Mathematics

Integer Addition and Subtraction:
Rounding to estimate

Ms Jeremy



OAK
NATIONAL
ACADEMY

Lesson agenda

Warm Up: Partitioning recap

↓

New Learning: Rounding recap

↓

Let's Explore: Rounding to estimate

↓

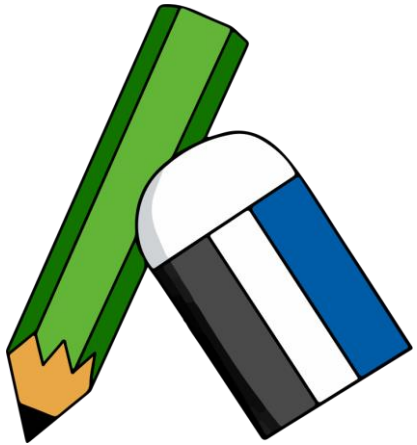
Develop Learning: Applying rounding

↓

Independent Task and Quiz

You will need...

Pencil	Paper





Warm Up: Partitioning



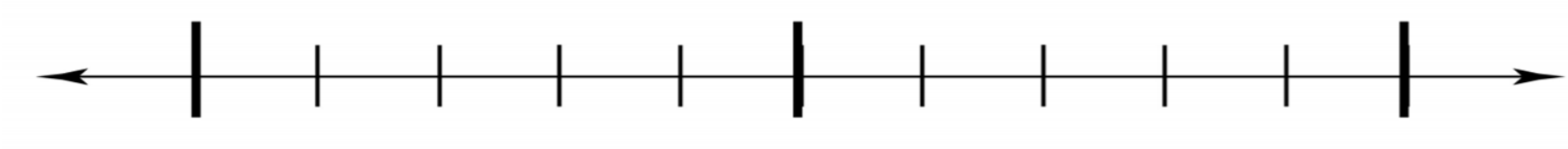
How could I use partitioning to solve the following equation?

673 000 + 24 000 =

Recap of Rounding

Can you round 47 351 to:
i) the nearest 10 000?
ii) the nearest 1000?

47 351



Pause the video to complete your task

Resume once you're finished

Can you round 183 625 to:
i) the nearest 10 000?
ii) the nearest 1000?

183 625



183 625 is approximately 180 000 (n.m. 10 000)
183 625 is approximately 184 000 (n.m. 1000)

Rounding to estimate

Could we use rounding to the nearest 10 000 and 1000 to estimate an answer?

$$64\,038 + 51\,182 \approx$$



Pause the video to complete your task

Resume once you're finished

Can you use rounding to the nearest 10 000 and 1000 to estimate an answer?

$$581\,823 + 233\,872 \approx$$

$580\,000 + 230\,000 = 810\,000$

$582\,000 + 234\,000 = 816\,000$

Applying rounding to estimate

Which rounded equation would you choose to use to estimate? Why?

Would the actual answer be greater or less than the estimate?

58 943 – 12 875 ≈
59 000 – 13 000
60 000 – 13 000
60 000 – 10 000
58 900 – 12 900

Pause the video to complete your task

Resume once you're finished

What is the total approximate population of Cambridge and Edinburgh?

123 945 + 495 360

100 000 + 500 000 = 600 000

120 000 + 500 000 = 620 000

124 000 + 495 000 = 619 000

123 900 + 495 400 = 619 300

Pause the video to complete your task

Resume once you're finished

Independent Task

Use rounding (n.m. 10 000 and 1000) to estimate the answers to the following:

1. 563 219 + 144 832 =
2. 623 914 + 182 453 =
3. 791 201 + 128 522 =
4. 612 733 + 335 029 =
5. Would you be more likely to round to the nearest 10 000 or 1000 when estimating? Why?

Answers

1. 563 219 + 144 832 = **700 000 / 708 000**
2. 623 914 + 182 453 = **800 000 / 806 000**
3. 791 201 + 128 522 = **920 000 / 920 000**
4. 612 733 + 335 029 = **950 000 / 948 000**
5. Rounding to the nearest 10 000 : **easier to calculate.**

   Rounding to the nearest 1000: **increased accuracy.**

Share your work with Oak National

If you'd like to, please ask your parent or carer to share your work on Twitter tagging **@OakNational** and **#LearnwithOak**



Now complete the quiz!

