# **Diving into Mastery - Diving**

## **Adult Guidance with Question Prompts**

Children add pairs of numbers using a number line and decide which number it would be more efficient to start with. They should be able to explain why we should start off with the larger number and add the smaller number.

Which of the two numbers should we start with? Why?

Is it better to start off with the bigger number or the smaller number? Why?

Can you show me how you use the number line to count on?

Could you have done this on your fingers?

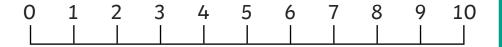
## **Addition - Adding More**



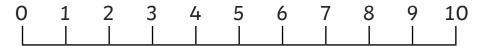
Use the number line to add the two numbers together.

Choose which number is best to start with.

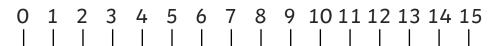
#### 6 and 2



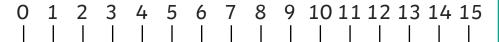
### 3 and 4



### 5 and 9



#### 8 and 4



Explain which number you chose to start with each time. Why did you choose this number?





# **Diving into Mastery - Deeper**

## **Adult Guidance with Question Prompts**

Children compare two totals and explain how they know which is bigger. They prove it using a number line. Children will need number lines to 20 for this activity. You could use ten-sided dice if you would like to challenge with larger numbers.

How many did Dina score?

Can you show me how you count on using the number line?

How many did Tom score?

Should I start at two and count on six?

Why not?

Is Tom right about scoring the most?

Now take turns with your friend to roll two dice each. Work out how many you score by counting on. Can you use your fingers to count on?



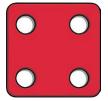


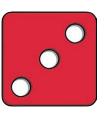
## **Addition - Adding More**



Dina and Tom are going to play a board game. They each roll two dice to decide who will go first.

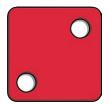
#### **Dina Rolls**







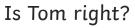
**Tom Rolls** 







I can go first because I rolled the biggest total.



Prove it on a number line.

Have a go with a friend and two dice. Who can roll the largest total? Have 6 goes. Does the same person always win?

# **Diving into Mastery - Deepest**

## **Adult Guidance with Question Prompts**

Children use number lines to solve addition word problems crossing ten that involve counting on from the larger number.

How can we use the number line to work out how many Dina counted on?

Did she start with the largest number?

What number did Tom start on?

Can you show me how he counted on?

Dina counted on twice from her starting number; can you show what she did on the number line? Where did she finish?





### **Addition - Adding More**



Tom and Dina are counting on using number lines.

They are making up puzzles for each other.



I started on 7 and finished on 13. How many did I count on?

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15



I started on 9 and finished on 14. How many did I count on?

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15



I started on 6. I counted on 5 and then I counted on 3 more. Where did I finish?

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Can you write a calculation to go with each number line? Can you make up a puzzle like this for your friend?