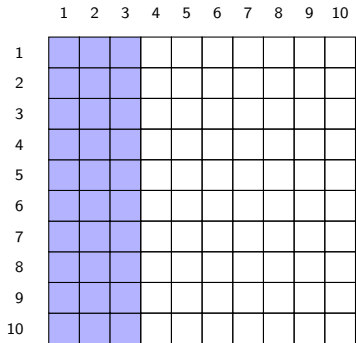


# Percentages: Starters

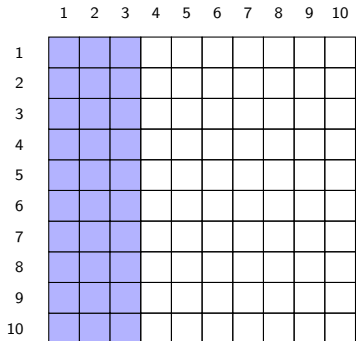
# Starter



\_\_\_ squares out of \_\_\_ are shaded

1. In the diagram how many squares are shaded? \_\_\_
2. How many total squares are there? \_\_\_
3.  $70 + 30 =$  \_\_\_
4.  $25 \times 4 =$  \_\_\_
5. What fraction of the square is shaded:
6. "Per cent" means "out of \_\_\_".
7. The shaded fraction = \_\_\_%
8. Write  $\frac{1}{2}$  as a percentage. \_\_\_
9. Write  $\frac{1}{4}$  as a percentage. \_\_\_
10. Write  $\frac{5}{4}$  as a percentage. \_\_\_

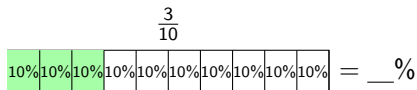
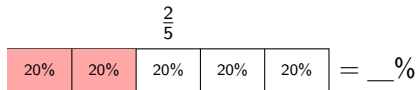
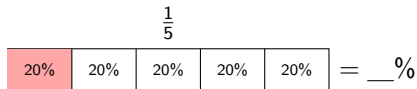
# Starter



30 squares out of 100 are shaded

1. In the diagram how many squares are shaded? 30
2. How many total squares are there? 100
3.  $70 + 30 = \underline{100}$
4.  $25 \times 4 = \underline{100}$
5. What fraction of the square is shaded:  $\frac{30}{100}$
6. "Per cent" means "out of 100".
7. The shaded fraction = 30%
8. Write  $\frac{1}{2}$  as a percentage. 50%
9. Write  $\frac{1}{4}$  as a percentage. 25%
10. Write  $\frac{5}{4}$  as a percentage. 125%

# Starter



1.  $3 \times 20 = \underline{\quad}$       6.  $\frac{?}{10} = 70\%$

2.  $7 \times 10 = \underline{\quad}$       7.  $\frac{1}{?} = 25\%$

3.  $\frac{1}{5} = \underline{\quad}\%$

8.  $\frac{2}{25} = \underline{\quad}\%$

4.  $\frac{2}{5} = \underline{\quad}\%$

9.  $\frac{7}{8} = \underline{\quad}\%$

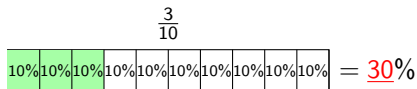
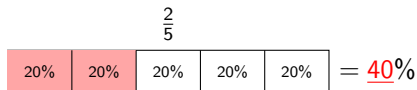
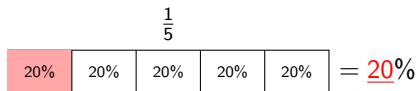
5.  $\frac{3}{10} = \underline{\quad}\%$

10.  $\frac{5}{3} = \underline{\quad}$

11. Complete the conversion:

$$\frac{?}{4} = \frac{75}{?} = 75\%$$

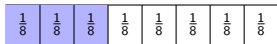
# Starter



- $3 \times 20 = \underline{60}$
- $7 \times 10 = \underline{70}$
- $\frac{1}{5} = \underline{20\%}$
- $\frac{2}{5} = \underline{40\%}$
- $\frac{3}{10} = \underline{30\%}$
- $\frac{7}{10} = 70\%$
- $\frac{1}{4} = 25\%$
- $\frac{2}{25} = \underline{8\%}$
- $\frac{7}{8} = \underline{87.5\%}$
- $\frac{5}{3} = \underline{166.\dot{6}\%}$
- Complete the conversion:  
 $\frac{3}{4} = \frac{75}{100} = 75\%$

# Starter

$$\frac{1}{8} = 12.5\%$$

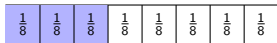


## Questions

1. Write  $\frac{1}{2}$  as a percentage. \_\_\_\_\_
2. Write  $\frac{3}{10}$  as a percentage. \_\_\_\_\_
3. What does “per cent” mean?  
\_\_\_\_\_
4. Convert  $\frac{3}{8}$  to a percentage. \_\_\_\_\_
5. What percentage of the second bar is shaded orange? \_\_\_\_\_
6. Convert  $\frac{2}{3}$  to a percentage. \_\_\_\_\_
7. What is  $\frac{4}{3}$  as a percentage, round your percentage to one decimal place.  
\_\_\_\_\_
8. What fraction does 0.1% equal?
9. What fraction does 0.003% equal?

# Starter

$$\frac{1}{8} = 12.5\%$$



## Questions

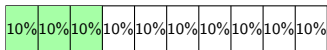
1. Write  $\frac{1}{2}$  as a percentage. 50%
2. Write  $\frac{3}{10}$  as a percentage. 30%
3. What does “per cent” mean?  
out of 100
4. Convert  $\frac{3}{8}$  to a percentage. 37.5%
5. What percentage of the second bar is shaded orange? 33.3%
6. Convert  $\frac{2}{3}$  to a percentage. 66.6%
7. What is  $\frac{4}{3}$  as a percentage, round your percentage to one decimal place.  
133.3%
8. What fraction does 0.1% equal?  $\frac{1}{1000}$
9. What fraction does 0.003% equal?  
 $\frac{3}{100,000}$

# Starter

1.  $50\% + 50\% = \underline{\hspace{2cm}}$  2.  $25\% + 25\% = \underline{\hspace{2cm}}$

3. Write  $\frac{1}{5}$  as a percentage:  $\underline{\hspace{2cm}}$

4. Complete the sum represented by the diagram:



$$3 \times ?\% + \frac{1}{7} = 30\% + 25\% = 55\%$$



5.  $20\% + \frac{3}{10} = \underline{\hspace{2cm}}$  8. Which is larger:  $\frac{3}{8}$  or 40%?



6.  $\frac{1}{2} + 15\% = \underline{\hspace{2cm}}$

7.  $45\% + \frac{1}{5} = \underline{\hspace{2cm}}$  9.  $\frac{2}{5} + \frac{3}{10} + 20\% = \underline{\hspace{2cm}}$

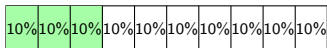
10. A class finishes  $\frac{1}{3}$  of a project, then 20% more. What percentage have they completed in total?

# Starter

1.  $50\% + 50\% = \underline{100\%}$  2.  $25\% + 25\% = \underline{50\%}$

3. Write  $\frac{1}{5}$  as a percentage: 20%

4. Complete the sum represented by the diagram:



$$3 \times 10\% + \frac{1}{4} = 30\% + 25\% = 55\%$$



5.  $20\% + \frac{3}{10} = \underline{50\%}$  8. Which is larger:  $\frac{3}{8}$  or 40%?

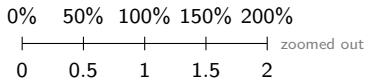
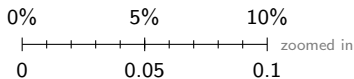
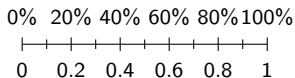
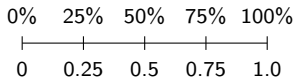


6.  $\frac{1}{2} + 15\% = \underline{65\%}$  40% ( $\frac{3}{8} = 37.5\%$ )

7.  $45\% + \frac{1}{5} = \underline{65\%}$  9.  $\frac{2}{5} + \frac{3}{10} + 20\% = \underline{90\%}$

10. A class finishes  $\frac{1}{3}$  of a project, then 20% more. What percentage have they completed in total?  $33.\dot{3}\% + 20\% = 53.\dot{3}\%$

# Starter



1.  $0.6 + 0.4 = \underline{\quad}$     2.  $0.25 \times 4 = \underline{\quad}$

3. Write  $\frac{3}{10}$  as a decimal:  $\underline{\quad}$

4. Write  $\frac{7}{100}$  as a decimal:  $\underline{\quad}$

5.  $0.5 = \underline{\quad}\%$       9.  $0.125 = \underline{\quad}\%$

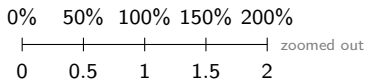
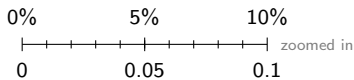
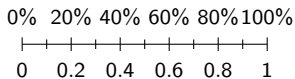
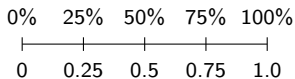
6.  $0.3 = \underline{\quad}\%$       10.  $1.4 = \underline{\quad}\%$

7.  $0.75 = \underline{\quad}\%$     11.  $0.005 = \underline{\quad}\%$

8.  $0.08 = \underline{\quad}\%$     12.  $0.92 \rightarrow \underline{\quad}\%$

13. *Challenge:* Convert 0.0625 to a %, then write as a fraction in simplest form.

# Starter



1.  $0.6 + 0.4 = \underline{1}$     2.  $0.25 \times 4 = \underline{1}$

3. Write  $\frac{3}{10}$  as a decimal: 0.3

4. Write  $\frac{7}{100}$  as a decimal: 0.07

5.  $0.5 = \underline{50\%}$       9.  $0.125 = \underline{12.5\%}$

6.  $0.3 = \underline{30\%}$       10.  $1.4 = \underline{140\%}$

7.  $0.75 = \underline{75\%}$     11.  $0.005 = \underline{0.5\%}$

8.  $0.08 = \underline{8\%}$       12.  $0.92 \rightarrow \underline{92\%}$

13. *Challenge:* Convert 0.0625 to a %, then write as a fraction in simplest form.  $6.25\% = \frac{1}{16}$