



We recorded how high each plant has grown since the start of the month.

Plant	Height at the start of the month	Amount grown	Height at the end of the month
Bamboo tree	0.7 m	0.9 m	
Cactus	0.92 m	0.33 m	

Bella

Danny

bamboo tree

cactus

Good Morning Year 5 and welcome to the final online maths lesson this week. Well done for following the lessons and completing the work at home. I can't wait to see all your learning when we are back in the classroom.

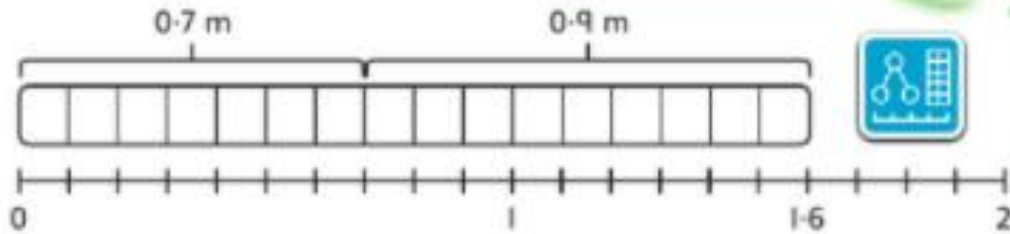
Like normal, have a quick go at answering the questions before moving on to the next slide where we will go through what you need to do.

- 1 a) What is the height of each plant at the end of the month?
- b) How much taller than the cactus is the bamboo tree?

Share

- a) At the start of the month the bamboo tree was 0.7 m tall. It grows by 0.9 m. We need to add 0.7 and 0.9.

I used a number line to help me work out the height of the bamboo tree.



$0.7 + 0.9 = 1.6$. At the end of the month the height of the bamboo tree is 1.6 m.

The cactus is 0.92 m tall at the start of the month. It grows by 0.33 m. We need to add 0.33 to 0.92.

O	•	Tth	Hth
	•	●●●●●●●●	●●
	•	●●●●●●●●	
	•	●●●●●●	●●●●

$$\begin{array}{r}
 0.92 \\
 + 0.33 \\
 \hline
 1.25
 \end{array}$$

$0.92 + 0.33 = 1.25$

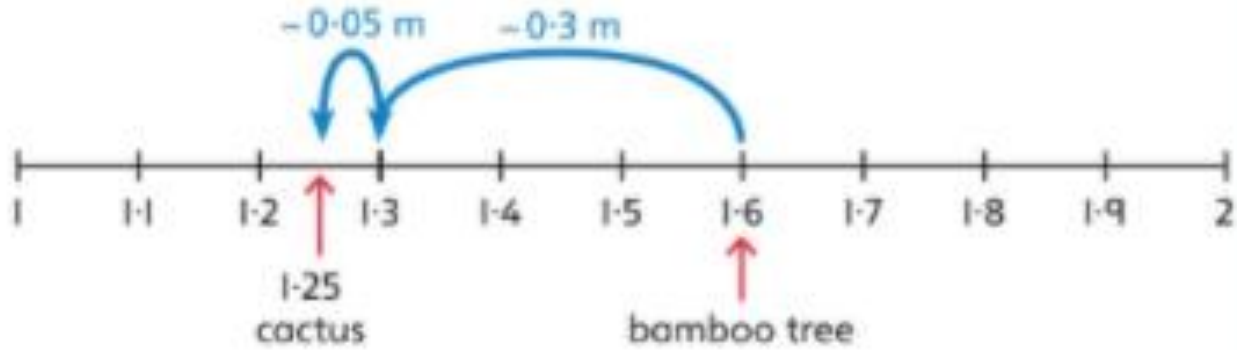
At the end of the month the height of the cactus is 1.25 m.

I used column addition to add 0.92 and 0.33. When I added the tenths, I got 12 tenths. This is the same as 1 whole and 2 tenths.



You can use a number line or column addition to help you to work out the answer. When using column addition we need to remember that we can only have 0-9 in one column and when the total is 10 or more then we have to exchange into the next column. See the example with $0.92 + 0.33$

b)



$$1.6 \text{ m} - 1.25 \text{ m} = 0.35 \text{ m}$$

$$1.25 \text{ m} + 0.35 \text{ m} = 1.6 \text{ m}$$

The bamboo tree is 0.35 m taller than the cactus.

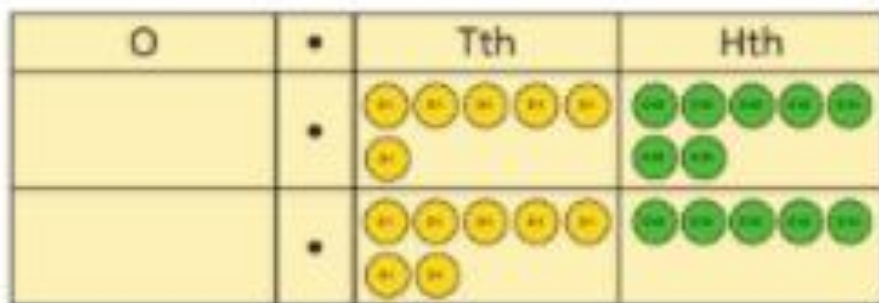
The cactus tree is 1.25m tall and the bamboo tree is 1.6 m tall. To work out how much taller it is we can use the number line and count back. Starting at 1.6 you count back 0.3 to get to 1.3 and another 0.05 to get to 1.25. if you add together how much you have counted back you get 0.35. so $1.6 - 1.25 = 0.35$.

Think together

1 Bella and Danny also measured a sunflower.

What is the height of the sunflower at the end of the month?

Plant	Height at the start of the month	Amount grown	Height at the end of the month
Sunflower	0.67 m	0.75 m	



$$\begin{array}{r}
 0.67 \\
 + 0.75 \\
 \hline
 1.42
 \end{array}$$

$$0.67 + 0.75 = \square$$

At the end of the month the height of the sunflower is \square m.

Lets use column addition to work out the height at the end of the month. Start in the Hth column. $7 + 5 = 12$ so write the 2 in the Hth column and exchange the 1 into the Tth column. Now looking at the Tth column. $6 + 7 = 13 +$ the 1 we exchanged $= 14$. so write the 4 in the Tth column and exchange the 1 into the ones column. We now have $0 + 0$ in the ones column + the 1 we exchanged which $= 1$. so the answer is 1.42

- 2 a) Emma collects 0.5 kg of apples from her apple tree. She then collects 0.7 kg of plums.



Explain why Emma is wrong.

- b) Max adds two numbers together.

What mistake has he made?

$$\begin{array}{r}
 \text{O} \cdot \text{Tth} \text{ Hth} \\
 0 \cdot 4 \quad 8 \\
 + 0 \cdot 7 \quad 1 \\
 \hline
 0 \cdot 11 \quad 9
 \end{array}$$

Emma is wrong because she has not exchanged if she lined up her addition correctly and exchanged then you can see she collected 1.2 kg of fruit in total.

$$\begin{array}{r}
 0 \cdot 5 \\
 + 0 \cdot 7 \\
 \hline
 1 \cdot 2 \\
 \hline
 1
 \end{array}$$

Max has made a similar mistake to Emma and he has not exchanged correctly. He has written 11 in the Tth column and we know that you can only have the digits 0-9 in a column. Instead Max should keep the 1 in the Tth column and exchange the ten Tth to 1 one. Making his answer 1.19

Adding and subtracting decimals 4

1 Complete these decimal additions.

a) $0.37 + 0.82 = \square$

O	•	Tth	Hth
	•	○ ○ ○	○○ ○○ ○○ ○○ ○○
	•	○○ ○○ ○○ ○○ ○○	○○ ○○

$$\begin{array}{r} \text{O} \cdot \text{Tth} \text{ Hth} \\ 0 \cdot 3 \quad 7 \\ + 0 \cdot 8 \quad 2 \\ \hline \cdot \end{array}$$

b) $0.675 + 0.721 = \square$

O	•	Tth	Hth	Thth
	•	○○ ○○ ○○ ○○ ○○	○○ ○○ ○○ ○○ ○○	○○○ ○○○ ○○○ ○○○ ○○○
	•	○○	○○ ○○	
	•	○○ ○○ ○○ ○○ ○○	○○ ○○	○○○

$$\begin{array}{r} \text{O} \cdot \text{Tth} \text{ Hth} \text{ Thth} \\ 0 \cdot 6 \quad 7 \quad 5 \\ + 0 \cdot 7 \quad 2 \quad 1 \\ \hline \cdot \end{array}$$

c) $0.56 + 0.78 = \square$

$$\begin{array}{r} \text{O} \cdot \text{Tth} \text{ Hth} \\ 0 \cdot 5 \quad 6 \\ + 0 \cdot 7 \quad 8 \\ \hline \cdot \end{array}$$

d) $0.7 + 0.7 = \square$

$$\begin{array}{r} \text{O} \cdot \text{Tth} \\ 0 \cdot 7 \\ + 0 \cdot 7 \\ \hline \cdot \end{array}$$

e) $0.82 + 0.78 = \square$

$$\begin{array}{r} \text{O} \cdot \text{Tth} \text{ Hth} \\ 0 \cdot 8 \quad 2 \\ + 0 \cdot 7 \quad 8 \\ \hline \cdot \end{array}$$

Now it is your turn to have a go. Use the place value charts and the counters to help you to remember to exchange. Make sure you show your working out on some paper so you can bring it in to show Miss Bosworth when we are all back in class. Remember always start with the column on the right.

2 Match each calculation with its answer.

$0.23 + 0.84$

$0.76 + 0.52$

$1 + 0.17$

$0.74 + 0.63$

$0.54 + 0.85$

1.39

1.37

1.07

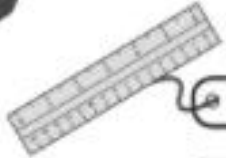
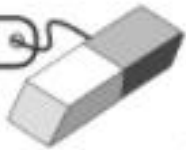
1.28

1.17



3 How much do the ruler and eraser cost altogether?

£0.65



£0.89



The ruler and eraser cost £ altogether.

4 Amal uses the treadmill at the gym.

He thinks he ran further on Thursday than he did from Monday to Wednesday in total. Is Amal correct?



Day	Distance
Monday	0.625 km
Tuesday	0.193 km
Wednesday	0.208 km
Thursday	1.25 km

Remember to line up your calculations correctly and make any exchanging clear so you do not get confused.

5

Write the missing numbers.

$$\begin{array}{r} \text{a) } \quad \underline{0 \cdot \text{Tth Hth}} \\ \quad \quad 0 \cdot 4 \quad 3 \\ + \quad 0 \cdot \quad \quad 7 \\ \hline \quad \quad \cdot 1 \end{array}$$

$$\begin{array}{r} \text{b) } \quad \underline{0 \cdot \text{Tth Hth}} \\ \quad \quad 0 \cdot \\ + \quad \quad \cdot 5 \quad 9 \\ \hline \quad \quad 1 \cdot 3 \quad 7 \end{array}$$

$$\begin{array}{r} \text{c) } \quad \underline{0 \cdot \text{Tth Hth Thth}} \\ \quad \quad 0 \cdot 7 \quad 3 \quad 2 \\ + \quad 0 \cdot 7 \quad \quad \quad \\ \hline \quad \quad \quad \cdot \quad 1 \quad 3 \end{array}$$

**CHALLENGE**

6 Use the signs $<$, $=$ or $>$ to complete each statement.
Explain how you worked out your answers.

a) $0.51 + 0.63$ $0.51 + 0.73$



b) $0.7 + 0.4$ $0.71 + 0.39$



Here is your final challenge slide of the week. Give it a go if you want to challenge yourself or do the reflect if you found some things quite tricky.

Remember with the greater than, less than and equal to symbols imagine it is a crocodile and their mouth is open to the biggest number. He likes to eat the greatest number.

Reflect

Jamie says, ' $0\cdot5 + 0\cdot6 = 0\cdot11$.' Explain why Jamie is wrong.

- _____
- _____
- _____
- _____

17

Well done Year 5! I am so happy with how you have all engaged with the learning and I can not wait to see all your hard work and learning when we are back in the classroom! Remember for this reflect place value. I hope you all have a good weekend and enjoy the final few lessons this of the week this afternoon and rest of this morning. – From Miss Bosworth