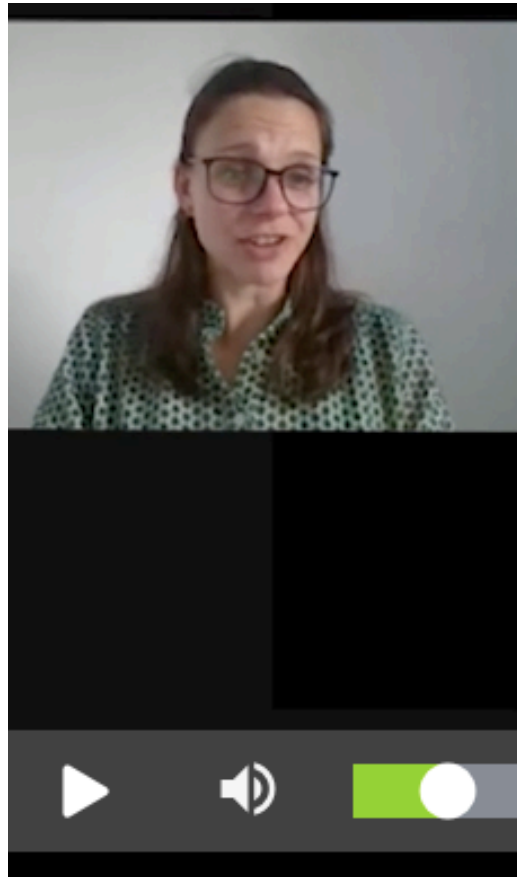# Maths Lesson Year 3

Write your date and title in your book

9.2.21
Can I solve 3 digit addition calculations?
(Where I have to regroup twice)

This is Miss Brinkworth.

She is going to remind you how to do column addition where you have to regroup twice in a video.

Click on this video link to watch her lesson.
Pause the lesson whenever you need to.

https://classroom.thenational.academy/lessons/adding-two-3-digit-numbers-regrouping-in-multiple-columns-74u3ce?step=2&activity=video

The activities from her lesson are on the following slides:

If you can't work the video, just do the slides without it.

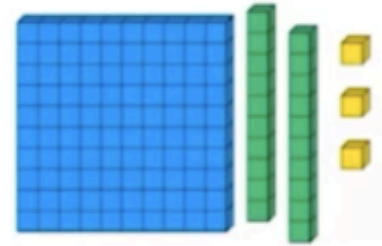You can use online dienes using the website shown, draw them or make some using cut up bits of paper/straws/counters/money etc.

🔥 This warm up activity is on the video. 🔥

Warm up Decide which ones you can answer mentally and which need column addition

583 + 262 = ☐

135 + 224 = ☐

435 + 242 = ☐

476+ 353 = ☐

Answers!

Warm up Decide which ones you can answer mentally and which need column addition

583 + 262 = **845**

135 + 224 = **359**

435 + 242 = **677**

476 + 353 = **829**

These two calculations needed regrouping and so needed column addition.

This is tricky!

Which of these is the odd one out and why?

134 + 347 =   176 + 247 =   372 + 253 =

Answer:

Which of these is the odd one out and why?

134 + 347 =   176 + 247 =   372 + 253 =
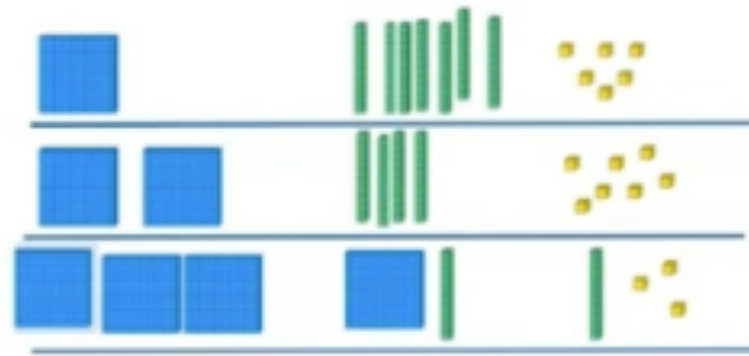
This calculation needed you to regroup <u>twice.</u>   These calculations only need you to regroup <u>once.</u>

Work this out:

You can use dienes or the written method.

Column addition 176 + 247 =

What should you do about these two columns?
Answer on the next slide.

Answer: That's right. You need to carry across on those two columns. (The video calls it regrouping)

Column addition 176 + 247 =
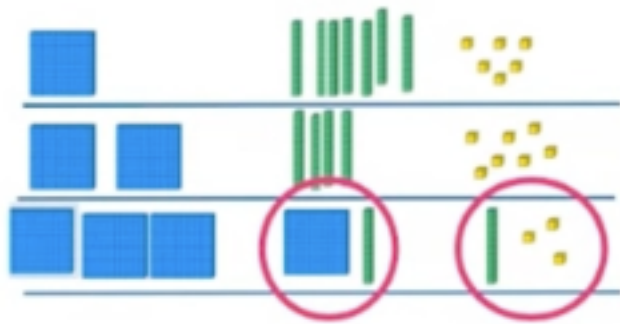
```
    1 7 6
  + 2 4 7
    4 2 3
    1 1
```

Regrouping to the next column.

Now do this one:

Column addition 625 + 426 =

625 + 426 =

What is this amount?

What do you need to do here?
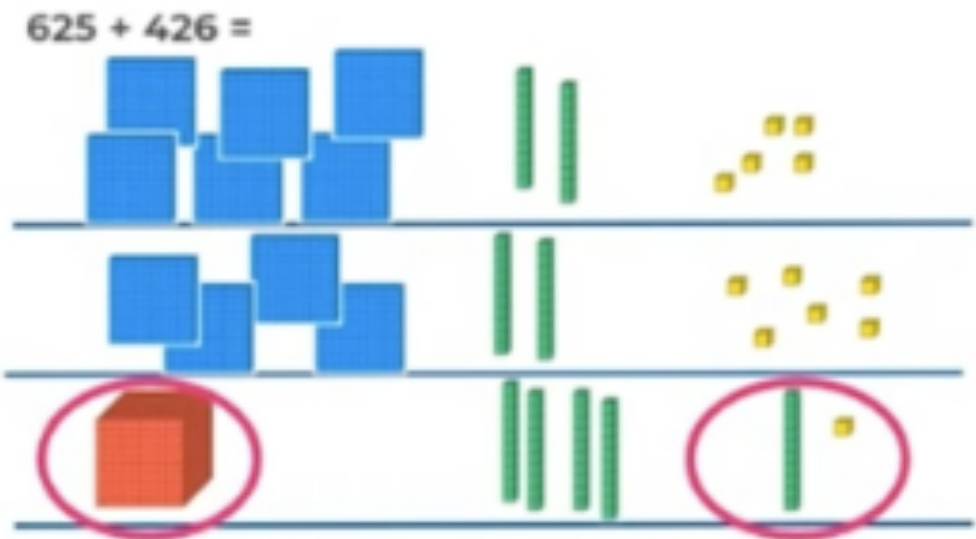
What will go here?

Answers!

Column addition 625 +426 =

625 + 426 =

This shows 1000

You need to regroup here
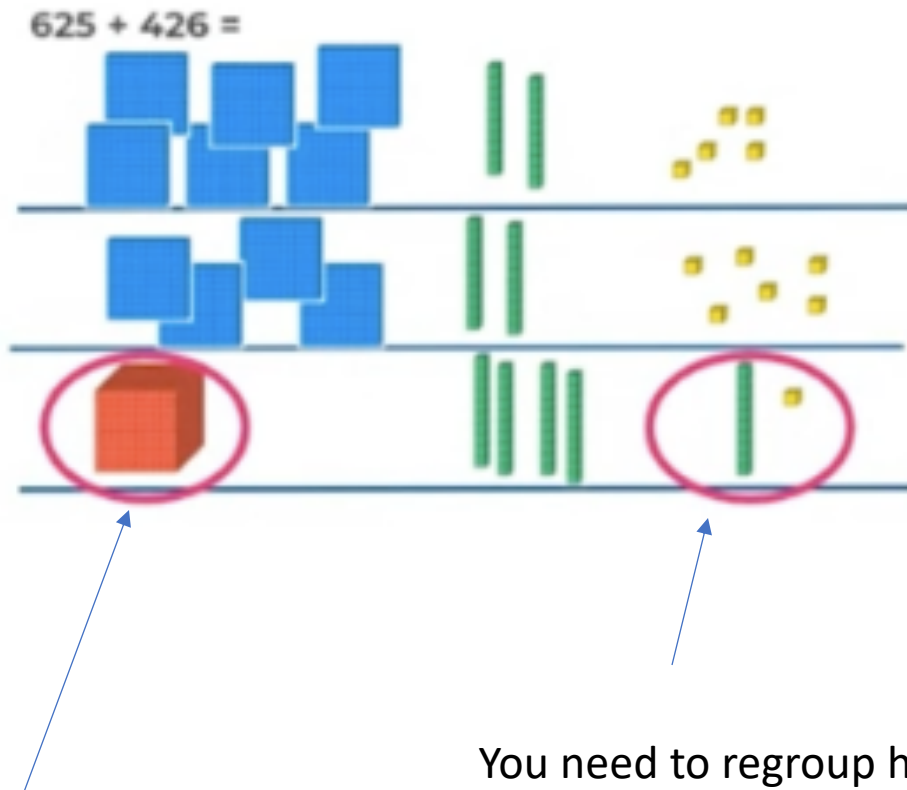
		6	2	5			
	+	4	2	6			
1	0	5	1				
			1				

Now do this one:
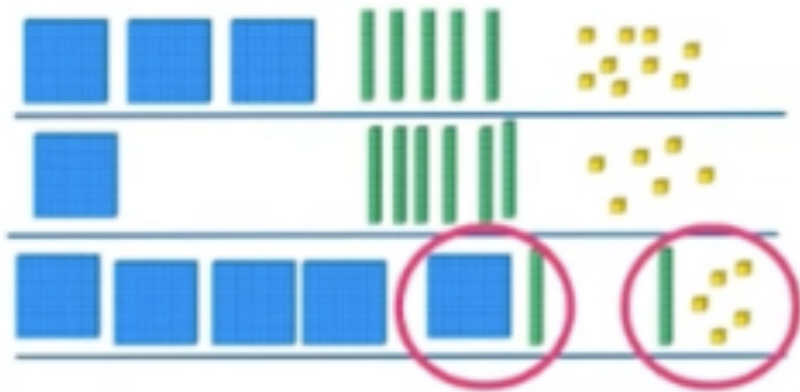
Column addition 359 + 166 =

Remember to regroup twice!

Answer on the next page.

Answer!

Column addition 359 + 166 =

$$
\begin{array}{r}
3\ 5\ 9 \\
+\ \underline{1\ 6\ 6} \\
\underline{5\ 2\ 5} \\
1\ 1
\end{array}
$$
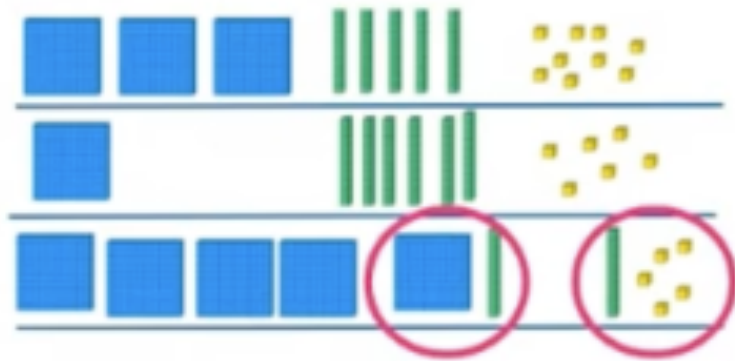
How did you do?

Task: Now do these addition calculations.

Use either dienes or do a written calculation.

**Part A - use column addition to answer these
(Not all need column addition so look carefully)**

313 + 254	373 + 458	422 + 275
468 + 356	276 + 335	534 + 267
212 + 366	586 + 217	378 + 256

Think:

How am I going to set out my work?

It should look like this:

	5	2	7
+	2	6	9

Answers on the next slide – no peeking!

Answers:

Part A - use column addition to answer these
(Not all need column addition so look carefully)

313 + 254	373 + 458	422 + 275
567	831	697
468 + 356	276 + 335	534 + 267
824	611	801
212 + 366	586 + 217	378 + 256
578	803	634

How did you do?

Now try this:

Part B

1) What could the missing numbers here be?
   Are there more than than 1 possibility?

$$
\begin{array}{r}
\square\ 4\ 6 \\
+\ 5\ 0\ \square \\
\hline
1\ \square\ \square\ 1
\end{array}
$$

2) Check this answer carefully

Is this calculation correct?
Why?
Why not?

$$
\begin{array}{r}
4\ 2\ 6 \\
+\ 3\ 4\ 7 \\
\hline
7\ 6\ 3
\end{array}
$$

Answers on the next slide – no peeking!

Answers:

Part B

1) What could the missing numbers here be?
   Are there more than than 1 possibility?

$$\begin{array}{cccc} & \boxed{5} & 4 & 6 \\ + & 5 & 0 & \boxed{5} \\ \hline 1 & \boxed{0} & \boxed{5} & 1 \end{array}$$

2) Check this answer carefully

$$\begin{array}{ccc} & 4 & 2 & 6 \\ + & 3 & 4 & 7 \\ \hline & 7 & \cancel{6} & 3 \end{array}$$

The regrouping was not shown!
The tens column is wrong.

Easier:

	T	U
	7	2
+	1	6
Add the units then add the tens	8	8

	T	U
	5	8
+	3	0

	T	U
	5	2
+	1	2

	T	U
	6	7
+	2	1

	6 2	4 0	3 5	2 3	3 4
+	3 3	3 7	2 4	3 5	6 3

	2 1	2 8	7 4	3 1	6 1
+	3 3	3 0	1 4	6 3	1 2

	2 3	6 3	2 1	3 3	1 3
+	1 1	1 4	7 6	6 1	5 3

	6 7	6 5	8 3	8 5	5 2
+	1 1	2 3	1 5	1 2	3 3

Extra Sheets

Choose the level that is right for you.

Harder:

	H	T	U
	3	1	9
+	2	9	4
	6	1	3
		1	1

Add the units then add the tens then add the hundreds:

Add a 10 to the 10s column or 100 to the 100s column if you need to.

	H	T	U
	3	1	7
+	2	8	8

	H	T	U
		4	5
+	4	8	7

	8 9 8	6 5 3	6 8 2	5 2 9
+	3 2	1 6 8	2 3 8	2 7 4

	2 7 8	7 1 6	4 3 1	8 4 2
+	3 9 8	1 8 5	6 9	9 9

	3 9 6	4 4 7	6 9 8	4 3 7
+	1 0 5	8 7	2 5 3	2 7 8

	1 5 8	5 9 6	2 1 8	5 6 5
+	3 7 9	1 2 8	4 8 6	2 6 5

How did you do?
We love seeing your work everyone.

Remember to post your work on Class Dojo!