Division word problems

LO: I can solve ÷ word problems involving remainders.

Problem Solving:

1) Sarah has 328 pencils. She shares them between her 5 friends. How many pencils will each of her friends get? How many pencils will Sarah have remaining?

Problem Solving:

2) Coco the clown has 937 balloons which he needs to share between 6 children at the fair. How many balloons does each child get? How many remaining?

3) Jasmin buys 976 ice lollies for her party. She has 7 carrier bags and needs to put an equal amount in each bag. Can she do this? How many will she have remaining?

Problem Solving:

4) There are 952 books on the shelf. They need to be shared equally amongst 8 table groups in the class. How many books will there be on each table? Will there be any left over?

Mastery

- 1. Divide 1262 by 3, 4, 5 and 6. Record each division and the remainder.
- 2. Divide 1562 by 3, 4, 5 and 6. Record each division and the remainder.
- 3. Divide 1862 by 3, 4, 5 and 6. Record each division and the remainder.
- 4. Divide 2162 by 3, 4, 5 and 6. Record each division, and the remainder.
- Invent other divisions of four-digit numbers by 3, 4, 5 and 6 that will give the same type of answers, for example, try 1322 and 1622 and so on.
- Can you explain to someone how you know what digits to choose in your four-digit number? Is there a rule?
- CHALLENGE: Think of four-digit numbers which when divided by 3, 4, 5 and 6 give a remainder of 1.

Division problems

Set out and solve these calculations:

1. $233 \div 4$ 2. $547 \div 8$ 3. $451 \div 7$ 4. $628 \div 9$

Solve these word problems:

5. Some pizzas are cut into 8 slices. How many pizzas are needed for 572 slices?

6. 7 children fit into a minibus. How many minibuses are needed to take 322 children on a trip?

7. 9 friends share out 534 marbles. How many marbles does each child get? How many are left over?

8. Stickers come in packets of 6. If I need 370 stickers to give out at my party how many packets should I buy?

Now make up two problems, each involving one of these calculations:

9. $546 \div 6$

10. $428 \div 8$

Challenge

Which numbers between 1 and 12 will NOT divide evenly into 504 (i.e. with no remainder)?