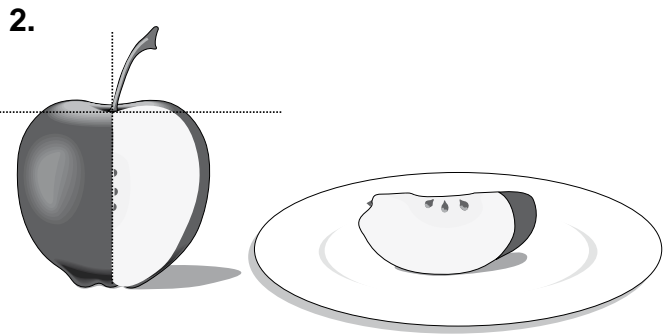
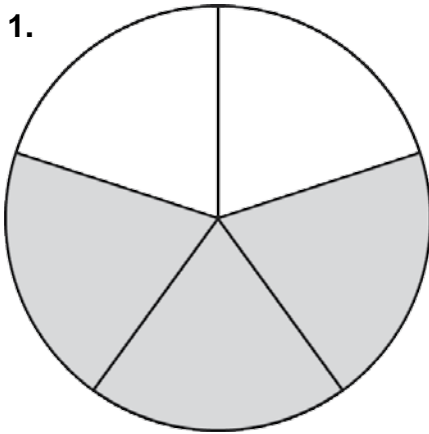


Activity 1

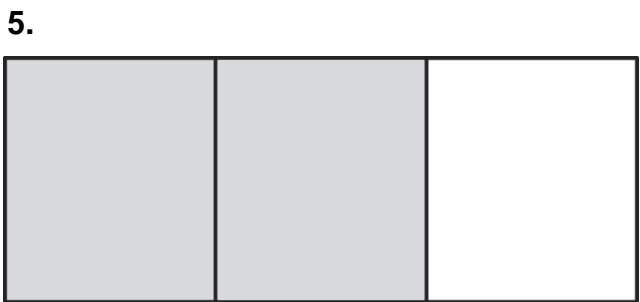
Match the fractions in the box to the diagrams. Be careful! There are five diagrams but seven fractions to choose from.

- |               |               |               |               |               |                |               |
|---------------|---------------|---------------|---------------|---------------|----------------|---------------|
| $\frac{1}{2}$ | $\frac{3}{4}$ | $\frac{1}{4}$ | $\frac{3}{5}$ | $\frac{1}{8}$ | $\frac{7}{10}$ | $\frac{2}{3}$ |
|---------------|---------------|---------------|---------------|---------------|----------------|---------------|



3. 

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## Activity 2

How do we work out fractions? Look at this simple explanation.

What is  $\frac{2}{3}$  of 18?

- Start by dividing ( $\div$ ) 18 by 3.
- So 3 into 18 = 6. So  $\frac{1}{3}$  of 18 is 6.
- Now multiply ( $\times$ ) 6 by 2.
- $6 \times 2 = 12$ .
- So  $\frac{2}{3}$  of 18 = 12.

Now you try it with these sums.

1.  $\frac{1}{2}$  of 14 =
2.  $\frac{3}{4}$  of 12 =
3.  $\frac{2}{5}$  of 25 =
4.  $\frac{5}{6}$  of 18 =
5.  $\frac{4}{7}$  of 21 =

## Activity 3

Read each situation and circle the correct answer.

1. Today is Jenny's birthday party. She sent out 12 invitations and 8 of her friends came. What is the correct fraction to describe the number of friends who came vs. invitations?

a)  $\frac{1}{4}$       b)  $\frac{1}{2}$       c)  $\frac{2}{3}$

2. Jenny had a cake. She cut it into eight slices, but only six people had a piece. How much of the cake is left?

a)  $\frac{1}{4}$       b)  $\frac{1}{2}$       c)  $\frac{2}{3}$

3. She has three bottles of cola and eight glasses. Each bottle contains enough cola to fill three glasses. She fills all eight glasses. How much cola does she have left in the third bottle?

a)  $\frac{1}{3}$       b)  $\frac{2}{3}$       c)  $\frac{1}{9}$

4. At nine o'clock three of her friends have to leave. So what fraction of her friends stay?

a)  $\frac{1}{4}$       b)  $\frac{3}{8}$       c)  $\frac{5}{8}$

5. Last year Jenny invited 35 people to her party.  $\frac{3}{5}$  of these turned up to the party. How many was that?

a) 15      b) 21      c) 25

**Fractions**

Adrian Tennant

**Level**

Elementary/Pre-intermediate

**Topic**

Fractions

**Subject(s)**

Maths

**Time (approx)**

Activity 1: 10 – 15 minutes

Activity 2: 10 – 15 minutes

Activity 3: 10 – 15 minutes

**Preparation**

All activities: One photocopy for each student.

**Activity 1**

- 1 On the board draw a circle and divide it in half with a line down the middle and shade in one part.
- 2 Point to the circle and ask students if they can tell you how much of the circle is shaded. Elicit *half*.
- 3 Tell the students you will give them a worksheet with some pictures. They need to look at the pictures and decide what fraction is being shown. The fractions are in a box and they should match each fraction to the correct picture.
- 4 Hand out the worksheet.
- 5 Give students a few minutes to do the activity.
- 6 Monitor and help where necessary (but don't tell the students the answers).
- 7 Put the students in pairs and ask them to check their answers together.
- 8 Check the answers as a class.
- 9 Finally, ask the students to draw two pictures (pizza slices) to show the other two fractions ( $\frac{3}{4}$  and  $\frac{1}{8}$ ).

**Answers**

- 1  $\frac{3}{5}$
- 2  $\frac{1}{4}$
- 3  $\frac{7}{10}$
- 4  $\frac{1}{2}$
- 5  $\frac{2}{3}$

**Activity 2**

- 1 Hand out the worksheet, but ask the students to cover up the bottom part where it says *Now you try it with these sums*.
- 2 Explain that you are going to work through the explanation on the worksheet.
- 3 Use the board and go through the example on the worksheet step-by-step. Make sure all the students follow either looking at their worksheet or at the board.
- 4 Now ask the students to try and do the five sums (a-e) on the worksheet. Remind them that if they get stuck they can look back at the example.
- 5 Monitor and help where necessary (but don't tell the students the answers).
- 6 Put the students in pairs and ask them to check their answers together.
- 7 Check the answers as a class.

**Answers**

- 1 7
- 2 9
- 3 10
- 4 15
- 5 12

**Activity 3**

- 1 Hand out the worksheets.
- 2 Ask the students to look at each situation and choose the correct answer.
- 3 Give students a few minutes to do the activity.
- 4 Monitor and help where necessary (but don't tell the students the answers).
- 5 Put the students in pairs and ask them to check their answers together.
- 6 Check the answers as a class.

**Note:** This activity tries to contextualise fractions by using a real-life situation that students will probably be familiar with.

**Answers**

- 1 c)  $\frac{2}{3}$
- 2 a)  $\frac{1}{4}$
- 3 a)  $\frac{1}{3}$
- 4 c)  $\frac{5}{8}$
- 5 b) 21

**Useful websites**

Here is a selection of maths websites which deal with fractions. The first is the easiest with each one getting more complex in terms of the types of fractions it deals with.

[http://www.bbc.co.uk/schools/ks3bitesize/maths/number/fractions\\_1\\_intro.shtml](http://www.bbc.co.uk/schools/ks3bitesize/maths/number/fractions_1_intro.shtml)

[http://www.bbc.co.uk/schools/ks3bitesize/maths/number/fractions\\_2\\_intro.shtml](http://www.bbc.co.uk/schools/ks3bitesize/maths/number/fractions_2_intro.shtml)

<http://www.bbc.co.uk/schools/gcsebitesize/maths/number/fractionsrev1.shtml>

<http://www.mathsnet.net/fractions/index.html>

<http://www.bbc.co.uk/dna/h2g2/A583355>