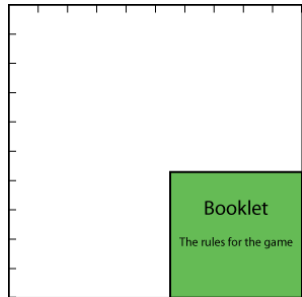


This game has a number of discs in seven different colours. They are kept in a flat square box with a square hole for each disc. There are 10 holes in each row and 10 in each column. So, there would be 100 discs altogether, except that there is a square booklet which is kept in a corner of the box in place of some of the holes. We haven't drawn a grid to show all the holes because that would give the answer away!



There is a different number of discs of each of the seven colours.



Half ( $\frac{1}{2}$ ) of the discs are red,  $\frac{1}{4}$  are black and  $\frac{1}{12}$  are blue.

One complete row (of 10 holes) of the box is filled with all the blue and green discs.



One of the shortened rows (that is where the booklet is) is exactly filled with all the orange discs.



Two of the shortened rows are filled with some of the red discs and the rest of the red discs exactly fill a number of complete rows (of 10) in the box.



There is just one white disc and all the rest are yellow.

How many discs are there altogether?  
What fraction of them are orange?  
What fraction are green? Yellow? White?



$$\frac{6}{5} \quad \frac{3}{5} \quad \frac{3}{4}$$

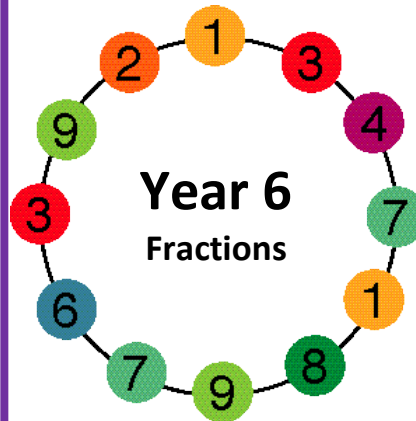
Write these fractions in order, starting with the **smallest**.



smallest



**Extra challenge:**  
Can you add some more fractions to the list? Perhaps some smaller ones and larger ones?



**Challenge linked to Home Learning**

1. What fraction/percentage of the Earth's surface is made up of:

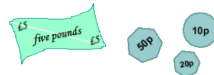
- Land
- Water
- Forest
- Desert

Make an estimate before you find out the actual answers- how close were you?

2. What fraction/percentage of the land is covered by Asia?

**Would you rather...**

Have 10% of £5 or 75% of 80p?



Be given 60% of 2 pizzas or 26% of 5 pizzas?

Be bitten by 15% of 120 mosquitoes or 8% of 250 mosquitoes?



Skip using a rope which is 54% of 105cm long, or 88% of 2.75m long?



Sit in a traffic jam for 33% of 2 hours or 44% of 1hr 40mins?



**Websites/Games/Useful Links**

<https://www.topmarks.co.uk/maths-games/7-11-years/fractions-and-decimals>

<http://www.scottle.edu.au/ec/viewing/L2801/L2801/index.html#>

