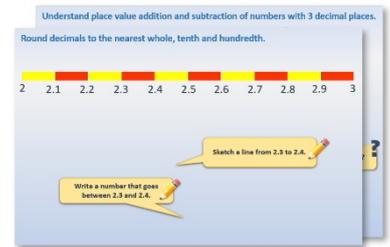


Week 12, Day 2

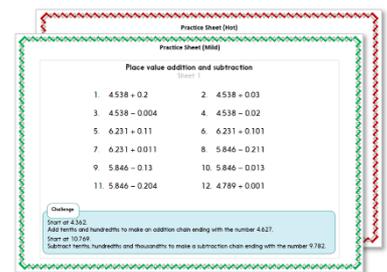
Multiplication and division

Each day covers one maths topic. It should take you about 1 hour or just a little more.

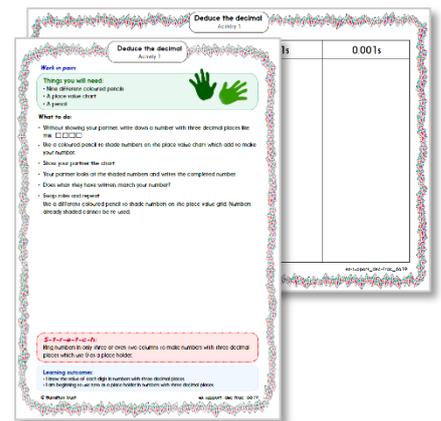
1. Start by reading through the **Learning Reminders**. They come from our *PowerPoint* slides.



2. Tackle the questions on the **Practice Sheet**. There might be a choice of either **Mild** (easier) or **Hot** (harder)! Check the answers.



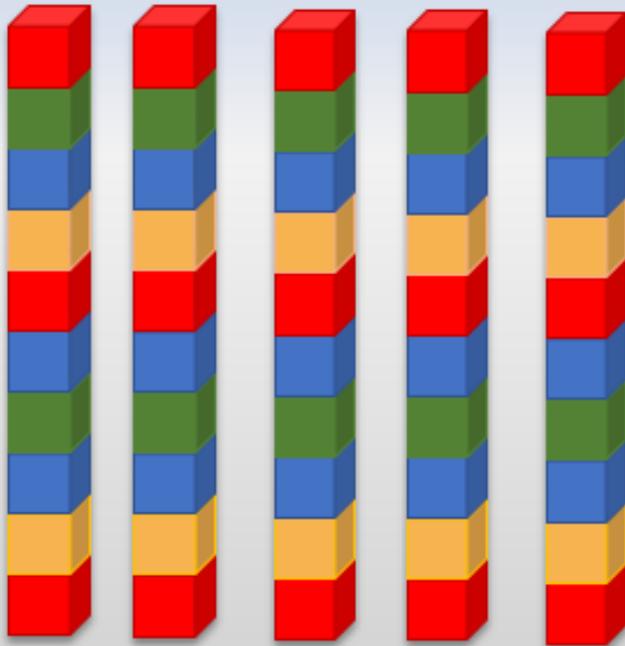
3. Finding it tricky? That's OK... have a go with a grown-up at **A Bit Stuck?**



4. Think you've cracked it? Whizzed through the Practice Sheets? Have a go at the **Investigation**...

Learning Reminders

Use multiplication sentences to describe a practical problem.



$$5 \times 10 = 50$$

5 towers of 10 cubes.

How many cubes
altogether?

Do we need to count all the
cubes one by one?

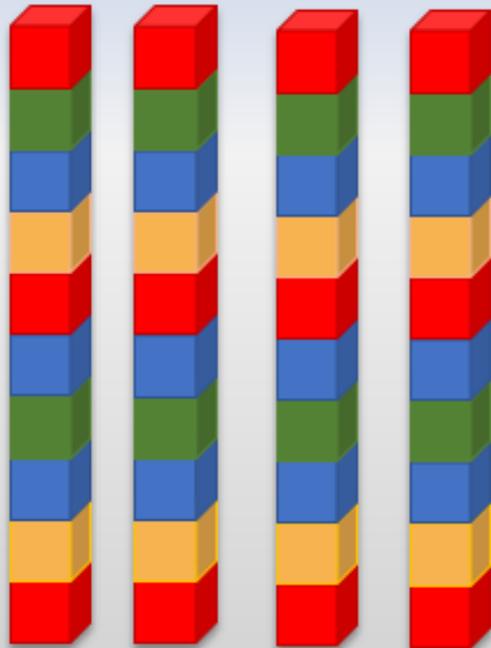


We can count in 10s:

10, 20, 30, 40, 50

Learning Reminders

Begin to make links to division (how many sets of).



$$4 \times 10 = 40$$

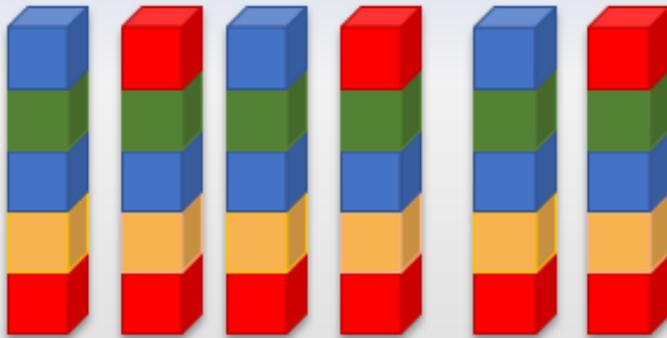
If we had 40 cubes, how many towers of 10 could we make?



We can count in 10s:
10, 20, 30, 40
That would be 4 towers.
Can you see why?

Learning Reminders

Begin to make links to division (how many sets of).



$$6 \times 5 = 30$$

If we had 30 cubes
how many towers of 5
could we make?



We can count in 5s:
5, 10, 15, 20, 25, 30.
That would be 6 towers.
Can you see why?

Practice Sheet Mild

Solving problems

To make their 'towers' of items, children could also use Lego bricks, counters, beads or pieces of dry pasta to solve the problems.

1. How many towers of 5 can I make from 20 cubes?
2. How many towers of 2 can I make from 8 cubes?
3. How many towers of 10 can I make from 30 cubes?
4. How many towers of 5 can I make from 10 cubes?
5. How many towers of 2 can I make from 12 cubes?
6. How many towers of 5 can I make from 25 cubes?
7. How many towers of 5 can I make from 15 cubes?
8. How many towers of 10 can I make from 40 cubes?
9. How many towers of 5 can I make from 30 cubes?

Practice Sheet Hot

Solving problems

To make their 'towers' of items, children could also use Lego bricks, counters, beads or pieces of dry pasta to solve the problems.

1. How many towers of 2 can I make from 30 cubes?
2. How many towers of 10 can I make from 80 cubes?
3. How many towers of 5 can I make from 25 cubes?
4. How many towers of 5 can I make from 40 cubes?
5. How many towers of 2 can I make from 28 cubes?
6. How many towers of 2 can I make from 32 cubes?
7. How many towers of 5 can I make from 45 cubes?
8. How many towers of 10 can I make from 50 cubes?
9. How many towers of 5 can I make from 35 cubes?

Challenge

Marya has 28 cubes.

1. How many towers of 2 can she make? How many towers of 5 can she make? How many towers of 10 can she make? Will there be any cubes left over?
2. How can she make towers of 2, 5 and 10 so that there are no cubes left over?

Practice Sheets Answers

Solving problems (mild)

1. How many towers of 5 can I make from 20 cubes? **4 towers**
2. How many towers of 2 can I make from 8 cubes? **4 towers**
3. How many towers of 10 can I make from 30 cubes? **3 towers**
4. How many towers of 5 can I make from 10 cubes? **2 towers**
5. How many towers of 2 can I make from 12 cubes? **6 towers**
6. How many towers of 5 can I make from 25 cubes? **5 towers**
7. How many towers of 5 can I make from 15 cubes? **3 towers**
8. How many towers of 10 can I make from 40 cubes? **4 towers**
9. How many towers of 5 can I make from 30 cubes? **6 towers**

Solving problems (hot)

1. How many towers of 2 can I make from 30 cubes? **15 towers**
2. How many towers of 10 can I make from 80 cubes? **8 towers**
3. How many towers of 5 can I make from 25 cubes? **5 towers**
4. How many towers of 5 can I make from 40 cubes? **8 towers**
5. How many towers of 2 can I make from 28 cubes? **14 towers**
6. How many towers of 2 can I make from 32 cubes? **16 towers**
7. How many towers of 5 can I make from 45 cubes? **9 towers**
8. How many towers of 10 can I make from 50 cubes? **5 towers**
9. How many towers of 5 can I make from 35 cubes? **7 towers**

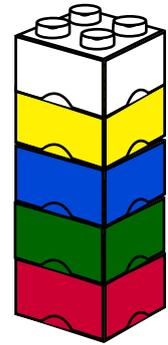
Challenge

1. **14 towers of 2 cubes. 5 towers of 5, with 3 cubes left over. 2 towers of 10, with 8 cubes left over.**
2. **She could make 1 tower of 10 cubes, 2 towers of 5 cubes and 4 towers of 2 cubes.**
 $1 \times 10 + 2 \times 5 + 4 \times 2 = 28$

A Bit Stuck? Find fives



- Choose a number.
- Take this number of Lego™ bricks. Count them really carefully!
- Use them to make towers of five bricks.
- How many towers can you make using all of the bricks?
- Write the number and how many towers you made.

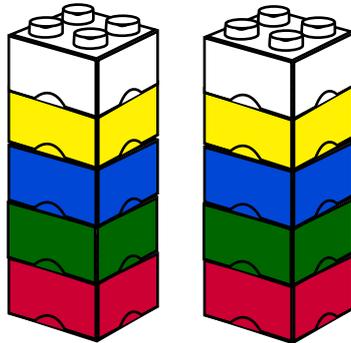


15 bricks makes 3 towers.
20 bricks makes ...

If you don't have Lego™ bricks, then you can use pieces of dry pasta, or counters, or beads to make sets of 5.

Investigation Towers

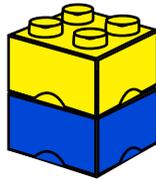
- Use 10 Lego™ bricks to make 2 towers.



$$2 \times 5 = 10$$

- Now use the **same number** of bricks to make towers of 2 bricks. How many towers can you make?

$$\square \times 2 = 10$$



- Now use **20** bricks. How many towers of 2, 5 and 10 can you make?

$$\square \times 2 = 20$$

$$\square \times 5 = 20$$

$$\square \times 10 = 20$$

- Now try **30** bricks!

Challenge

What about 40.....?

Can you solve this **without** the bricks?

If you don't have Lego™ bricks, then you can use pieces of dry pasta, or counters, or beads to make sets of 5.