# Number Bonds within 20 



## Under the Sea



Number bonds to 9

Number bonds to 6

Number bonds to 7

Number bonds to 8


## What Can You See?



How do you know?


## How Many Each?

Isla and Ismail have found 5 starfish. How many might they have caught each?

How do you know?

## How Many Each?

Does this picture represent how the starfish have been shared?
Can you represent it in another way?


## Are They Correct?

Ismail and Isla both say they caught 3 starfish. Are they correct?
Explain how you know, using a whole sentence.


## What Can You See?



## How do you know?

## How Many Each?

Daryl and Isabella have found 6 pretty shells. How many could they take each?

Have you found all the ways?
Draw pictures or use equipment to prove it to your partner.


## Are They Correct?

They agree that Ismail can take 4 shells and Isla can take 3 shells.
Can they do this? Explain how you know using a whole sentence.


## How Many?

The children need to catch some fish and crabs for dinner. There are 7 people for dinner. How many fish and how many crabs should they catch?


Use some cubes to show all the ways to your partner.

## All the Possibilities

Have you found all the ways the children could catch enough fish and crabs for dinner? How do you know?


$$
0 \text { crabs and } 7 \text { fish }
$$



1 crab and 6 fish
2 crabs and 5 fish
3 crabs and 4 fish
4 crabs and 3 fish
5 crabs and 2 fish
6 crabs and 1 fish
7 crabs and 0 fish

Can you write these into number sentences?


## Represent It

$$
\begin{array}{ll}
7+0=7 & 4+3=7 \\
1+6=7 & 5+2=7 \\
2+5=7 & 6+1=7 \\
3+4=7 & 7+0=7
\end{array}
$$



Can you show the different ways you found to feed the 7 guests for dinner on a number line?


## Is This Correct?



8 seahorses are hiding in two pieces of coral. How many can hide in each piece? Have you found all the ways?

How will you prove it?



## Is This Correct?



$$
4+3=8
$$

Does this number sentence explain the story? Prove it.

## All the Possibilities



Write down all the number sentences you can to explain this picture. Have you got them all? How do you know?

$$
5+3=8 \quad 3+5=8
$$



## How Many?



There are 9 octopuses and 2 pools. How many could hide in each pool? Can you find all the ways? How could you represent this for your partner?

$$
\begin{array}{ll}
0+9=9 & 5+4=9 \\
1+8=9 & 6+3=9 \\
2+7=9 & 7+2=9 \\
3+6=9 & 8+1=9 \\
4+5=9 & 9+0=9
\end{array}
$$

Do any of the number sentences mean the same thing? Prove it.

## How Many?



How many are there in total? Use a whole sentence to explain your reasoning.

## Are They Correct?



Which picture represents the number of sea anemones in each rock pool? Use a whole sentence to explain your reasoning.


## All the Possibilities



Draw some pictures or use equipment to show all the ways that the 10 sea anemones could be found in the two rock pools.
Have you found all the ways? How do you know?


## Ismail Says...



$$
7+3=10 \quad 3+7=10
$$

are the only addition number sentences that can describe these number shapes. Is he correct?


## Isla Says...



Isla says this is the only addition number sentence she can write to describe the picture. Is she right?


## What Comes Next?

What is the next number sentence in the sequence?


$$
\begin{gathered}
0+10=10 \\
1+9=10
\end{gathered}
$$



$$
2+8=10
$$

$$
3+7=10
$$

Can you see a pattern? Explain your strategy using a whole sentence.


## Because We Know....

$$
\begin{array}{r}
0+10=10 \\
1+9=10 \\
2+8=10 \\
3+7=10 \\
4+6=10 \\
5+5=10
\end{array}
$$

$$
\begin{aligned}
& \hline ?+4=10 \\
& ? ?+3=10 \\
& ? ?+2=10 \\
& ? ?+1=10 \\
& ? ?+0=10
\end{aligned}
$$

Can you see a pattern? Explain your strategy using a whole sentence.

## Because We Know....



## What number bonds can you see?

What is the same? What is different?
Can you explain using a whole sentence?


## Because we know the number bonds to $10 .$.

$$
\begin{array}{rrr}
0+10=10 & 6+4=10 \\
1+9=10 & 7+3=10 \\
2+8=10 & 8+2=10 \\
3+7=10 & 9+1=10 \\
4+6=10 & 10+0=10 \\
5+5=10 & 10+8
\end{array}
$$


...we can work out the number bonds to 20.
Can you explain your strategy using a whole sentence?


## Make Me....



Think of a number bond for your friend. How many different ways can they represent it?

Which ways do you find the most useful? Swap over.


