

# Diving into Mastery - Diving

## Adult Guidance with Question Prompts

Children will need two sets of digit cards (0-10) and cubes. They could use the symbols  $<$ ,  $>$  and  $=$  on cards or they could stick the digit cards in books and write the symbols themselves. Children may find it useful to have access to a number track for this activity.

What numbers have you chosen?

What do the symbols  $<$  and  $>$  mean?

What symbol should go between your numbers?

Can you read the statement that you have made?

Can you prove that you have chosen the correct symbol using cubes?

What would happen if we swapped the numbers over? Could we use the same symbol?

What does this symbol ( $=$ ) mean?

Can you use your cards to make a statement with this symbol?

Can you write the symbol yourself?

## Comparing Numbers



Choose two number cards. Decide which symbol should go between them to make a correct statement. For example:

$$9 > 3$$

Can you create three statements using the equal symbol? For example:

$$6 = 6$$

# Diving into Mastery - Deeper

## Adult Guidance with Question Prompts

Children could have access to a number track to help with this activity.

What does the statement say?

What are the children saying?

Are they saying anything that is the same?

Are they saying anything that is different?

What numbers do you think could go in the box?

Why?

Could five go in the box?

Could zero go in the box?

Explain how you know.

Encourage full explanations of reasoning.

How can we solve the second problem?

Can you explain your thinking?

## Comparing Numbers



Two children are trying to solve a problem.

$$\square < 5$$

I am Ben. I think that the missing number could be 1, 2, 3, 4 or 5.



I am Elle. I think that the missing number could be 0, 1, 2, 3 or 4



Who is right? Explain how you know. Try this one yourself and explain your thinking.

$$\square < 7$$

# Diving into Mastery - Deepest

## Adult Guidance with Question Prompts

Children could have access to a number track to help with this activity. They could write statements or organise them practically with digit cards. Children can use the digits more than once in statements, e.g. they can write  $2 = 2$ .

What statement could I write using the symbol  $<$ ?

Could I write  $1 < 4$ ?

Could I write  $4 < 2$ ?

What statement could I write using the symbol  $>$ ?

Could I write  $2 > 2$ ?

Could I write  $3 > 1$ ?

What statement could I write using the symbol  $=$ ?

Could I write  $2 = 2$ ?

Could I write  $4 = 1$ ?

Encourage children to explain their reasoning in full sentences.

Can you work systematically to find as many statements as possible?

Can you explain your method?

## Comparing Numbers



Using these digits, how many statements can you make?

