

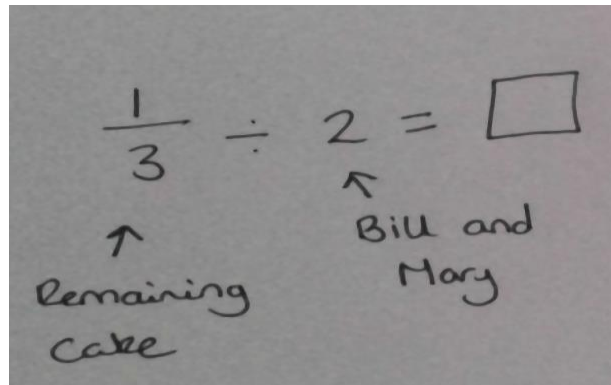
- **Objective:** Divide proper fractions by whole numbers e.g.  $\frac{1}{3} \div 2 = \frac{1}{6}$

### Year 6 Task:

Mary and Bill wanted a piece of chocolate cake each. They went to cut a piece and noticed that there was only a third of the whole chocolate cake left. Bill suggested that they simply share the remaining cake between them.

What fraction of the whole cake did Bill eat?

### Worked example



$$\frac{1}{3} \div 2 = \square$$

↑  
Remaining  
cake

↑  
Bill and  
Mary

Whole cake					
Cake left = $\frac{1}{3}$		Already eaten		Already eaten	
Bill's Piece $\frac{1}{6}$	Mary's Piece $\frac{1}{6}$				

$$\frac{1}{3} \div 2 = \frac{1}{6}$$

### Variation

Mary and Bill wanted a piece of chocolate cake each. They went to cut a piece and noticed that there was only  $\frac{1}{5}$  of the whole chocolate cake left. Bill suggested that they simply share the remaining cake between them.

What fraction of the whole cake did Bill eat?

*Show your working here:*

Answer: Bill ate  $\frac{1}{10}$  of the cake

Mary and Bill wanted a piece of chocolate cake each. They went to cut a piece and noticed that there was only  $\frac{1}{4}$  of the whole chocolate cake left. Bill suggested that they simply share the remaining cake between them.

What fraction of the whole cake did Bill eat?

*Show your working here:*

Answer: Bill ate  $\frac{1}{8}$  of the cake