### 3.4.20 Friday place value year 3

Estimation is finding a number that is close enough to the right answer.
You are not trying to get the exact right answer

## How to Estimate

We can estimate answers by rounding to the nearest multiple of 10 .

## Rounding reminder

When we round to the nearest 10 we look at the digit in the $1 s$ column
If it is 5 or higher you round up
If it is 4 or lower you round down
so 39 would round up to 40 and 34 would round down to 30
Round these numbers to nearest 10 e.g. $12=10 \quad 123=120$
A. 29
B. 17
C. 46
D. 126
E. 249
F. 456


## Solving problems using rounding

- $550+268: 268$ is nearly 270 so an estimate is $550+270 \approx 820$

When we write an estimation number sentence we use the $\approx$ instead of the $=\operatorname{sign}$ to show that that this is an estimate.

| 1. Which of these calculations give an answer of about 50? $\begin{aligned} & 34+17 \\ & 13+45 \\ & 28+31 \\ & 45+18 \end{aligned}$ | 2. Which of these calculations give an answer of about 60? $\begin{aligned} & 37+23 \\ & 31+16 \\ & 17+53 \\ & 39+29 \end{aligned}$ | 3. Which of these calculations give an answer of about 80? $\begin{aligned} & 72+25 \\ & 47+31 \\ & 29+32 \\ & 35+27 \end{aligned}$ | 4. Which of these calculations give an answer of about 100? $\begin{aligned} & 87+26 \\ & 14+98 \\ & 82+17 \\ & 45+67 \end{aligned}$ | 5. Which of these calculations give an answer of about 120? $\begin{aligned} & 84+23 \\ & 46+76 \\ & 98+32 \\ & 53+56 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| 6. Which of these calculations give an answer of about 150? $\begin{gathered} 76+77 \\ 63+76 \\ 125+41 \\ 95+43 \end{gathered}$ | 7. Which of these calculations give an answer of about 200? $\begin{aligned} & 120+60 \\ & 50+180 \\ & 130+70 \\ & 140+160 \end{aligned}$ | 8. Which of these calculations give an answer of about 300? $\begin{gathered} 150+175 \\ 205+90 \\ 105+175 \\ 75+220 \end{gathered}$ | 9. Which of these calculations give an answer of about 400? $\begin{aligned} & 234+129 \\ & 294+213 \\ & 301+102 \\ & 241+156 \end{aligned}$ | 10. Which of these calculations give an answer of about 110? $\begin{aligned} & 87+26 \\ & 14+98 \\ & 82+17 \\ & 45+67 \end{aligned}$ |

