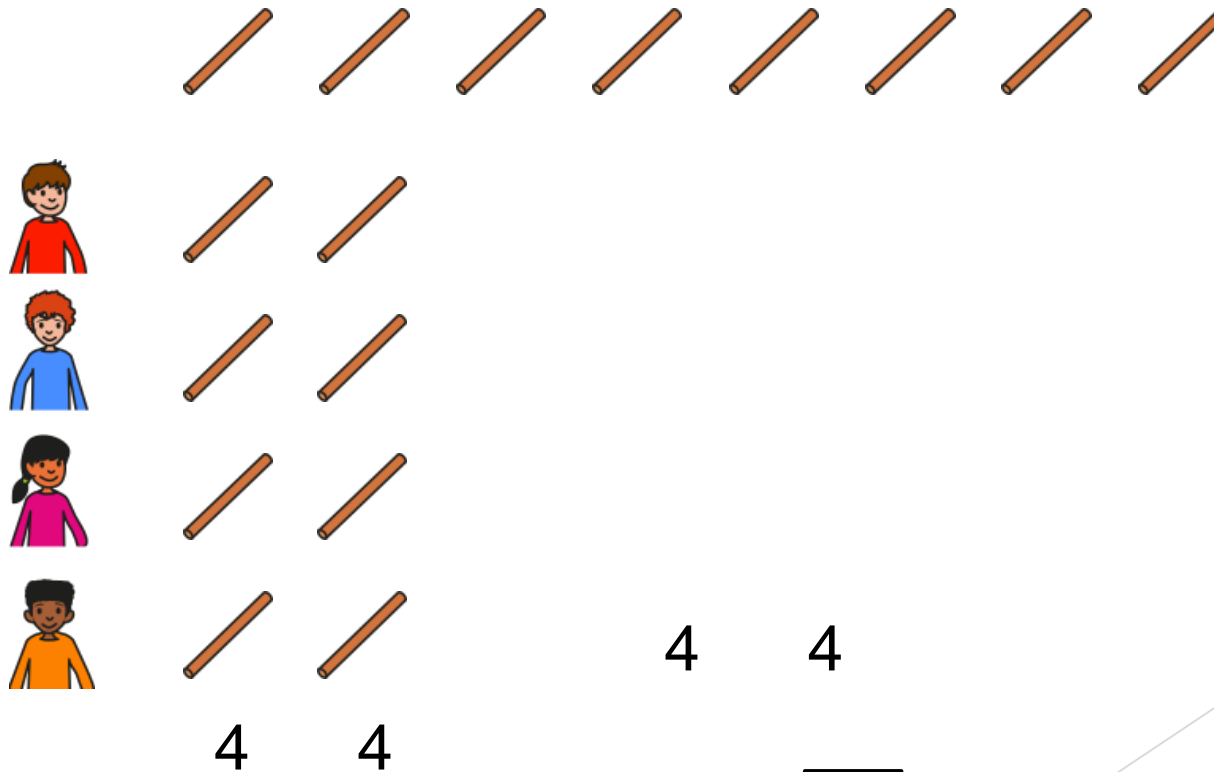
$$24 \div 6 = 4$$

# What is division?

- Division is sharing into equal groups.
- Did you know that this symbol actually denotes a fraction?  $\div$
- So  $15 \div 3$  is the same as  $\frac{1}{3}$  of 15
- It is also the same as 15 shared into 3 equal groups.

# Using Manipulatives and Pictorial Representations

8 sticks are shared equally between 4 children.  
How many sticks do they get each?



$$8 \div 4 = 2$$

2019 pilot

# Dividing with Repeated Subtraction

- How would we solve this calculation using a number line?

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$$\boxed{18} \div \boxed{3} = \boxed{\phantom{00}}$$

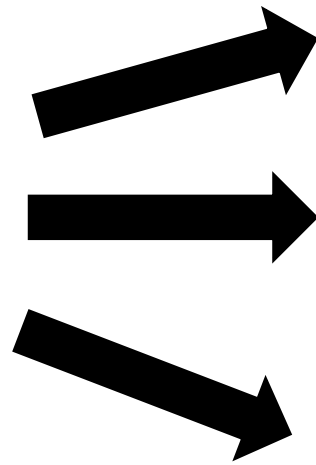
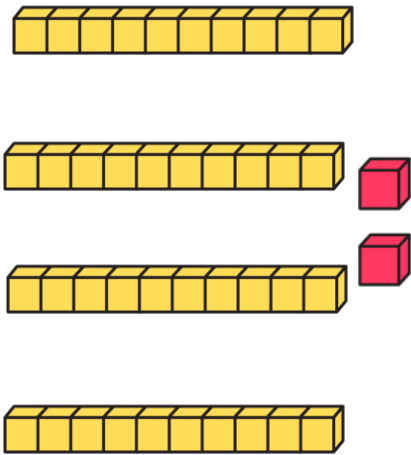
# Dividing with Repeated Subtraction - with remainders

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$$\boxed{18} \div \boxed{4} = \boxed{\phantom{00}} \text{ r. } \boxed{\phantom{00}}$$

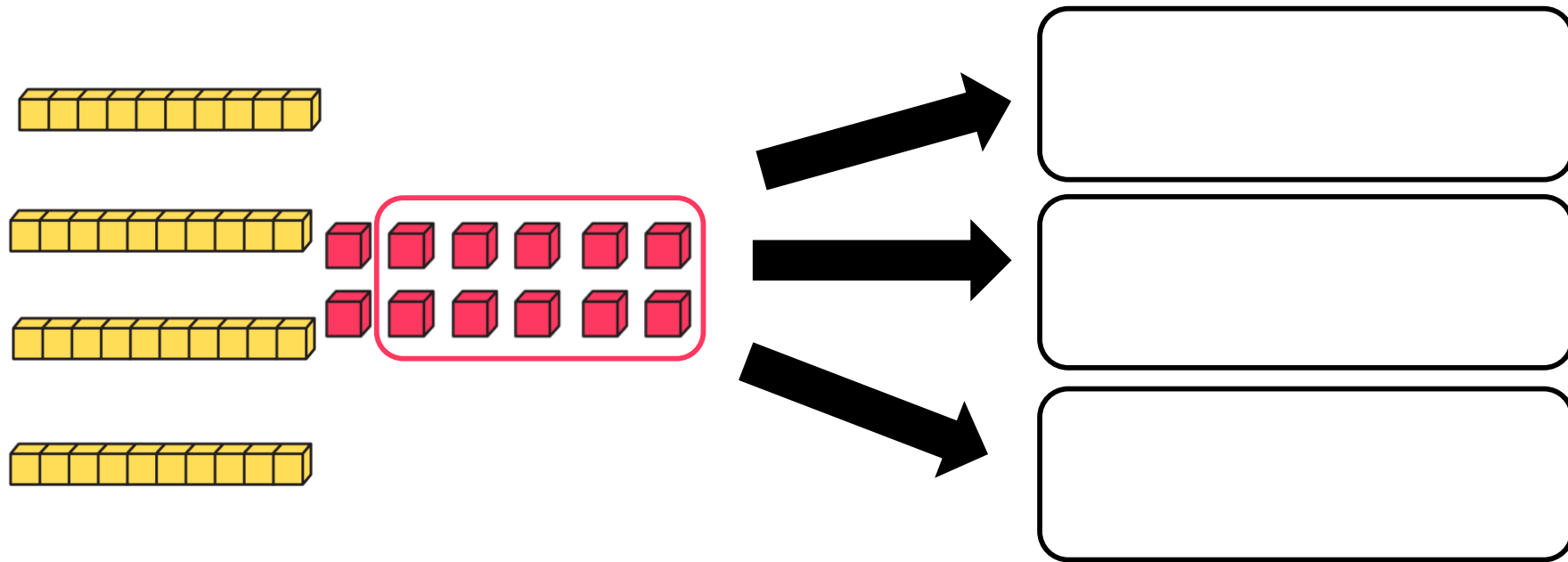
# How would you solve this calculation using the manipulatives on your table?

$$42 \div 3 =$$



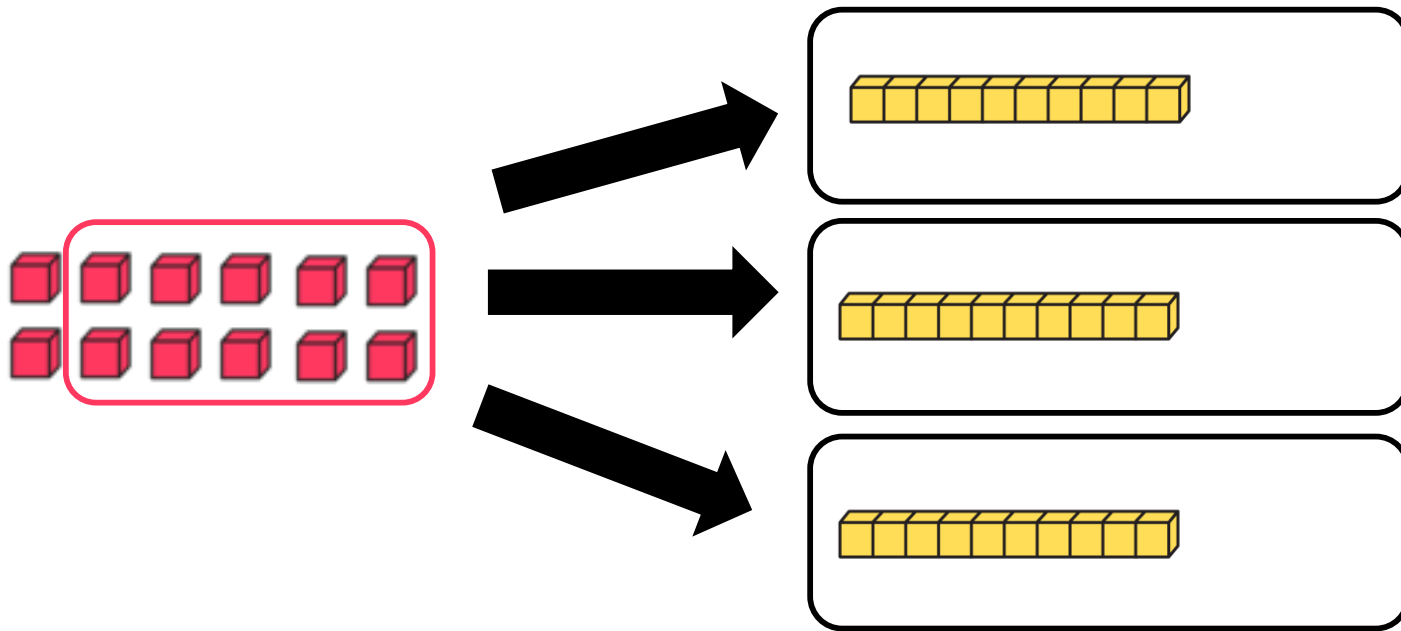
Three empty rounded rectangular boxes stacked vertically, intended for the student to write their solution or steps.

# Dividing with exchange



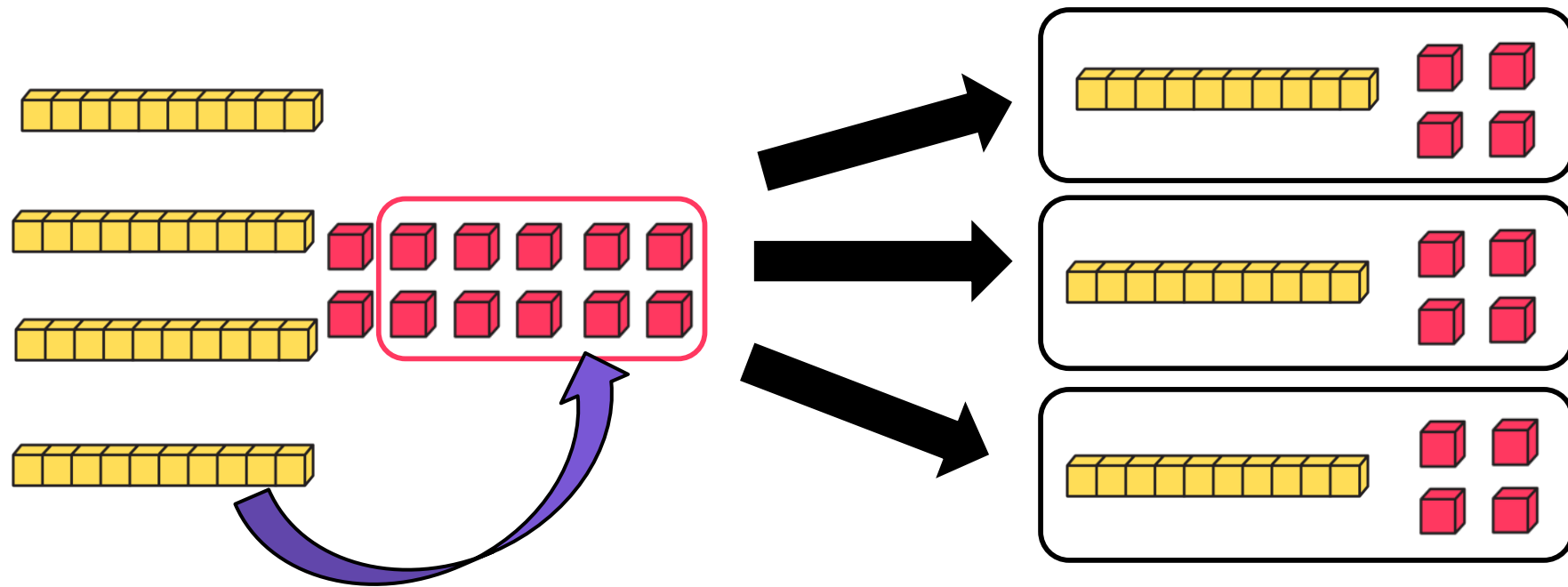
$$42 \div 3 = \square$$

# Dividing with exchange



$$42 \div 3 = \square$$

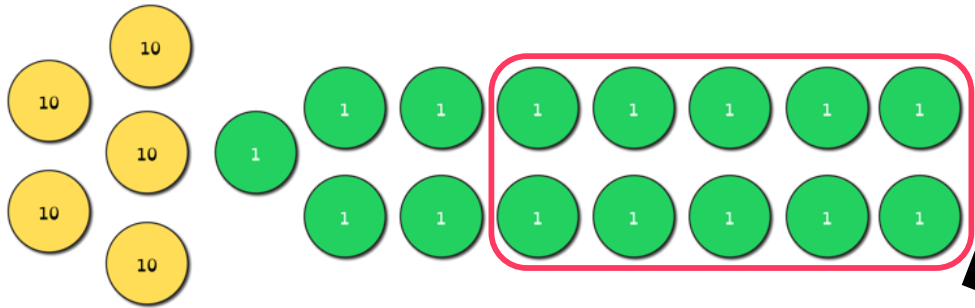
# Dividing with exchange



$$42 \div 3 = 14$$

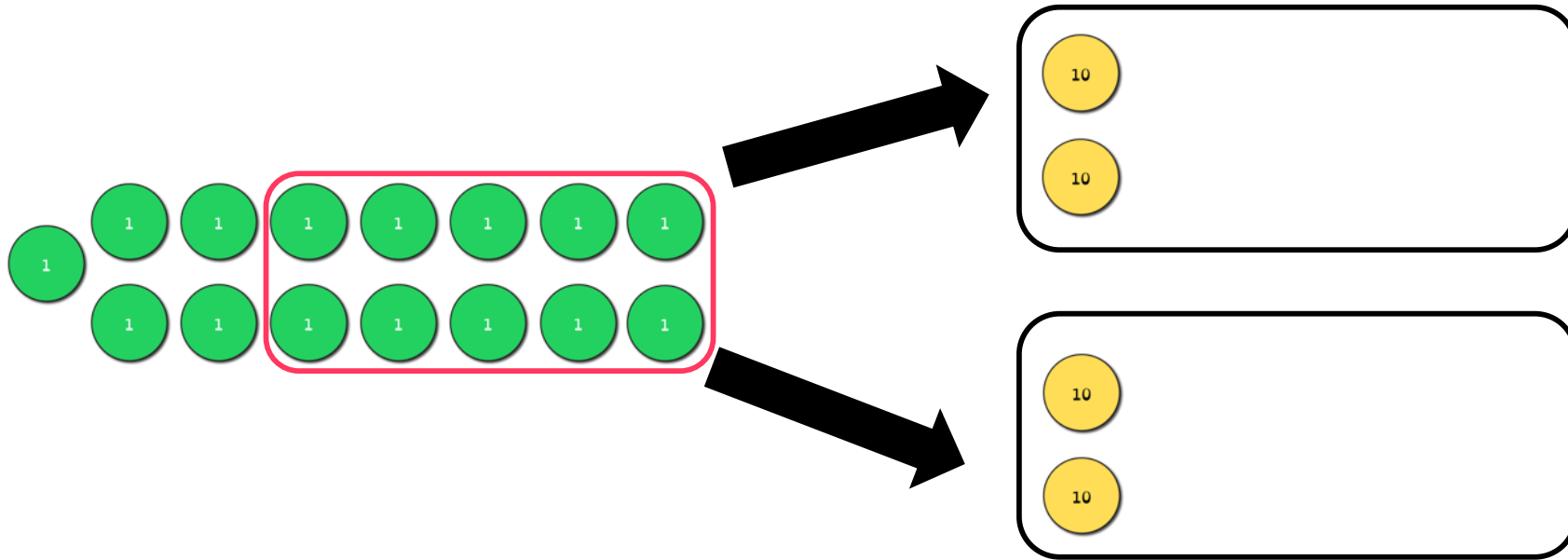
# Dividing with exchange and remainders

- How would you solve this calculation?



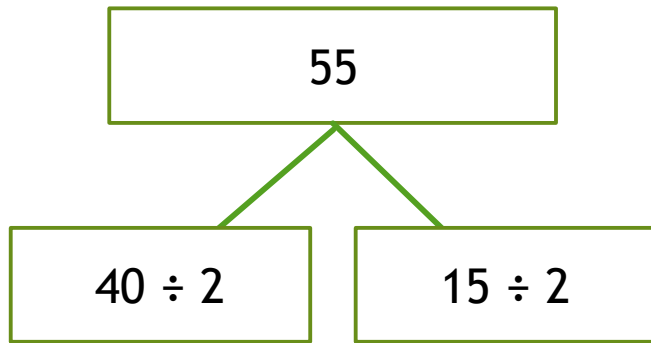
$$55 \div 2 = \quad r.$$

# Dividing with exchange and remainders

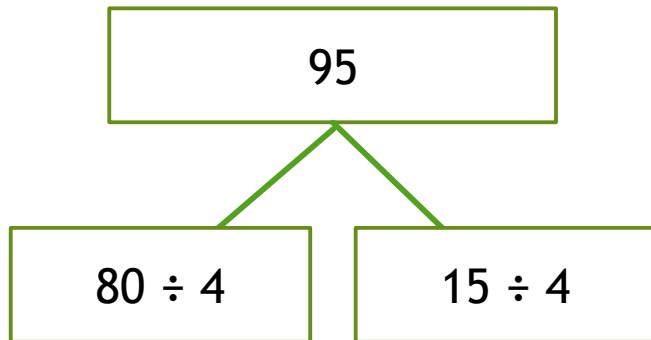


$$55 \div 2 = 27 \text{ r. } \underline{1}$$

# Division using a part-whole model



- $55 \div 2 =$
- $40 \div 2 =$
- $15 \div 2 =$



- $95 \div 4 =$
- $80 \div 4 =$
- $15 \div 4 =$

# Supporting your child at home

How should we practice at home? Little and often is the best approach. We recommend 10 -15 minutes practice every day, using a variety of activities.

## Maths Apps

There are thousands of educational apps which will support your child's maths learning. We have selected just a few that we would recommend as being particularly good.

### Number Bonds

Bubble Pop Number Bonds (free)  
Wipeout Wall Addition and Subtraction  
(69p)  
Number Bonds and Fact Families (69p)  
Number Bonds Pro (£1.49)

### All 4 Operations

6 Numbers (free)  
Pop Maths Lite (free)  
Mathletics (free)  
Super Tiles (69p)

# Supporting your child at home - Maths Apps

## Times Tables

Tables Lite (free)

Cloud Tables (free)

DK Times Tables (free)

Wipeout Wall Multiplication and Division  
(69p)

Eggs on Legs (69p)

Table Mountain (69p)

Division Descent (69p)

Frontier Factors (69p)

## Telling the Time

Telling Time Quiz (free)

Stop the Clock (free)

Interactive Telling Time Lite (free)

## Shape

Banana Hunt (69p)

Billy Bug and his Quest for Grub (69p)

Beebot (69p)

**Maths shed can be downloaded as an app**

# Supporting your child at home - Maths Websites

## **Maths Websites**

These websites have links to lots of different maths games which can be played online:

[Woodlands Junior Maths Zone](#)

[Sumdog](#)

[NCETM](#)

Here are some of our favourite maths games:

[Banana Hunt](#) - Estimating angles

[Hit the Button](#) - rapid recall of facts (really good for quick times tables recall)

[You Can't Do Simple Maths Under Pressure](#) - Really useful for quick mental maths recall!

[Daily 10](#) - Mental Maths!