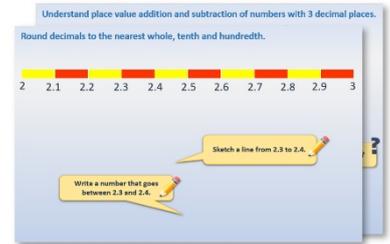


# Week 7, Day 5

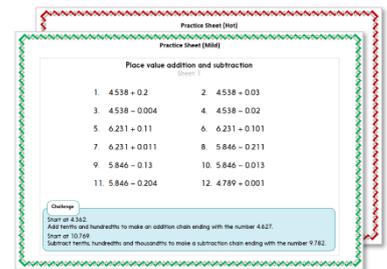
## Fractions of amounts (2)

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

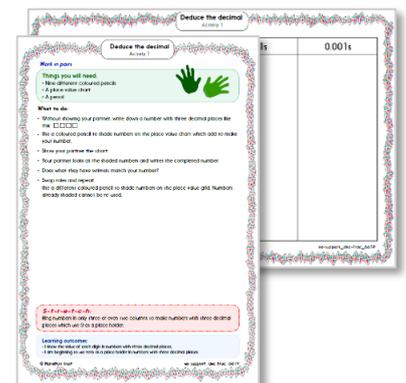
1. Start by reading through the **Learning Reminders**. They come from our *PowerPoint* slides.



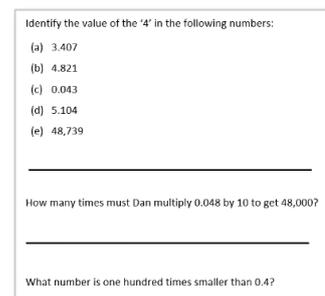
2. Tackle the questions on the **Practice Sheet**. There might be a choice of either **Mild** (easier) or **Hot** (harder)! Check the answers.



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

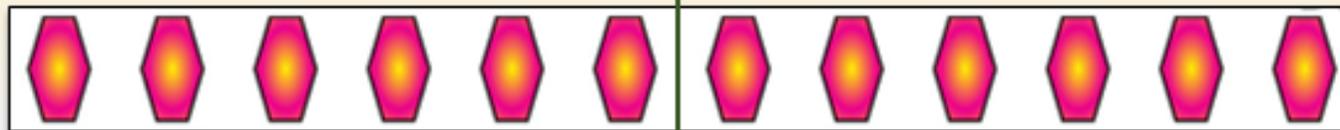


4. Have I mastered the topic? A few questions to **Check your understanding**. Fold the page to hide the answers!



## Learning Reminders

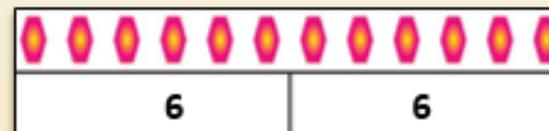
Find unit fractions of quantities and link to division facts.



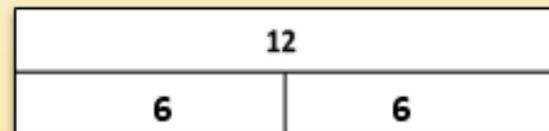
Imagine folding this strip of 12 shapes in **half...**

What is  $\frac{1}{2}$  of 12?

We can also use a **bar model** to show half of 12.



To find  $\frac{1}{2}$ , **divide by 2.**



## Learning Reminders

Find unit fractions of quantities and link to division facts.

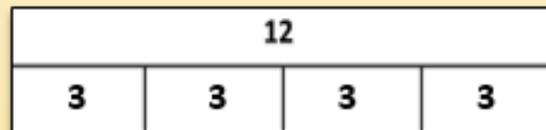


Fold your strip in half and half again so that you have **4 equal parts**. What do we call each part?

What is  $\frac{1}{4}$  of 12?



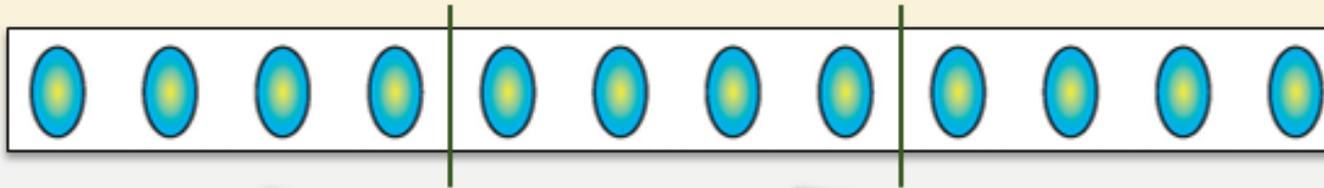
We can also use a **bar model** to show  $\frac{1}{4}$  of 12.



To find  $\frac{1}{4}$ , **divide by 4**.

## Learning Reminders

Find unit fractions of quantities and link to division facts.



Fold your strip into **3 equal parts**.  
What do we call each part?

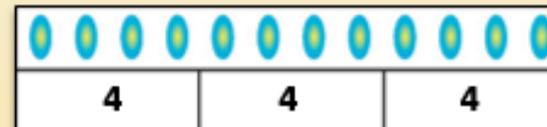
What is  $\frac{1}{3}$  of 12?



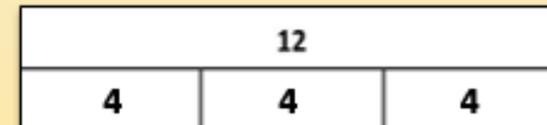
What division fact is linked  
to  $\frac{1}{3}$  of 12 = 4?

$$12 \div 3 = 4$$

We can also use a **bar model** to show  $\frac{1}{3}$  of 12.

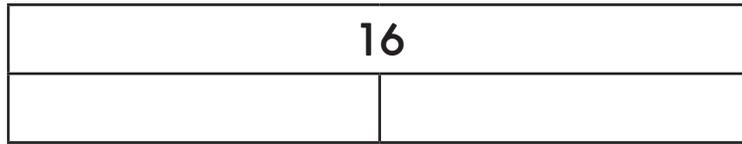


To find  $\frac{1}{3}$ , **divide by 3**.

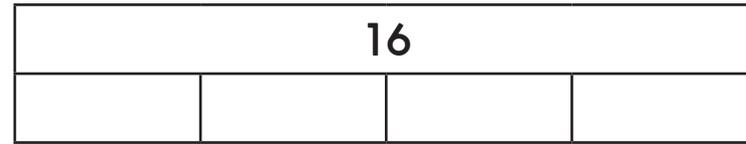


# Practice Sheet Mild

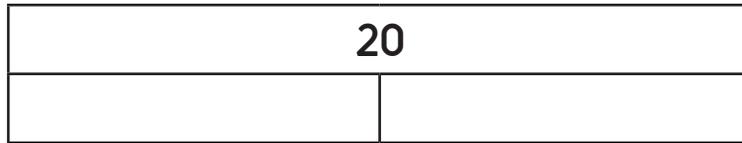
## Fractions practice



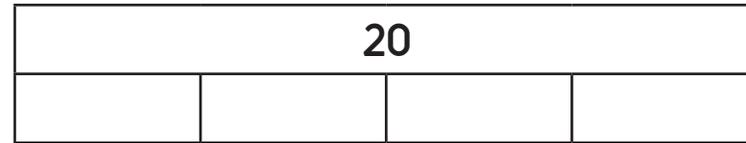
$$\frac{1}{2} \text{ of } 16 = \boxed{\phantom{00}}$$



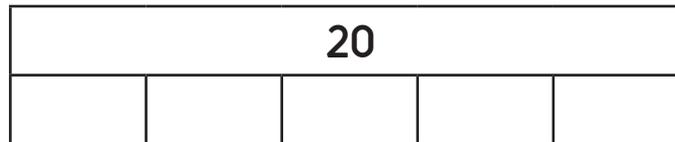
$$\frac{1}{4} \text{ of } 16 = \boxed{\phantom{00}}$$



$$\frac{1}{2} \text{ of } 20 = \boxed{\phantom{00}}$$



$$\frac{1}{4} \text{ of } 20 = \boxed{\phantom{00}}$$



$$\frac{1}{5} \text{ of } 20 = \boxed{\phantom{00}}$$

$$\frac{1}{2} \text{ of } 40 = \boxed{\phantom{00}}$$

$$\frac{1}{4} \text{ of } 40 = \boxed{\phantom{00}}$$

$$\frac{1}{5} \text{ of } 40 = \boxed{\phantom{00}}$$

$$\frac{1}{5} \text{ of } 35 = \boxed{\phantom{00}}$$

$$\frac{1}{2} \text{ of } 14 = \boxed{\phantom{00}}$$

$$\frac{1}{4} \text{ of } 28 = \boxed{\phantom{00}}$$

## Practice Sheet Hot

### Fractions practice

$\frac{1}{2}$  of 16 =

$\frac{1}{4}$  of 16 =

$\frac{1}{8}$  of 16 =

$\frac{1}{2}$  of 20 =

$\frac{1}{4}$  of 20 =

$\frac{1}{5}$  of 20 =

$\frac{1}{10}$  of 20 =

$\frac{1}{2}$  of 30 =

$\frac{1}{3}$  of 30 =

$\frac{1}{5}$  of 30 =

$\frac{1}{10}$  of 30 =

$\frac{1}{2}$  of 40 =

$\frac{1}{4}$  of 40 =

$\frac{1}{5}$  of 40 =

$\frac{1}{8}$  of 40 =

$\frac{1}{10}$  of 40 =

#### Challenge

What different fractions can you find of 36?

## Practice Sheet Answers

### Fractions practice (Mild)

$$\frac{1}{2} \text{ of } 16 = 8$$

$$\frac{1}{4} \text{ of } 16 = 4$$

$$\frac{1}{2} \text{ of } 40 = 20$$

$$\frac{1}{4} \text{ of } 40 = 10$$

$$\frac{1}{5} \text{ of } 40 = 8$$

$$\frac{1}{2} \text{ of } 20 = 10$$

$$\frac{1}{4} \text{ of } 20 = 5$$

$$\frac{1}{5} \text{ of } 20 = 4$$

$$\frac{1}{5} \text{ of } 35 = 7$$

$$\frac{1}{2} \text{ of } 14 = 7$$

$$\frac{1}{4} \text{ of } 28 = 7$$

### Fractions practice (Hot)

$$\frac{1}{2} \text{ of } 16 = 8$$

$$\frac{1}{4} \text{ of } 16 = 4$$

$$\frac{1}{8} \text{ of } 16 = 2$$

$$\frac{1}{2} \text{ of } 20 = 10$$

$$\frac{1}{4} \text{ of } 20 = 5$$

$$\frac{1}{5} \text{ of } 20 = 4$$

$$\frac{1}{10} \text{ of } 20 = 2$$

$$\frac{1}{2} \text{ of } 30 = 15$$

$$\frac{1}{3} \text{ of } 30 = 10$$

$$\frac{1}{5} \text{ of } 30 = 6$$

$$\frac{1}{10} \text{ of } 30 = 3$$

$$\frac{1}{2} \text{ of } 40 = 20$$

$$\frac{1}{4} \text{ of } 40 = 10$$

$$\frac{1}{5} \text{ of } 40 = 8$$

$$\frac{1}{8} \text{ of } 40 = 5$$

$$\frac{1}{10} \text{ of } 40 = 4$$

### Challenge

What different fractions can you find of 36?

Children's answers could include:

$$\frac{1}{2} \text{ of } 36 = 18$$

$$\frac{1}{4} \text{ of } 36 = 9$$

$$\frac{3}{4} \text{ of } 36 = 27$$

$$\frac{1}{3} \text{ of } 36 = 12$$

$$\frac{2}{3} \text{ of } 36 = 24$$

$$\frac{1}{6} \text{ of } 36 = 6$$

$$\frac{2}{6} \text{ of } 36 = 12$$

$$\frac{3}{6} \text{ of } 36 = 18$$

$$\frac{4}{6} \text{ of } 36 = 24$$

$$\frac{5}{6} \text{ of } 36 = 30$$

$$\frac{1}{9} \text{ of } 36 = 4$$

$$\frac{2}{9} \text{ of } 36 = 8$$

$$\frac{4}{9} \text{ of } 36 = 16$$

$$\frac{5}{9} \text{ of } 36 = 20$$

$$\frac{7}{9} \text{ of } 36 = 28$$

$$\frac{8}{9} \text{ of } 36 = 32$$

## A Bit Stuck? Alien adventure

Work in pairs

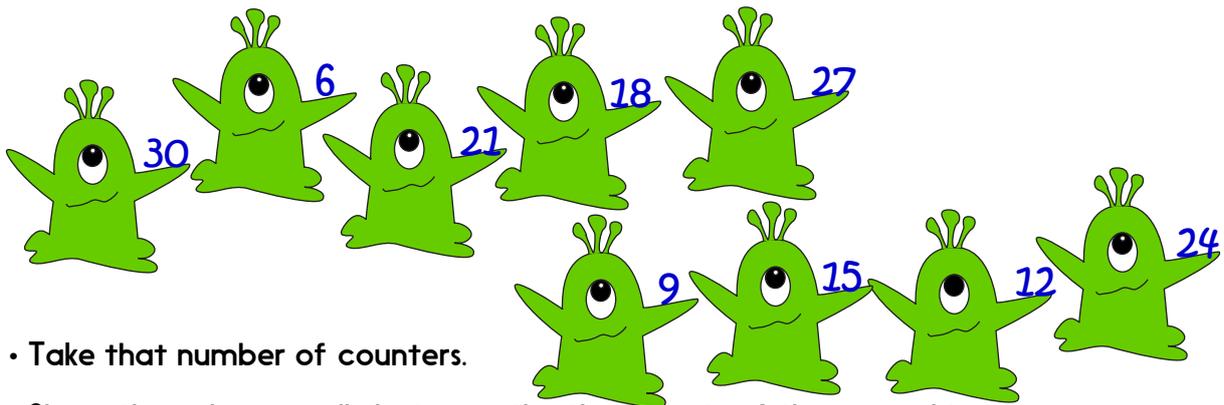
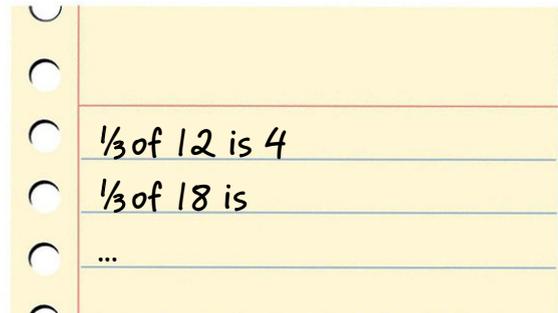
### Things you will need:

- An outline of a spaceship
- 30 counters/pennies
- A pencil



### What to do:

- The aliens are going on an adventure!
- Each  $\frac{1}{3}$  of the spaceship must have the same number of aliens. Otherwise the spaceship will become unstable.
- Choose an alien with a number.



- Take that number of counters.
- Share the cubes equally between the three parts of the spaceship.
- Write the fraction sentence.
- Choose at least four other aliens with numbers to go on an adventure. Each time, work out how many aliens need to be in each  $\frac{1}{3}$  of the spaceship.

### **S-t-r-e-t-c-h:**

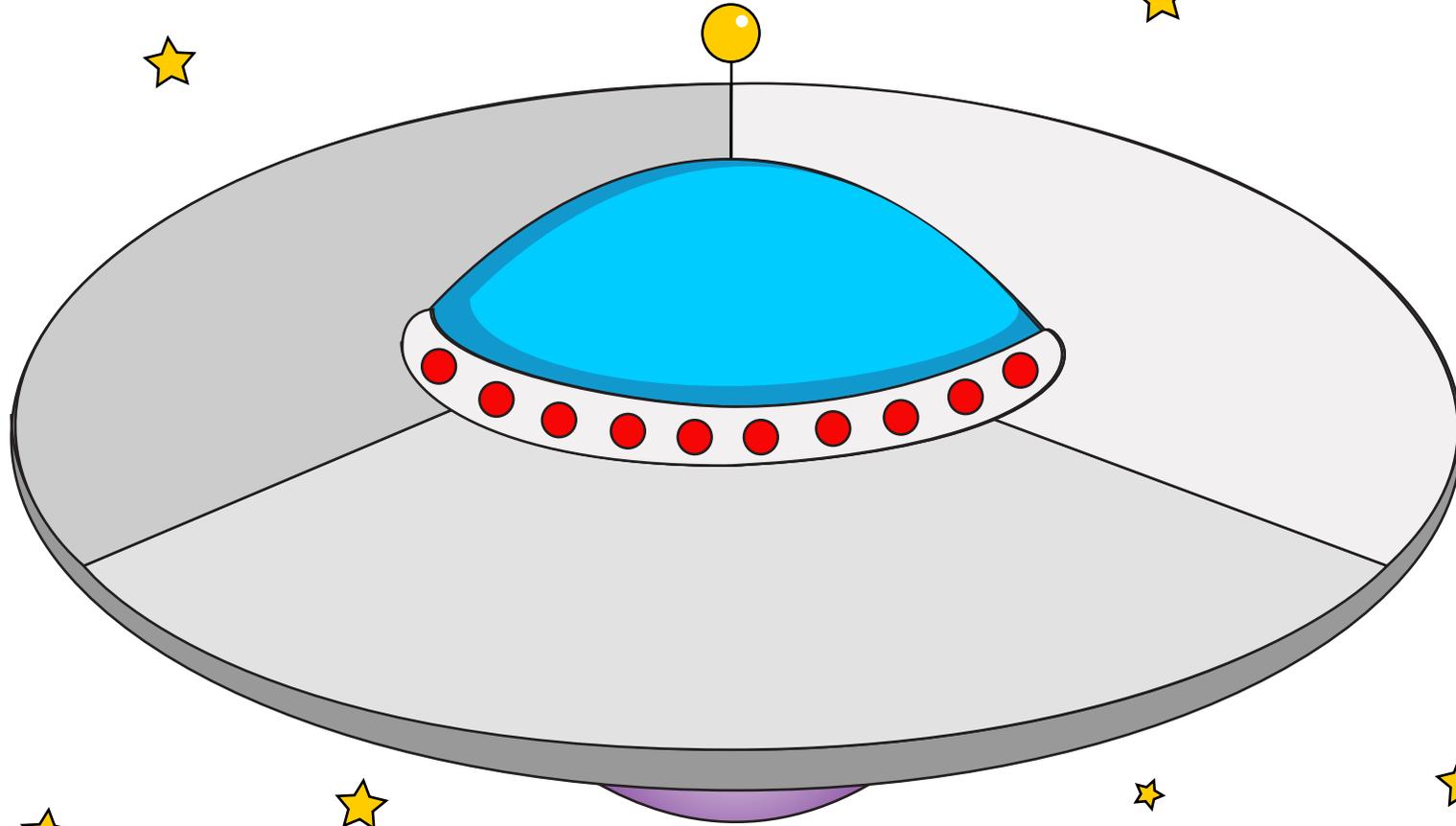
Find  $\frac{1}{3}$  of 12,  $\frac{2}{3}$  of 12 and  $\frac{3}{3}$  of 12.

Find  $\frac{1}{3}$ ,  $\frac{2}{3}$  and  $\frac{3}{3}$  of another number of aliens.

### Learning outcomes:

- I can understand that thirds are equal parts of a whole.
- I can find  $\frac{1}{3}$  of numbers (whole number answers)
- I am beginning to find  $\frac{2}{3}$  of numbers (whole number answers).

**A Bit Stuck?**  
**Alien adventure**



## Check your understanding: Questions

Complete each sentence:

$$\frac{1}{3} \text{ of } 15 = \square$$

$$\frac{1}{5} \text{ of } 40 = \square$$

$$\frac{1}{6} \text{ of } 24 = \square$$

---

Draw three bar models, one to represent each of these fraction problems.

$$\frac{1}{3} \text{ of } 24$$

$$\frac{1}{8} \text{ of } 24$$

$$\frac{1}{5} \text{ of } 30$$

---

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**Answers on next page**

## Check your understanding:

### Answers

Complete each sentence:

$$\frac{1}{3} \text{ of } 15 = 5$$

$$\frac{1}{5} \text{ of } 40 = 8$$

$$\frac{1}{6} \text{ of } 24 = 4$$

---

Draw three bar models, one to represent each of these fraction problems. A common error is to write the denominator number rather than the fractional amount in the bar model cells.

$$\frac{1}{3} \text{ of } 24 = 8$$



$$\frac{1}{8} \text{ of } 24 = 3$$



$$\frac{1}{5} \text{ of } 30 = 6$$

